Extension Service Review

VOL. 5, NO. 1 JANUARY 1934

THE GENERAL objective in the recovery program is clear and easily stated—to restore a workable exchangeability among the separate parts of our economic machine and to set it to functioning again; and beyond this to perfect arrangements which may prevent its future disorganization. This means that we must insure adequate income to the farmers, adequate wages to the workers, an adequate return to useful capital, and an adequate remuneration to management. What we want, really, is to provide the opportunity for every individual and every group to work and to be able to consume the product of others' work. This involves a creation of buying power which is coordinate with the creation of goods. We shall not rest nor be diverted to lesser things until that minimum is achieved.

R. G. Tugwell

Assistant Secretary of Agriculture.

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In This Issue

WHAT will be the extension program for 1934? In a clear-cut and comprehensive statement Director C. W. Warburton gives his answer to this all-important question. Summarizing the field of extension activity in 1934, he says: "It is highly desirable to continue the educational program of the county agent, modifying it and molding it to fit into the new order. Production control is only applied economics limiting the production of any commodity to the quantity which the market will take at a price which yields a fair return to the consumer. We still need to keep constantly before rural people the latest results of research that contribute to efficient and economical production."

WHAT can be done with the land retired from the production of corn, wheat, cotton, and tobacco, under the terms of the authorized production adjustment contracts? J. F. Cox, Chief, Replacement Crops Section, Agricultural Adjustment Administration, gives us an authoritative reply. He points out further that the proper use of acreage retired from commodity production should benefit American agriculture not only through the immediate effect of balancing the production of the basic surplus crops, but through the contribution that honest and conscientious use of retired acreage will make to erosion control, soil improvement, and the permanent improvement of agriculture.

THE urgent need for terracing in Tallapoosa County, Ala., was realized by County Agent Fletcher N. Farrington and the county commissioners when farmers could not pay their taxes because their land was virtually washed away. Educational work carried on by Agent Fletcher and J. B. Wilson, Alabama extension agricultural engineer, showing the tremendous loss to the county through depletion of the soil gave the county commissioners the popular support they needed to justify providing tractors and terracing equipment to aid in doing the work.

Contents

TWO county agricultural agents of Connecticut give us an interesting account of how extension work is carried on in their counties. C. D. Lewis of Hartford County discusses how the local leaders in towns take their problems and suggestions to their county project committees for a thorough study of the economic and other factors bearing on their particular projects, using a recent conference on tobacco policies as an example. Similarly, Raymond Clapp of New Haven County tells us what his county dairy committee has accomplished.

On The Calendar

Southern Agricultural Workers meeting, Memphis, Tenn., January 31–February 2.

Farm and Home Week, Ithaca, N.Y., February 12–17.

Annual Meeting, Illinois Farming Institute, Jacksonville, Ill., February 20–23.

Houston Fat Stock Show, Houston, Tex., February 24–March 4.

Southwestern Exposition and Fat Stock Show, Fort Worth, Tex., March 10–19.

Fifty-seventh Annual Convention, Texas and Southwestern Cattle Raisers Association, San Antonio, Tex., March 20–22.

Farm and Home Week, Orono, Maine, March 26–29.

F. W. PECK, cooperative bank commissioner for the Farm Credit Administration, outlines the new credit system as it applies to cooperative organizations. He explains what working capital loans, facility loans, and commodity or intermediate loans are and on what basis they are made to cooperative organizations. He says, "We believe that to obtain credit from the cooperative division, cooperatives must be producer-owned and producer-controlled. In making credit available to such organizations, the members' interest and welfare is the deciding factor."

THAT news calendars are important in the extension agent's annual program of work is emphasized by W. H. Darrow, extension editor for Texas, and County Agent J. V. Highfill, Franklin County, Ark. Both give us examples of news calendars that have helped bring extension activities to wide public attention.

BUSINESS methods are being adapted to effective use in Wisconsin homes as a result of a project supervised by Wealthy M. Hale, Wisconsin home management specialist. Banking, money investments, problems of children's money, records, and wills are among the things that are being discussed and studied by Wisconsin farm women cooperating in this extension activity.

THE EXTENSION SERVICE REVIEW is issued monthly by the EXTENSION SERVICE of the United States Department of Agriculture, Washington, D.C. The matter contained in the REVIEW is published by direction of the Secretary of Agriculture as administrative information required for the proper transaction of the public business. The REVIEW seeks to supply to workers and cooperators of the Department of Agriculture engaged in extension activities, information of especial help to them in the performance of their duties, and is issued to them free by law. Others may obtain copies of the REVIEW from the Superintendent of Documents, Government Printing Office, Washington, D.C., 5 cents a copy, or by subscription at the rate of 50 cents a year, domestic, and 75 cents, foreign. Postage stamps will not be accepted in payment.

C. W. WARBURTON, *Director* C. B. SMITH, *Assistant Director* REUBEN BRIGHAM, *Editor*

Extension Service Review

VOL. 5 WASHINGTON, D.C., JANUARY 1934 NO. 1

The Extension Program for 1934

C. W. WARBURTON

Director of Extension Work, United States Department of Agriculture

EXTENSION work and extension programs are never static. Extension activities have been gradually adjusted to changing conditions. The war-time urge for increased production of foodstuffs gave way to the more orderly post-war period when the major attention was given, not to bringing new acres into cultivation, but to the more efficient use of existing acres, consideration of the land-utilization problem, the organization of cooperative marketing and purchasing associations, the development of market grades and standards, farm-management studies and other activities having to do with the business side of agriculture. Now, again the emphasis shifts, the pendulum is at the opposite end of the swing with the stress on taking acres out of cultivation, control of production, leaving land idle or putting it into grass, with the thought that the farmer will get larger returns for fewer bushels of wheat or corn, fewer bales of cotton, fewer pounds of hogs, cattle, or lambs, and perhaps most important of all, fewer hours of labor, leaving him more leisure for himself and his family. For the first time, however, those who make the reductions have opportunity to profit therefrom rather than, as has been the case in too many previous acreage reduction efforts, for the major profit to go to those who, with thought only of individual gain rather than the common good, plant extra acres when their neighbors reduce.

THE AMERICAN FARMER, American industry and the people generally have the greatest interest in the recovery of agriculture. We cannot and do not claim responsibility for all the recovery manifest as the Agricultural Adjustment Act comes up to its first New Year's day, but we do take pride in the contribution we have made toward improving the situation. I wish I could express adequately my appreciation of the extension agents and the work that they and those cooperating with them have been doing for the Agricultural Adjustment Administration. They have been our field troops. They have worked without stint or let-up day in and day out and, many times, long night hours, too. Without their assistance it would have been utterly impossible for us to have attained the measure of success we have reached. The Extension Service has every right to share with us any pride to which we may be entitled in the results thus far obtained.

Administrator, Agricultural Adjustment Administration.

Need for Efficiency

With a reduction of the acreage in cultivation and the number of livestock on farms there is increasing need for efficiency of production. The greatest reward will come to those who produce at the lowest cost per commodity unit and not necessarily to those who obtain the largest yields of wheat or cotton or pork per acre. We cannot hope for conditions which will make agriculture profitable for every person who engages in it. There will still continue to be wide differences in the efficiency of individuals, but the greatest reward will continue to be given to those whose operations are best planned, who conduct their business with the greatest care, who plan their operations well in advance, keep records of cost and income, and adjust their farming to suit the needs of the times. Agricultural adjustment cannot be expected suddenly to make rural life Utopian any more than present-day control of business can be expected to insure success for every one who engages in it.

In the campaigns in which the great majority of extension workers have been engaged in recent months to sign up cotton and wheat farmers in production-control agreements, the campaigns which are projected for the next few months for the signing of similar agreements for tobacco, corn and hogs, and the 1934 cotton crop, naturally much which was planned in the way of extension activities has had to be set aside, or carried on less actively than was anticipated. It is not to be expected that county production-control associations, once organized, will go along on the even tenor of their way with no further attention from extension workers. We must expect that problems will continually arise with one or another of these organizations which will require the agent's attention even though he is not burdened with the actual business of the association as its secretary. It is highly desirable, however, to continue the educational program of the county agent, modifying it and molding it to fit into the new order. Production control is only applied economics limiting the production of any commodity to the quantity which the market will take at a price which yields a fair return to the producer and which is not unduly burdensome to the consumer. We still need to keep constantly before rural people the latest results of research, the latest productions of plant and animal breeders, the latest methods of plant and animal disease control, and all similar information that contributes to efficient, economical production.

Utilization of Land

Production-control campaigns which involve taking average acres out of cultivation on every farm can only be regarded in the light of temporary makeshifts. The Extension Service can make a large contribution to American agriculture by directing public thought to the re-

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moval from production of submarginal lands, leaving it idle or utilizing it for pasture, forests, or other useful purposes, and the better utilization and conservation of the more productive land. Beginnings have been made in some localities in the transfer of farmers from poor farms on which they had no reasonable chance to make a living, to good farms on which they have, at least, an even break. I hope that eventually our production-control plans will lead to the removal from cultivation of submarginal areas and also to adjustments on individual farms which will result in better use of the good acres and the abandonment of effort to eke out a living from the poor ones.

Production control with reduction in the acres planted to cotton, corn, wheat, and other crops presents new questions to extension workers as to the best use to be made of the contracted acres; use which will not bring new problems of surpluses in other commodities. In some areas, particularly in the South, production control will need to be guided to make sure not only that it does not result in problems involving the use of surplus acres but also that it does not throw out of employment thousands of farm tenant families. Southern agriculture in particular needs the most careful thought of both extension and research workers to devise methods of land utilization which will convince landowners that their best interests in the long run require liberal treatment of tenants and wage earners during this adjustment period.

Live at Home

In this connection it is desirable to remember that unlike the probable need for long-continued curtailment of production of wheat, corn, and hogs because of a well-nigh vanished export market, the need for drastic reduction of cotton production probably will not extend beyond the period necessary for disposition of our present burdensome surplus. The tenants and wage earners who during the next year or two of drastic reduction of cotton acreage may appear to be unnecessary to produce 25 million acres of this commodity, will be needed a little later when we return, as now seems entirely probable, to a more normal production plan. If the cotton acreage on each plantation is divided pro rata among the tenants and each is given the use, either free or at a nominal rental, of some of the contracted acres for the production of food for the family and feed for the farm livestock, the "live-at-home" program so long advocated for the South will become a reality.

Local Leaders

While the county agricultural agents have been busy with crop-reduction plans, home-demonstration agents have been equally busy conducting unusual and emergency activities. If there was nothing else in the history of home-demonstration work to justify its existence and public support, the service which home-demonstration workers have rendered to the unemployed and the destitute would have provided that justification. One of the most striking and appealing chapters in the history of extension work to date is the record of the contributions of home-demonstration agents in lightening the burden and brightening the lives, not only of those who are actually on relief rolls, but in rendering assistance to thousands of others to enable them to provide for themselves and avoid the necessity of applying for charity. Here to an even greater degree than in the agricultural field the ability of the home-demonstration agent to extend her activities has been greatly increased through the devoted and intelligent service of thousands of unpaid local leaders. I feel that I cannot pay too high tribute, not only to the members of our home demonstration staffs, but to the thousands of local leaders who have given so unstintedly of their time and of themselves.

In the home-demonstration work more stress is being placed on the family budget, the best use of foods which are available to the family, the selection and proper preparation of cheap but adequate food supplies, and the development of new sources of income, with less time being devoted to other things which in these times of stress may be considered as non-essentials. Everywhere, however, during the past 2 or 3 years there has been a growing demand on the part of rural people generally, both men and women, for inexpensive recreation and for reading courses, the organization and training of groups to present plays, and the like. If the new social order means more leisure, more time for rural people to do as they please, I can foresee these demands for help along cultural and recreational lines greatly expanding. So far we have depended largely on cooperating agencies like the American Recreation Association for help in this field. Plans are now under discussion for somewhat similar cooperation with the American Federation of Art.

4-H Club Work

There is one phase of extension work which must be maintained at all costs. No matter what the demands on county agricultural agents may be for agricultural adjustment, no matter what the demands on home-demonstration agents for relief activities, we cannot and must not neglect 4-H club work. I am happy to say that such information as has come to us from the States through reports of extension workers and observation of our people from Washington shows that the 4-H clubs are being maintained both in membership and in quality of work done. There is opportunity for review of 4-H club projects to determine whether they are planned to meet the changing conditions through which we are now passing, and particularly whether they are planned to meet the conditions, so far as we can anticipate them, which will confront 4-H boys and girls a few years from now when they become farmers and homemakers in their own right. Here again, projects concerned mainly with quantity of production should be revised to put the major emphasis on cost, quality, and efficiency. Particularly do I think we should give attention to the prizes which are offered for club work, with honors going not to those who produce the most bushels of corn or the most pounds of cotton to the acre, but to those who produce at the lowest cost per unit of product.

The experience of the last few months and the very remarkable accomplishments of the extension forces, aided by thousands of volunteer committeemen, in obtaining the signatures of more than a million farmers to contracts to destroy a part of their 1933 cotton crop, and in getting several hundred thousand wheat growers to reduce their production for 1934 and 1935, demonstrate the value of a well-trained, efficient county agricultural agent in every important agricultural county. In the cotton campaign, which was organized and completed within less than a month, it was necessary not only to present the program to well over a million farmers, but in many counties to appoint, install, and instruct an emergency county agent, sometimes unacquainted with the local people and local conditions. These emergency agents, with the cheerful cooperation of leading farmers and business men and the efficient supervision of directors and district agents, did surprisingly well and deserve all honor for their accomplishments. It is a marvel to me that there were so few failures. The general report of the cotton and wheat campaigns, however, is that the campaigns progressed more rapidly, more smoothly, and in general resulted in greater accomplishment in those counties where a well-trained, efficient agent was already on the job. I do not believe that any one factor is more important in the readjustment of American agriculture than the employment of a good county agricultural agent in every important agricultural county or in a district comprising two or more of the less important counties. I hope to see provision made in

(Continued on page 16)

The Land-Use Program for Rented Acreage

What Can Be Grown Under Production Adjustment Contracts of the Agricultural Adjustment Administration

J. F. COX

Chief, Replacement Crops Section, Agricultural Adjustment Administration

THE FULFILLMENT of the program for the retirement from production of corn, wheat, cotton, and tobacco, under the terms of the authorized allotment control contracts, will withdraw from surplus production of these crops approximately 43 million acres of land of average fertility employed in producing these crops. A reduction of 20 million acres of corn, 15 million acres of cotton, 8 million acres of wheat, and 500 thousand acres of tobacco should result on farms owned by farmers who cooperate in signing the adjustment contracts.

In the main, a uniform program for the use of the land withdrawn from the production of basic crops has been developed under the terms of the respective contracts. All of the contracts (wheat, cotton, tobacco, and corn-hog) permit the use of the rented acres in establishing new seedings of soil-improving and erosion-preventing crops; resting or fallowing the land, where these practices are practicable; cultivating to control noxious weeds, and planting to forest trees. In view of the fact that cotton and tobacco are contract crops, produced largely by share renters and share croppers, limited use of the rented acres is permitted in the cotton and tobacco contracts for growing crops for direct consumption by the farm family or for feeding livestock contributing to the farm family. With the exception of the use of new and additional pasture seedings, for light pasturing, the corn-hog contract and regulations do not permit the use of the rented acreage for crops for home use. The wheat contract carries the following regulations controlling the use of the contracted acreage:

It shall be deemed to be a violation of his contract for a producer, who had executed a contract, to shift food crops grown for home consumption on the farm or feed crops grown for the production of livestock (or livestock products) for home consumption or use on the farm to the contracted acreage, thereby releasing other lands on the farm for the planting of crops for sale or for feed for the production of livestock or of livestock products for sale.

The contracted acreage of 1934 and 1935 shall not be used to feed or to produce feed for dairy cattle, beef cattle, hogs, sheep, or poultry kept for sale or kept for the sale of their products.

None of the contracts permit the use of the rented acreage withdrawn from production for growing crops for sale purposes or feed crops to be fed livestock and poultry producing products for the market, with the exception of the limited fall pasturing of new seedings of permanent pasture and meadow crops seeded without nurse crops in accordance with the corn-hog and wheat contract regulations, making additional expense for temporary fences unnecessary under such conditions.

J. F. Cox.

The pasturing or feeding otherwise of nurse crops or of annual forage crops that produce an abundance of forage on contracted acreage for the purpose of producing meat and milk for the market would be contrary to the corn-hog, wheat, tobacco, and cotton contracts.

Permanent Pastures

The use of the rented acreage should benefit American agriculture beyond the immediate effect of balancing the production of the basic surplus crops now produced beyond the needs of our domestic and export markets. An increase in permanent pastures and meadow crops at the expense of the acreage now being used in producing too much corn, wheat, cotton, and tobacco, should result in decreasing losses from erosion and should aid in maintaining and improving soil fertility.

Feeding Rations

The general use of more economical and effective feeding rations should follow through the ultimate availability, after the contracts have expired, of more home-grown roughage and pasturage produced on the farm from additional pasture and meadow crop seedings made on contracted acreage. By lessening the acreage of the basic commodity crops now produced in excess and increasing the soil-improving and erosion-preventing crops, a great improvement in our existing farm-management programs will result.

An increased demand will undoubtedly develop for legume and grass seed for planting for soil-improving and erosion-preventing purposes. Growers who plan to plant their rented acres to these crops will do well to obtain, at an early date, their needed seed supplies of blue grass, timothy, red top, orchard grass, bromegrass, alfalfa, Lespedeza, red and alsike clover, and sweetclover of adapted seed mixtures.

It is expected that many will grow soybeans, cowpeas, velvet beans, crimson clover, and other leguminous crops to be turned under for green-manuring purposes on the contracted acreage as adapted. Those who obtain seed early are most likely to get adapted seed of high quality.

FOR A NUMBER of years the Negro division of the Alabama Extension Service has carried on a number of health tours. These tours have emphasized the importance of proper sanitation in the rural home. The meetings have been well attended, and the lectures of vital interest to the people have been well received. Not only the situation of the home has been discussed but the importance of sanitation in public meeting places has been given special attention.

BERNIE W. Wright, Russell County (Kans.) agricultural agent, has devised a novel means of assisting the township committeemen in summarizing their wheat allotment applications before sending them to the central county office. Two semiprofessional accountants in Russell County have offered their services and are now acting in the capacity of the "county auditing committee", going to whatever township needs assistance in getting its applications listed correctly.

Improving Business Methods in Wisconsin Homes

A Successful Home-Management Project Discussed by Wealthy M. Hale, Wisconsin Home-Management Specialist

Wealthy Hale.

IN A DISCUSSION of home accounts at a Wisconsin home-management meeting, it became apparent that many women knew little about business methods. This condition led to the working out of a project on everyday problems with which the average woman is liable to make mistakes.

The women themselves suggested banking, money investments, problems of children's money, records, and wills. So these are the subjects around which the program is built.

Banking

Blanks used in checking and savings accounts are obtained at the bank. Women are interested in knowing the purpose of each blank and how to make it out correctly. It is like playing a game for the women to check up on themselves and see how many mistakes they are making. For instance, few of them know what the word "currency" means on their deposit slip. The bankers say that the changing of checks is one of the most common ways of cheating; therefore, it is necessary to know how to make them out correctly and give as little temptation and opportunity for changing them as possible. It is surprising how many women make out their checks before filling in the stubs and then leave them until they have forgotten the amounts of the checks. Of course, that is very confusing to any other member of the family who might be writing checks on the same account.

After this work on the correct way of writing checks was given in one county, an unmarried woman of middle age said, "You don't know how thankful I am for this help. I have never written a check in my life, for I live with my brother, and he has always made out the checks. He will not be able to write checks much longer, and I am so glad that I know how to do such things right because it will give me confidence in myself."

Few people know what to do when a check is lost, and so do nothing. Many do not check on their bank balance monthly but leave it entirely to the bank, expecting the bank to notify them when they have checked out all their money. This is usually because they do not know how to make the balance and not because of indifference. After finding out how it is done, they take pride not only in checking up but in understanding how the banker does it.

Some families do their banking jointly and others have never heard of it. After discussing the advantages and disadvantages of "joint accounts" and "joint tenancy", many families begin them.

Money Investments

Under money investment, the women are not told which are the safest, but through discussion of good and bad investments are left to draw their own conclusions. Since the depression, the discussion has led mostly toward United States securities and life insurance. The latter is discussed as to kinds and also the advantages and disadvantages of an insurance load.

Women always enter enthusiastically into the discussion on the following subjects:

Where should children get their money?

How much should they have to spend?

Should they be guided in their spending?

Should they be paid for home work?

How can they be given good buying habits?

How about children's savings at present?

This subject of children's spending has been so popular that it could well be used as the topic of the day's discussion.

Records

Even with all the safety deposit boxes in the banks, there are still many old tin boxes in existence in homes. They contain tax receipts and paid-up mortgages, but there are many records they do not contain that should be there. Why the boxes should contain thorough records of all the business of the home is being shown the women, and they are surprised to see how many records might be needed that they could not show.

They are learning to have a record sheet which shows the cost of each business transaction, how much has been paid on it, when each payment comes due, the amount of the payment, and what remains to be paid. On this sheet is kept not only the record of the farm indebtedness, but of machinery or household goods bought on the installment plan. Installment buying is discussed, and they decide when it should be used and to what extent.

Nearly every woman has a story to tell about signing papers before they are read. Many of them have paid a subscription or part of a subscription to magazines at the door and never received their magazines. These matters seem trifling, but they show a lack of business principles, of which women folks are often justly accused. As women become conscious of where common business errors are liable to occur they can free themselves of those mistakes. This will give them more confidence and better judgment in dealing with the many new problems that arise almost daily.

Wills

One of the surprising things about this work on "Business Methods for Wisconsin Women" was a frank and open discussion on the subject of "Wills." After an open discussion, the women become curious and want to know what can be learned about a subject that many of them dare not broach at home. They soon found that if a person dies leaving property but no will to tell what to do with it, the State of Wisconsin will divide it according to laws that are already laid down.

The women begin to wonder if there is a will, or if it is necessary to make one to have the property go to the right members of the family. Questions begin to come fast. In her printed sheet, the extension worker has eight of the most common cases on Wisconsin law of descent. These are gone through very carefully and cover most of their problems. As the printed folder contains Wisconsin law, questions about that only can be answered. However, a list of questions which cannot be answered at the meeting are taken to a legal source in order to help the women to learn the law about their individual problems.

Women are asked to take the printed sheets containing all this material home and have them read at home when the husband and older children can listen. Class discussion and home discussion give a good background for local leader training. In Milwaukee County alone, where women are accustomed to making checks and doing their share of the home business, nearly 100 wills were looked over, corrected, and brought up to date.

Financing Farmer Cooperatives

An Interview with F. W. Peck, Cooperative Bank Commissioner for the Farm Credit Administration

THIS is the fourth and last of a series of articles on how the Farm Credit Administration is making credit available to agriculture.

F. W. PECK, Cooperative Bank Commissioner for the Farm Credit Administration, has the job of making credit available to farmer cooperative organizations. He supervises the Central Bank for Cooperatives and the 12 regional banks for cooperatives, one in each Federal land bank district.

As Mr. Peck is in a field of considerable interest to extension workers and was for 12 years director of agricultural extension at the University of Minnesota, I knew he would have some helpful information for county agents and specialists.

When I entered his office for an interview on what the Farm Credit Administration is doing to help finance farmer cooperatives, I found a man of middle age, slender, gray haired. He turned, motioned me to be seated, and in his crisp voice started, at my suggestion, to outline this new credit system as it applies to cooperative organizations.

"The Cooperative Division", he said, "has two major functions. One is to make credit available and the other is to render a number of services to co-ops."

Banking

"Let's hear about the banking function first," I interjected. "That probably will be of most interest to extension workers. From time to time they are called upon to answer questions on how co-ops can borrow from the banks for cooperatives."

"Two of the divisions in the Farm Credit Administration make loans to co-ops", Mr. Peck pointed out. "There are three classes of these loans. They are classified into effective merchandising, working capital loans, facility loans, and commodity loans by the Federal intermediate credit banks.

"The working capital loans are made by the central bank for cooperatives and the regional banks for cooperatives. They are made to supplement funds of the co-ops for operating purposes. Such loans may be used to refinance indebtedness. Also, loans of this kind may be used to promote the effective merchandising of agricultural commodities and their food products.

"These loans may be made upon different kinds of collateral. The collateral may consist of liens on real estate, equipment, inventories, commodities, accounts receivable, notes, and the like. Generally the loans must be repaid at the end of the marketing season for which the loans were made. The interest rate on these working capital loans in December was 4 percent.

"What about the other class of loans, Mr. Peck—the facility loans?"

"Well, facility loans are made for the construction or acquisition by purchase

F. W. Peck.

or lease, or for refinancing such construction or acquisition by physical marketing facilities. This property must be used for the preparation, handling, storing, processing, or merchandising of agricultural commodities or their food products.

Security

"As for security, it is a mortgage on the property itself together with such other collateral as the bank may require. The duration of each loan is determined by the applicant's volume of business, earnings, and other factors affecting his ability to repay. The interest rate in December was 4½ percent.

"Regardless of whether a facility or a working capital loan is obtained, each organization borrowing from a bank for cooperatives must own $100 of capital stock in the bank for each $2,000 or part of $2,000 borrowed. The bank for cooperatives making the loan will repurchase the capital stock from the borrower when the loan is paid off. It will buy the stock at the original price less any impairment due to losses.

"Though the banks for cooperatives are authorized to make loans for operating capital and for refinancing operating capital indebtedness, they are not authorized to make loans to cooperative purchasing associations for physical facility purposes or for refinancing physical facility loans.

Intermediate Credit

"This", he said, "covers in a sketchy way some of the high lights on facility and working capital loans made by the banks for cooperatives. The other kind of credit being made available to farmer cooperatives is called intermediate credit. It is being extended by the Federal intermediate credit banks and is handled through that division of the Farm Credit Administration. Those banks made loans to cooperatives to enable them to make advances to their grower-members on commodities delivered to the associations. Loans also are made to pay the costs of marketing such commodities. Loans to cooperative purchasing associations are made principally to help them carry their necessary inventories.

"The loans generally are made upon the security of warehouse receipts, bills of lading, or other shipping documents covering staple, nonperishable agricultural commodities. They also are made on supplies bought for resale to farmer members. Ordinarily such loans through the Federal intermediate credit banks, mature in from 3 to 9 months. The interest rate on December 1 was 2½ percent for one of the Federal intermediate credit banks and 3 percent per annum for the other 11 banks."

"What are the special services to co-ops that you spoke of a few minutes ago", I asked. "As I understand it, they consist largely of management suggestions, an accounting and auditing service, and advice as to methods or organizations. Am I right?"

"Yes; and I believe this function of the cooperative division is just about as important as the banking function. The services consist of those you have just mentioned and also include general advice on the importance of collective organization, information on the status of the cooperative movement in general, and field studies of commodity industries.

"You know", he said, leaning back in his chair, "we believe that to obtain credit from the cooperative division, cooperatives must be producer-owned and producer-controlled."

County Organizations that Work

What is a successful county extension organization? Here are two suggestions from Connecticut

C. D. Lewis.

COUNTY AGENT C. D. Lewis says that a successful organization is one that gets farm people to recognize their most important problems and plan a definite solution. When he came to Hartford County 5 years ago, he found a cumbersome organization with a few overworked officials. Under his direction this has grown into a smooth-working, democratic organization in which more than 200 people are assigned a definite job planning and executing the extension program. Extension work in Hartford County is carried on by three agents and two assistant agents and is supported by the farm bureau which must raise at least $1,000 per year to qualify for State funds.

The fall of 1933 saw the organization plan we have been working on for the last 5 years at last put into complete operation.

Briefly the plan calls for initiation of the program in local township meetings, with the responsibility for working out the details of the rural program and its execution placed on a township board of directors and county project committees, with the approval of the county executive board.

There are 29 townships, or, as we say in New England, towns in Hartford County. Each of these towns has a board of five directors. The chairman of the town board is the business manager. The other directors represent agriculture, homemaking, and boys' and girls' 4-H clubs. This directorate together with the officers and executive board are elected by the membership at the annual meeting.

The county organization includes an executive board and several commodity or departmental committees. At present there are five agricultural project committees functioning—tobacco, dairy, poultry, fruit, and vegetables.

The first step in program making is the local township achievement and planning meeting when the past year's accomplishments on the extension program are discussed by local leaders and suggestions for the future made.

These problems and suggestions are then taken to the county project committees, who make a thorough study of the economic and other factors bearing on their particular project.

For instance, at a recent conference on tobacco policies the tobacco extension economist presented the facts pertaining to stocks of tobacco on hand, total supply, disappearance of cigars and number of year's supply on hand. The farm accountant for the Extension Service presented cost of production figures. The extension agronomist presented facts pertaining to the general fertilizer situation. The State director for the Regional Agricultural Credit Corporation presented the facts concerning this organization. The extension vegetable economist presented facts pertaining to the possibility of expanding the production of different vegetable crops. The agricultural agent presented facts obtained from a cooperative survey of acreage changes in the tobacco area. Two representatives of the tobacco experiment station presented facts concerning the type and nature of tobacco experimental work. Based on these facts the tobacco committee builds a program for the extension agencies in the tobacco area.

The programs are then presented to the executive board for action after which the town directors are called together and the program presented to them.

The plan is far from perfect, but it is a definite attempt at getting farm people to really plan and execute their own extension program. In all, more than 200 people are assigned a definite job. Membership in the farm bureau has increased from 300 to 600 under this plan.

The agricultural agents in Hartford County have this year, largely as a result of the improved county organization, been able to make 1,200 farm visits which is 200 more than last year. They had 1,300 calls personally at the office which is 800 more than last year, and had 3,200 telephone calls which is 1,200 more than last year. They held and attended 324 meetings with an attendance of 20,000, which is 24 more meetings and 5,000 more attendance than last year.

County Committees Prove Their Value

Raymond Clapp.

County agent Raymond Clapp has a similar setup in New Haven County. Here, too, there are 3 agents and 2 assistants and the extension program is carried through the farm bureau. Mr. Clapp lays particular emphasis on well-selected committees and feels that this is the secret of his smooth-running organization. The following examples seem to prove this theory.

It was nearly 4 o'clock on the afternoon of December 15, 1924. Twenty-five members of the county dairy committee were gathered in one of the dining rooms of the Hotel Bishop at New Haven. Ever since paying for their 65-cent luncheons early in the afternoon the members had been discussing how to replace more scrub bulls with purebreds.

Among the 25 dairymen present were four honorary members, distinguished citizens of the community, representing the Guernsey, Ayrshire, Jersey, and Holstein breeds respectively. The other 21 members were prominent farmers whose principal source of income was the sale of milk from their dairy herds.

John A. Simms, dairy specialist, with the use of a blackboard, had been pointing out what the elimination of scrub bulls would mean to the county in dollars and cents 10 years hence.

Soon, one by one, the members of the committee would be leaving to rush home and get the milking and evening chores under way. Undoubtedly H. H. Tomlinson, the white-haired, yet youthful-feeling chairman realized this fact, for all at once he was on his feet and speaking as follows:

Gentlemen, this plan sounds good. We all ought to get behind it and put it across. Will each one of you who is willing to pledge himself to see at least five fellow dairymen during the next 6 weeks and try to sell them the idea that they need a pure-bred bull, please stand? [Every man in the room, some enthusiastically, others more sedately, rose to his feet.]

Gentlemen, we will meet here again on February 2 to report progress. Meeting adjourned.

Six weeks later the committee met and it continued to meet at intervals throughout the year. The final result was the placing of 143 pure-bred bulls on the dairy farms of the county.

During the years that have followed, standing committees on dairy, fruit, vegetables, poultry, homemaking, and 4-H clubs have been appointed yearly by the county extension organization.

The origin of three different marketing cooperatives can be traced directly to the work of these committees. An increase in the acreage of alfalfa by 600 percent, a reduction in chick mortality from 25 to 7 percent, and many other worth-while accomplishments can be attributed to these committees or to special committees created for a particular job.

Plans, Plants, and Planting

The home of F. F. Miller, LaCrosse County, Wis., after planting shrubbery on the grounds, and the same home before any planting was done.

ATTRACTIVE FARM HOMES—Appealing school yards—inviting rural parks; what pride and satisfaction these can develop in the rural community.

"Who is there who visions the future of extension work who does not see these things in a rounded-out program in rural communities?" asks Norman A. Morris, extension specialist in landscape design at the University of Wisconsin. Economists and rural sociologists alike are calling attention to the greater percentage of the time of rural people that is being devoted to recreational activities.

"Rural people, in general, are envious of the neat yards and shrub-trimmed grounds that surround the homes of the city people", says Morris. "Yet, rural homes have practically all, if not more, advantages for planting and for improving the appearance of the home grounds. Farmers usually have ample ground for a good lawn, for trees, flowers, and shrubs. In nearby woods grow the hardy shrubs and trees that can be fitted into a practical planting plan. They have at their disposal fertilizer to make these grow. There are the natural surroundings that give that excellent setting for the home buildings."

In Wisconsin, rural people each year are taking an increased interest in planting and planning for beauty both in their homes and communities. In 1933 thirty-five counties were engaged in some form of grounds-beautification work. Three counties carried on home-grounds contests in which farmers and their families vied with their neighbors and other contestants for honors in the amount of improvement to their yards and home grounds, 192 farm homes having been entered in this contest. Three other counties carried on school grounds-improvement contests. Forty-six schools improved their grounds in this activity. A score or more other counties were engaged in contests to improve cheese factory grounds where bleak grounds and unsightly objects were transformed by painting, planting, and landscaping into places of civic pride and interest. In this contest 102 factories made improvements.

"Before entering a contest, the common question that is asked by every prospective contestant is, 'Is it going to be expensive?'" reports Morris. "Fortunately there are a great many things that can be done to improve home grounds, school grounds, rural factories, and parks, with little, if any, expense. The biggest item is that of labor which the people do themselves."

Once the plan has been outlined and the work begun, it is not uncommon in the Badger State to see farm homes changed in appearance in 3 months with no outside expense whatever. In this improvement work, drives have been graded and often graveled with material from nearby pits. Gravel walks have been built, lawns regraded, and fences around the grounds repaired. Latticework under porches has made startling changes in the appearance of the building itself. An example of a farm home changed in appearance by mere planting is shown in the two accompanying pictures of the same farm home, the one taken before and the other after the planting had been done.

Wisconsin is favored with an abundance of native shrubs and trees so that farmers have obtained from their own wood lots enough materials to plant their grounds. Many people have been surprised to find that shrubs in the brush of the woodside make good landscape plants. The brilliant sumac, the graceful elderberry, the colorful dogwoods, and the regal viburnums have served farmers' needs as well or better than any foreign importation.

The rural people of Wisconsin have been assisted in their grounds-improvement work by the horticultural department at the college of agriculture. The plan as carried out by a landscape specialist has consisted of three methods: First, contests; second, demonstrations; and third, illustrated lectures with colored slides.

A typical plan for such a contest is as follows:

September

A visit is made to each contestant's home, at which time the specialist gives suggestions on improving the grounds, and usually prepares a sketch planting plan for some part of the work, in many instances foundation planting. Preliminary judging is done and bulletins are given the contestant at this visit. An evening meeting is held at which an illustrated lecture is given on Home Grounds Beautification.

(Continued on page 8)

A Terracing Program that Builds Terraces

A TERRACING PROGRAM has been inaugurated in Tallapoosa County, Ala., which may point the way to eventual permanent solution of one of the American farmer's knottiest problems—that of soil erosion.

Under the leadership of Fletcher N. Farrington, county agricultural agent, farmers of the county and the court of county commissioners have begun the execution of a 5-year plan which it is expected will result in the proper terracing of every farm in the county.

The program is cooperative in nature. Though farmers of the county are paying the entire cost, the work is made possible through initiative and assistance given by their county government.

Soon after becoming county agent with headquarters at Dadeville 2 years ago, Mr. Farrington realized that one of the biggest tasks confronting farmers of the county was to reclaim thousands of acres of red Piedmont hilly land which was washed and gullied as a result of the rains and clean cultivation of past years.

The problem was brought forcefully to the attention of the county commissioners through tax-adjustment hearings. Farmer after farmer in appearing before the court to secure a reduction in their assessments would state that it was impossible for them to pay taxes on their land because it was virtually washed away.

Terracing Schools

To meet the need, County Agent Farrington and J. B. Wilson, extension agricultural engineer of the Alabama Polytechnic Institute, held two terracing schools at which 26 leading farmers of the county were trained in terracing and received certificates as licensed terracers. Through these leaders, demonstrations in terracing were established on farms in all parts of the county. Educational work on the subject was continued by Mr. Farrington through meetings of farmers, bulletins, circulars, and press articles. In addition, he procured the services of an airplane photographer from Maxwell Field who flew over the county and took 33 photographs which picture in graphic detail the damage being done to farm lands by soil erosion. These pictures were used in contrasting poor terracing with good terracing and to stimulate interest of farmers in saving their soil through the use of good terraces and winter cover crops.

County Commissioners Aid

As a result of this educational work and the tremendous loss to the county through depletion of the soil, the court of county commissioners became intensely interested in the problem and together with Mr. Farrington and Mr. Wilson devised a program which has met with almost universal response from the farmers of the county.

It became apparent that, due to lack of equipment and horsepower and to the nature of the soils of the county, which are of the Piedmont Cecil type and therefore somewhat heavy, most Tallapoosa farmers were not able to do an adequate terracing job as individuals. Therefore, County Agent Farrington and the commissioners decided to provide tractors and terracing equipment. In fact, the commissioners came to the conclusion that the terracing of land was equal to road building, if not greater, in importance.

The Tallapoosa County Soil Erosion Club was organized and actual work was begun a short time ago. The work was started with one outfit consisting of a tractor and a terracing machine. Four outfits are now in operation which terrace approximately 10 acres a day each. It is expected that six other outfits will be added before the work is completed.

Farmers who wish their land terraced apply to the Soil Erosion Club. When the work is done by one of the tractor outfits, the farmer is charged with the total cost, including labor, fuel, and depreciation. In this way the program is made self-liquidating, meaning that there will be no cost to the county government but that the entire cost will be borne by landowners whose farms are terraced.

The charge for terracing runs from $1 to $2.50 per acre, depending on the slope of the land, the number of terraces needed, and other similar factors. No farmer is charged less than $1 and none more than $2.50. County Agent Farrington estimates that good terraces enhance the value of land from $5 to $10 per acre.

It is expected that from 4,000 to 6,000 acres will be terraced this season. There are approximately 87,960 acres of field lands in the county and most of the land is in need of terracing, according to County Agent Farrington. Applications for terracing come in at the rate of about 700 acres a week. The county commissioners and Mr. Farrington are being assisted in the work by the licensed terracers who give expert service to farmers in running terrace lines and supervising the terracing work.

County agents and county officials from counties adjoining and near Tallapoosa have visited Tallapoosa to study the program and it is expected that similar work will be under way in an effective manner soon in Chambers, Coosa, Randolph, Lee, and other counties.

Plans, Plants, and Planting

(*Continued from page 7*)

April

Planting demonstrations are held at one of the homes. Contestants are shown correct methods of planting, pruning, and maintenance. An illustrated evening meeting is held at this time on the subject, How to Recognize Native Shrubs and Trees.

August

The final judging and achievement program includes the awarding of prizes and an illustrated lecture on Garden Features on the Home Grounds. Prizes are given for homes making the most improvement and also for the most attractive homes. In this way, everyone has an equal chance.

Demonstrations are conducted in several counties each year. Four farms are selected in different sections of the county, and plans are prepared by the specialist for arrangement and planting of their grounds. In the spring a planting demonstration is held at each of these farms. These farms are then checked each year by the specialist so that they may set a standard for the community to follow.

Illustrated lectures with colored slides are given whenever possible throughout the State, both as a stimulus for the work, and to bring to the people the principles of landscape work.

The following quotation from Harriet Keeler's "Our Northern Shrubs" illustrates the point very well. "It makes a great advance in the intellectual cultivation of the individual when he is able to appreciate the beauty of familiar things, and does not wish to destroy an object simply because it is well known."

So we find that home grounds can be improved at slight expense to the rural home owner, and the satisfaction and pride in having beautiful grounds will be real compensation for the time and effort the individual spends.

Tobacco Production Adjustment Programs

ALL THE PLANS under the Agricultural Adjustment Act for bringing the production of the commercial types of tobacco in line with a substantially reduced domestic and foreign export demand include benefit payments to growers. These payments, made, or to be made, with respect to the 1934 crop, total about $25,000,000. In addition to which many growers are receiving materially increased prices for the 1933 crop of several kinds of tobacco, and the prospects are favorable for a higher level of prices to producers in 1934.

In 1932, 1,421,700 acres were planted to tobacco; the average yield was 714 pounds per acre, and the crop totaled 1,015,000,000 pounds. In 1933 tobacco was grown commercially on 1,740,000 acres by about 400,000 farmers in 19 States. In 1933 the crop exceeded the 1932 total by about 320,000,000 pounds, in spite of low prices and a greatly abridged export outlet.

Early in 1933 the adjustment program for producers of cigar type tobacco became effective in the areas of its established production—Connecticut, Massachusetts, Vermont, Pennsylvania, New York, Wisconsin, Minnesota, Indiana, and Ohio. Growers signed the agreement to reduce their 1933 production by 50 percent. They received benefit payments approximating $2,000,000, of which $1,274,448 had been paid up to January 2, 1934. The agreement may be renewed in 1934 and 1935 by the Secretary of Agriculture.

Burley Tobacco

For the adjustment of Burley tobacco production, the plan calls for a reduction in 1934 production by 33⅓ percent, or 50 percent of the grower's base figure. It limits the crop to about 250,000,000 pounds, and the participating growers will receive about $15,000,000 in benefit payments. These growers are located in Kentucky, Tennessee, North Carolina, Virginia, West Virginia, Ohio, and Indiana.

For the growers of fire-cured tobacco, which is grown in Kentucky, Tennessee, and Virginia, the program, by agreement with growers, would limit the 1934 crop to about 110,000,000 pounds, reducing their production by 25 percent from their base. The benefit payments offered total about $1,700,000.

Under the agreement offered to growers of dark air-cured tobacco, the 1934 crop would be limited to between 30,000,000 and 35,000,000 pounds by reductions of 30 percent in the base figures, and growers under the plan would receive approximately $715,000 in benefit payments. This type of tobacco is grown in Virginia, Tennessee, Kentucky, and Indiana.

Marketing Agreement

A marketing agreement for handlers of Connecticut Valley shade-grown tobacco became effective December 11, following signatures by a majority of those in the industry and approval by the Secretary of Agriculture. It applies to shade-grown tobacco in Connecticut, Massachusetts, New Hampshire, and Vermont. Under its terms, allotments of acreage to growers and allotments which handlers may handle are permitted. It authorizes the establishment of a minimum price for sales by handlers and prices to be paid growers. The agreement requires that all tobacco sold by handlers be graded under Federal supervision; provides for handlers to submit required reports to the Secretary; and fixes terms and conditions under which shade-grown tobacco shall be sold. This agreement is the second to be approved in the tobacco industry. The first was a marketing agreement for flue-cured tobacco.

The production adjustment program offered to growers of certain grades of Maryland tobacco seeks to reduce their 1934 crop by 25 percent of their base tobacco acreage and base tobacco production. It is estimated that about 40 percent of the Maryland growers will find it advantageous to take part in the program, the main object of which is to reduce the production of the lower grades. Rental and benefit payments to participating growers are expected to total about $140,000 and improve the general price for this kind of tobacco. Under the agreement, the Secretary of Agriculture has the privilege of requiring in 1935 a reduction not exceeding 30 percent of the grower's base tobacco acreage and production, in which case benefit payments would be continued.

Processing Taxes

The processing taxes on the various kinds of tobacco became effective October 1, 1933, and are borne by the domestically consumed portion of the crop. In recent years the share of production of the several kinds consumed in the United States has been about as follows: Dark air-cured, from three fifths to four fifths; flue-cured, Virginia fire-cured and Maryland, one third to one half; Kentucky, Tennessee fire-cured, one fifth to one third. Burley and cigar types are practically all used in this country. The benefit payments to growers are paid out of revenue derived from the processing taxes.

With the exception of the domestic processing taxes on cigar-leaf tobacco, these taxes were levied at rates equal to the full difference between the current average farm prices and the fair exchange values. The processing tax on the first processing of cigar-leaf tobacco of 3 cents a pound, farm sales weight, is designed to prevent the accumulation of surplus stocks and the depression of farm prices of cigar-leaf tobacco which might result if the full tax rate, equal to the difference between the current average farm price and the fair exchange value, were levied.

The object of the tobacco production adjustment programs is to aid growers on making such adjustment in supplies of tobacco as to enable them to obtain fair exchange value for their crop. Fair exchange value, or parity, is the price for tobacco that will give it the same purchasing power, with respect to articles that farmers buy, as tobacco had in the base period 1919–28. In that period, for example, 1,000 pounds of tobacco on the farm would buy more units or quantities of things that farmers buy than they would have bought since that time.

The processing taxes on the six kinds of tobacco into which United States production has been classified by the Agricultural Adjustment Administration are as follows:

Processing tax (rate per pound)

Kind of tobacco	Farm sales weight	In processing order or condition	
		Stem not removed	Stem removed
	Cents	*Cents*	*Cents*
Cigar-leaf	3.0	3.75	5.0
Maryland	1.7	1.8	2.4
Burley	2.0	2.3	3.1
Flue-cured	4.2	4.7	6.1
Fire-cured	2.9	3.2	4.1
Dark air-cured	3.3	3.8	5.1

In consideration of the payments provided for reducing production, producers are required to restrict the use of the land taken out of production and to limit their production of other basic agricultural commodities. In the tobacco production adjustment agreements, the standard regulation applying to the use of rented or retired tobacco acreage reads:

The producer shall use the rented acres only as follows: All or any part may be left idle or planted to soil-improving or erosion-preventing crops or to forest trees or to pasture; not more than one half may be planted to food crops for home consumption on this farm or to feed crops for livestock (or livestock products) for home consumption or use on this farm.

(Continued on page 10)

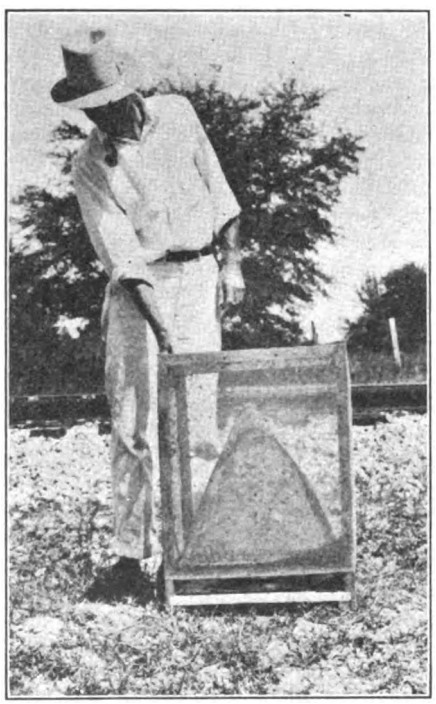
Florida Meets Outbreak of Screwworm Fly

THE SCREWWORM FLY—one of the blowflies—has been troublesome in Texas for a number of years, but when it invaded, in destructive numbers, certain south Georgia and north Florida counties in the late summer of 1933 it presented a real problem. Entomologists say that it has been present in this area for a long time, but generally its numbers are so small that it breeds only in carrion. Either its parasites became less effective or during the summer and fall of 1933 conditions became especially propitious for its spread. It became so numerous that it was attacking and killing some live animals with any scratches or bruised places on their hides. In some cases it wrought costly destruction.

The situation demanded and received the attention of county agents early in the infestation. Veterinarians of the Florida State Live Stock Sanitary Board and in private practice, as well as veterinarians and entomologists with the Florida Agricultural Experiment Station, gave valuable assistance in controlling the pest. In some places county commissioners and welfare agencies lent their aid. The result of this effective cooperation between all agencies was that losses were prevented and livestock owners were saved money.

Appearing first in border counties of south Georgia, the pest soon became of major importance in Leon, Jefferson, Madison, Suwannee, Baker, and Taylor Counties of Florida. It also gave trouble to a lesser extent in Lafayette, Columbia, Hamilton, Dixie, Wakulla, Gadsden, and Jackson Counties.

In Taylor County the cooperation of all agencies was complete, and the campaign was outstanding. Trouble from the screwworm fly was first observed in the northern part of Taylor County in mid-August. County Agent R. S. Dennis, already on the lookout for the pest and informed about control measures, held a meeting of all livestock owners in the county on August 24, that they might be given all available information as to treatment of infested animals and means of control of the pest. The county agent and representatives of the State Live Stock Sanitary Board, State Extension Service, and Experiment Station outlined these control measures and suggested that every effort be made to patrol the ranges and burn or bury all dead animals as soon as they were found. With an area of 1,050 square miles carrying 20,000 cattle and 40,000 range hogs, the proper patrolling of the ranges proved to be too big a task for the livestock owners alone, and the infestation of screwworm flies continued to spread, both in area and in intensity.



County Agent Dennis demonstrating the screwworm fly trap.

Early in September, County Agent Dennis discussed the matter with the board of county commissioners in session at Perry, Fla., and with the local unemployment relief council. The commissioners agreed to furnish materials for building at least 100 traps and the council agreed that their labor should build them and look after them. One of the commissioners and the county agent conferred with the State director of unemployment relief, and the local council was authorized to employ three men regularly for patrolling the ranges and to use other unemployed labor as needed. The county was divided into three districts and each regular man was given a district. Each selected local patrolmen for his district, and arrangements were made to patrol all ranges twice a week. Every dead animal found was burned, and injured ones were reported to owners for treatment. Reports were made regularly to County Agent Dennis.

After a carcass was burned, a trap was set and baited nearby to catch any adult flies which might emerge from the ground near where the carcass had been burned. The bait was placed in water containing a little nicotine sulphate to prevent the bait itself from spreading the infestation. The traps were remarkably successful in catching flies, and it was not uncommon to find them with over a gallon of screwworm flies in them.

Mr. Dennis says that the fly was almost eradicated in the originally infested area during the first three weeks of the campaign, but the ponds dried up and dead fish gave the fly a new lease on life. However, succeeding trouble was much less in that area, and the spread of the fly to additional areas in the county was practically stopped.

Tobacco Production Adjustment Programs

(Continued from page 9)

Another regulation in all the tobacco contracts is as follows:

The rented acres must not include waste, gullied, or eroded lands, but shall be tillable land suited to the growing of tobacco, and fairly representative of the tobacco land on this farm.

In the case of the cigar tobacco production adjustment program which was the first offered by the Agricultural Adjustment Administration, the provisions in regard to the use of land taken out of tobacco production by growers under the agreement were practically the same in principle as those embodied in all the other tobacco agreements.

The agreements are uniform in providing for the distribution of each adjustment payment to share tenants or share croppers as their interest may appear. Furthermore, the producer, under an agreement, is not permitted to reduce the number of his tenants or croppers engaged in growing tobacco on his farm in 1934 below the number so engaged in 1933, because of reduction of tobacco acreage and production, or because of other provisions of the agreement.

THE Ready Workers 4-H Club of Laconia, N.H., has been awarded a $40 prize for roadside beautification. Their work consisted of thinning and pruning a strip of pine woods several hundred feet long and nearly 300 feet wide, which lies between Lake Winnisquam and the highway. Now motorists can see the lake which was once hidden by brush and trees. The boys worked a total of 1,500 hours.

Using Extension News Calendars

EXTENSION news calendars come to the front with New Year's resolutions. The following excellent examples of such calendars speak for themselves. The first one, which was worked out and used successfully by County Agent J. V. Highfill, Franklin County, Ark., was submitted after reading County Agent Wilson's ideas on the subject in the October issue of the Review. The second, prepared by W. H. Darrow, Texas extension editor, for the county agent news-writing conferences, has been supplied to all Texas county agents.

Arkansas Calendar Brings Results

IN THE case of the extension news calendar for Franklin County, Ark., plans were made at the beginning of the year to make the greatest possible use of stories in the weekly and daily press as well as on the radio, as the great importance of bringing extension activities to wide public attention was realized.

From experience, it was found that the haphazard method of writing news at odd times was not effective and that the greatest good through news stories could not be accomplished in this manner. By observing the old method of news writing there seemed to be a let-down in the amount of information prepared during the summer months and perhaps too much subject matter in the winter and spring months. When subject-matter stories were written Agent Highfill found that the story was more widely read if it was built around some news feature.

A year's use of this news calendar has led to much more systematic news writing on the agent's part. It has reminded him also, in connection with individual stories, to consult demonstrators and individuals in advance of the release of the stories so that their opinions may be incorporated.

The use of stories in the calendar has insured the release of seasonal stories at the proper time as well as affording plenty of time for writing the stories.

During the year 194 subject-matter and news stories were released to two different county newspapers, besides five radio talks and numerous other news items which appeared in daily papers and several monthly farm magazines. County Agent Highfill gives the following specific results which he attributes to an efficient news service.

The results of 11 pork-cutting and curing demonstrations were the basis of a series of news stories which has almost revolutionized the curing of pork in Franklin County. Hundreds of farmers have written or called for the sugar-cure method of curing pork, and the old salt cure has given way to the sugar-cure method.

Because the results obtained in shipping potatoes cooperatively by the Charleston Potato Grower's Association were written in the form of several news stories, the membership of the organization was increased from 14 to 35. After hearing of the success of the association through the press, farmers became eager to join in order to market cooperatively.

In order to obtain a good acreage of Korean Lespedeza, a series of news articles was written in regard to this legume, which resulted in 300 acres being seeded in the county. The only means by which the value of this crop was learned by farmers was through the press. A good acreage are established the first year.

A series of news articles which included subject matter relative to the soybean and the experience of those who had grown soybeans, was writtten early in the spring. Due to this newspaper campaign, over 500 acres were planted to soybeans in the county. In previous years, soybeans had been practically unheard of by farmers of this county.

The fact that Franklin County signed 124 percent of her quota in the recent cotton acreage reduction campaign is to a large extent attributed to the large amount of publicity devoted to this one campaign. A series of stories is also largely responsible for 67 percent of the abandoned cotton acres being planted to feed crops in this county.

A series of news stories resulted in 25 percent more winter cover crops and pasture crops being planted in the county than were planted last year. Publicity also brought out 250 farmers to view the exhibit train which made a 1-day stop in the county.

Farmers of the county became interested enough from what was written in the county papers relative to cooperative shipping of livestock so that 55 farmers shipped $3,701.51 worth of cattle and sheep. No meetings were held. Publicity was used all together, which brought them in to see about it, and they shipped their livestock.

Early in the fall, a short series of news articles was published in regard to economical storage of potatoes for those who did not possess storage houses. These articles brought dozens of men in to inquire. Many of them returned home and put their potatoes away in the manner recommended.

A series of news articles from May to October 13, the date of the county fair, is responsible largely for the 5,000 people who attended the fair each day.

News stories alone sold the idea to enough farmers that they bought 300,000 strawberry plants through the county agent and thereby established over 100 acres of a new early spring cash crop in the county.

The following are two sample months of the calendar itself:

Calendar for News Stories

January 1933

Subject Matter
- Certified potato seed
- Spraying for peach leaf curl
- Hog flu or pneumonia
- Preparing land for strawberries

News—County and State Extension Activities
- Outlook meetings
- St. Mary's Club wins State championship
- Agents' conference
- Farm machinery week
- Cattle epidemic outbreak
- Demand for cowpea seed
- Plan of work
- County agricultural committee meets

Demonstration Results
- Potato yields
- Spray results
- Strawberry yields

February 1933

Subject Matter
- Planting strawberries
- Home orchards
- Value of Lespedeza
- Spray schedules
- Care of barnyard manure
- Lespedeza sereca

News—County and State Extension Activities
- Monthly outlook
- To ship car of poultry
- Potato growers' association buys seed
- Live-at-home week
- Federal farm loans
- Results of meat cutting and curing work
- Bills in State legislature

Demonstration Results
- Pasture results
- Lespedeza results
- Results of brick brooder
- Stove demonstrations

A County Agent News Calendar for Texas

The Texas county agents' news calendar developed for the annual extension conference by W. H. Darrow, extension editor, is, as he says "a fresh attempt to help agents with their local news writing."

One of the big handicaps in developing a good local news service is the agent's frequent inability to recognize news. Often they know there is news in the fall of the year when demonstrations are being completed, but challenge anyone to show them news throughout the year. This calendar attempts to meet this challenge by using a typical plan of work on only four lines of activity and listing at least five good news stories every week in the year.

The following excerpts from the calendar itself give an idea how the calendar was made up and the type of stories suggested. Many of the suggested titles for stories had to be omitted because of lack of space.

Features of the Assumed Plan of Work

1. Cotton campaign.
2. 4-H club work.
3. Filling the farm storehouse demonstration.
4. Terracing.

Cotton Campaign

About December 1 to March 1, May, July, August, September. Kinds of stories: General plan—how it works out in John Doe's case; county organization plans; notices of community meetings; names of county campaign committees; names of community committees; officers of county production control association; progress of sign-up campaign; good uses planned for retired acres; good farming methods in use on cotton farms; information stories on arrival of cash rental checks.

(The original calendar contained many more suggestions for stories which cannot be included here for lack of space.)

4-H Club Work

Throughout the year with emphasis on fall months. Kinds of stories: Summary of 1933 club work; summary of results in each line of club work, as corn, cotton, pigs, chickens, etc., including names, average yields, profits, etc.; club plans for 1934; names of club members as enrolled by communities; progress of each kind of club work, as "all the corn is planted"; "beeves gained 2 pounds per day last month", etc.; progress of individual members, as "Johnny rigs up novel pig-weighing scales", etc.; individual achievement stories of several of the high-record boys in each line of work; group achivements in terracing, spraying, pruning, culling, etc.; summary of all results in each line of club work.

Filling the Farm Storehouse Demonstration

Entire year, emphasis on early spring and fall. Kinds of stories: Outline of a simple plan for making most of family food supply at home; names of demonstrators enrolling for filling farm storehouse demonstration; trees and vines demonstrators are planting for fruit; how farmer A uses skim milk for hogs and chickens; how farmer B handles his garden etc.; progress of living-at-home demonstrators—how many of them, total acres, average cows, chickens, garden per farm, etc.; number of living-at-home demonstrators whose wives are 4-H pantry demonstrators; summary story of how much stuff stored for winter, how much eaten fresh, how much demonstration has been worth to them; brief achievement stories on 10 or more individual families that have done well.

Terracing

Throughout year, emphasis on fall and winter. Kinds of stories: Summary of all terracing in county last year, how many farms and acres, how much the cost and how much the value; summary of all terracing done in county in all time, and how much remains to be done; summary of demand for terracing help and county agent plan for handling it in 1934; progress reports from month to month during season of recent terracing done; stories of individual terracing success; list of farmers trained to run lines, and summary of what they have done this year; many 1-sentence stories on general theme "What terracing has done for me."

The suggestions given for stories throughout the year on these four lines of extension work were woven together into a suggestive news pattern for every week in the year as shown in the following sample weeks taken from the calendar:

January 15

Names of community cotton committees.

Marketing retired acres.

Questions and answers on cotton contracts.

Names of demonstrators enrolled in "Filling farm storehouse demonstrations."

How farmer Jones cured beef.

January 22

Officers of county cotton production control association.

More about campaign progress.

How farmer X and wife made a living at home last year.

Club beeves gained 2 pounds per day last month. More names of demonstrators in filling farm storehouse demonstrations.

January 29

Preliminary summary of cotton sign-up.

The job confronting county allotment committee.

Cropping plans for filling farm storehouse demonstration.

How farmer P and wife have cut grocery bill by living at home.

Key banker supplies club boys with seed corn.

February 5

How leading community put over campaign.

Progress of county allotment committee.

Good farm systems planned by local farmers.

How farmer O profits from improved permanent pasture.

Farmers order fruit trees and vines from home fruit supply.

February 12

Plans for signing cotton contracts.

Final figures on cotton applications.

Complete summary of filling farm storehouse demonstration (number demonstrations and average acreages, livestock, etc.).

Club boys run terrace lines on three farms.

February 19

Progress in signing cotton contracts.

Story of farmer attitude toward cotton plan.

Good uses planned for retired acres.

How farmer R keeps car up on egg sales.

Farmer terraces pastures.

A 5-Year Beautification Plan

More than 200 homes in four communities of Greene County, Ark., are interested in a State-wide 5-year contest program for home and community beautification. All of these projects are under the direction of chairmen of the home-demonstration club. They are completing the fourth year of this competition, which started in one community 4 years ago, and has added a new community each of the succeeding years.

Every home in these four communities is interested in the plan and has done some work toward the visual beautification of the homestead. They have removed dilapidated buildings; are making permanent plantings of native shrubs; have painted houses and barns, and have improved lawns and pastures, with results that please the eye.

Even when one of the schoolhouses was destroyed by fire, after plantings had been made, the community turned out and made new plantings on the grounds.

The winners of the contests have been very helpful with their suggestions to the other participating members. The use of native plants has kept the expense low and has in turn made the project available to all. Cooperative suggestions have aided the local club members in formulating the individual home-planting plans.

4-H Camp on Historic Site

Rusk County, Wis., has a new 4-H camp, located on a spot which 60 years ago saw the footsteps of early settlers of that region, writes County Agent C. O. Ebling. It is the site of an old log hotel, where teamsters stopped over night with their huge loads of lumber. Delinquent taxes had claimed the place along with second-growth trees and numerous weeds.

County commissioners, upon request, deeded the property, a tract of 86 acres, to the 4-H clubs and future farmers as a permanent camp site.

The 4-H boys and girls have already made improvements on their camp and the shades of yesterday look upon the smiles of today.

THE LARGEST single problem on poultry farms in New York has to do with marketing and concerns the profitable sale of broilers, according to 283 farmers who were asked to give a list of topics for discussion at poultry meetings.

BOYS and girls in 4-H clubs reached a new high in New Hampshire in 1933 with a total enrollment of 7,478.

Presenting the Economic Situation Through the Press

One of the best newspaper feature articles based on an economic survey of a county and the outlook which has come at any time to the attention of the editor was one by County Agent M. D. Butler, on the agricultural page of the Sunday Chronicle-Tribune, Marion, Ind., February 28, 1932. This was used as a lead article, using two "streamer heads" across the top of the page. Written 2 years ago, it brings home to us, also, the vital changes which have taken place in the economic situation in every county. The article follows in part:

GRANT COUNTY AMONG LEADING FARM SECTIONS

Plans Nearing Completion for Annual Series of Outlook Meetings

FARMERS ARE QUICK TO SEE CROP CHANGES

Agriculturists of Community are Prepared to Adapt Selves to Necessary Condition Changes

Although market prices on farm products have dropped considerably during the year, Grant County farmers are rapidly adapting themselves to present conditions, and by reducing costs, culling out nonpaying departments of the farm, and working scientifically incomes for the coming season are expected to be far greater than during 1931.

The above statement comes after a survey of Grant County farm conditions and is probably as accurate a forecast for agriculture in this community as is obtainable. Farm leaders seem sure that the farmer is due to receive more profits this year, and the fact that farming is one of the best money-making industries is seen in the back-to-the-farm movement.

Extension work is going to aid the farmer this year probably more than ever before. Through county agents and organizations which cooperate with these county agents the United States Department of Agriculture is bettering farm conditions. Probably one of the best examples of this work is the organization of the group in Liberty Township. Through this organization Liberty Township farmers have greatly reduced costs and have produced only the best-paying products.

Grant County is located in the heart of one of the outstanding farming communities in the Middle West. It is one of the leading diversified agricultural regions in the United States, and among the many departments of the industry found here are hog raising, poultry raising, cattle breeding, dairying, grain raising, truck gardening, and sheep production.

With nearly 4,000 farms in operation in the county there are more than 3,800 farmers actively engaged, a few of them operating more than one farm. This number is a slight increase over that of a year ago.

Although the market this year was lower than for many seasons, hog raising was probably the greatest source of income to Grant County farmers during the year. The soil is especially adaptable to producing proper feed and the climate is ideal for large production of pork.

One year Grant County was known as the largest commercial hog feeding county in the Nation and Fairmount ranked tenth in the country as a shipping point. Although total receipts in hog raising dropped from slightly over $2,000,000 in 1930 to little more than $1,000,000 in 1931, cost of production was also greatly reduced and the average net profit was but little reduced, especially if one takes into consideration the fact that the present dollar is worth more in commodities than a year ago.

Linked with the hog raising is the production of corn. More farmers fed their corn during last year than ever before, principally because the corn market was so low. A bushel of corn turned into pork was found far more profitable than a bushel of corn sold on the market.

Despite the low market, however, corn and other grains brought to Grant County farmers almost $1,000,000. Of course, but a small part of this was profit, but it tended to help the economic situation greatly by the exchange of the moneys.

Dairying has been greatly improved in Grant County during the last year and the number of dairy cattle has been boosted from 15,000 a year to more than 20,000 at the present time. Milk products have not dropped in price in comparison with other farm products, and many farmers have turned to this branch for their largest profits.

The meat livestock industry was also good during the year comparatively and promises to be much better during the coming months.

FOURTEEN members of the Vineland, N.J., 4-H Poultry Club, owning single-comb White Leghorns, entered a pen of 16 birds in the Vineland international egg-laying contest last year. The boys, in selecting the birds for this contest, put into practice what they had learned in judging birds for egg production. The pen was assembled at the home of the local leader, J. D. Eno, one of Vineland's prominent poultrymen, and then taken to the egg-laying contest.

The pen made a very creditable showing during the year. At the close of the contest, September 24, the pen had completed the year with a production of 2,008 eggs, an average production of 200 eggs per bird. Only one bird died during the year. The assistant county agent, F. A. Raymaley, gave a monthly report at the club meetings on the standing of the pen and the individual birds. This report never failed to produce discussion among the club members.

To obtain the greatest benefit from this pen the club members have accepted the offer of Mr. Eno that he keep the pen and put in a high-production pedigreed cockerel with it. He will give each member 10 chicks from his bird next spring. This plan will distribute stock of known egg production to the members.

MORE than 1,500 Vermont children were examined last year in free school clinics sponsored by the Vermont Extension Service cooperating with the State board of health. The work was under the supervision of the home-demonstration groups in the various communities who have been emphasizing health in their home-demonstration work.

Eighty-five dental clinics were also held in six counties, with 1,792 children treated at an estimated saving of over $5,000. Some home-demonstration groups sponsored a diphtheria-immunization campaign, with the result that 633 children were treated with toxin-antitoxin. Home nursing lectures and discussions were organized in several communities with the help of trained nurses and instruction obtained in such subjects as the care of the sick room, first aid, the home medicine chest, and simple home treatment.

Extension Influence Carries on

THE STRENGTH of the foundation work that is being done by the county agricultural agents and the home-demonstration agents is brought strikingly to light by the winners of the Moses leadership trophies at the Twelfth National 4-H Club Congress.

Four-H club work has a permanent place in the lives of enthusiastic rural youth. The leadership instilled in 4-H club members has aided them in temporarily carrying on, even when the extension agents were not reemployed by the county commissioners. The fact that the influence of the extension workers continues through the local leadership developed is certainly indicative of the need for the fundamental work of extension agents.

Boy Wins Over Depression

When, in 1931 and 1932, the county commissioners failed to provide funds for employing a county agent, Hugo Graumann, of Greer County, Okla., stepped in and by virtue of his own determination, took over the direction of the 4-H clubs in his county. The success of the work he has done is reflected in the success of his demonstration teams, the growth of 4-H clubs in the county, and the State-wide inspiration that has been brought about through his visits and pep talks. The county has become famous throughout the State as a 4-H center. His own efforts have been rewarded by the presentation of the Moses 4-H Leadership Trophy.

Hugo has been in club work for 8 years and his projects have involved 93 animals, 540 fowls, and 131 acres of land. Poultry and terracing demonstration teams from the county have won honors at the State fair and a successful 4-H fair has been held in the county under local leadership. Hugo has taken part in 32 public demonstrations and 41 judging contests, having been undefeated in these activities in the county during the last 4 years.

The ability to carry on while obstacles of every kind faced her on all sides won for Doris E. Clark, of Marinette County, Wis., the coveted Moses 4-H Leadership Trophy. Her home community is located far from the county seat, is made up of a cosmopolitan group of nationalities, and has a passive indifference toward better homes; yet she, by her own enthusiasm over a period of 5 years, has been active in the 4-H club work of her county, which for the last 2 years has been without a home demonstration agent.

Hugo Graumann and Doris E. Clark broadcasting after winning the Moses Leadership Trophy. They both spoke highly of the value of 4-H leadership training in building good community citizens.

Doris has traveled 5,577 miles in her efforts to put club work in her county out in front. The greater part of this travel was necessary to make personal visits to club members and stage public demonstrations and plays to visualize the work. The efforts she has expended have resulted in her girls winning many district, county, and State championships. Doris is 18 years old and a freshman in home economics at the University of Wisconsin.

ARKANSAS farmers this fall have increased the planting of vetch 300 percent over the planting of any previous year.

There are two reasons for this increased interest in soil building. First, county agents during the past 6 years have conducted hundreds of result demonstrations with vetch to show its value as a soil-building crop.

Second, farmers have been quick to take advantage of the opportunity offered in soil improvement this year in connection with the cotton plow-up program. Arkansas cotton growers took out of production nearly 1 million acres of cotton during the summer, thereby releasing labor and horsepower that could be used in the preparation of soil for this increased planting of vetch.

RAPID progress in poultry production has been made by Oklahoma in the past 10 years. In 1924 the average annual egg production per hen was 56 eggs. By 1930 it was 84 eggs per hen.

The flock owners who are keeping good birds and giving them good care have been shown by extension records to be getting from 145 to 180 eggs per hen per year.

A STATE-WIDE series of finish-up meetings has been completed by the home-demonstration groups in Vermont. More than 1,000 women attended, with a total family attendance of 2,656.

The meetings, one in each county, were achievement meetings, culminating the work of the year. In several places exhibits of canned goods were held and the finals in the canning and bread-making contests conducted. There was also a demonstration of quick breads. The women invited their husbands to the luncheon. The evening was devoted to recreation, featuring skits, plays, stunts, and old-fashioned dances.

Memorial Archways Proposed

The national honorary extension fraternity, Epsilon Sigma Phi, recently presented a resolution to Secretary Wallace for the naming of the archways which will connect the new South Building with the main building of the United States Department of Agriculture.

The fraternity requested that the west arch be designated the Wilson Memorial Arch in recognition of the high qualities as a statesman of the Hon. James Wilson, deceased, for 16 years Secretary of Agriculture, and for his services to American agriculture. Secretary Wilson began the building of a home for the Department which would ultimately house all of the Department's activities.

The fraternity also asked that the east arch be designated the Knapp Memorial Arch in honor of the Hon. Seaman A. Knapp, deceased, who as chief of the Office of Extension Work in the Southern States, Department of Agriculture, by his far-seeing vision and tireless application to duty made possible the establishment of the present national system of cooperative extension work in the United States.

This resolution was presented to Secretary Wallace by W. A. Lloyd as director of the Grand Council, Epsilon Sigma Phi. Mr. Lloyd, who was awarded the distinguished service ruby by the Grand Council at its Chicago meeting in November, has been in extension work for nearly 30 years, now being with the Federal Extension Service in charge of extension work in the Western States. He organized extension work in the Territory of Hawaii in 1928–29 and in the Territory of Alaska in 1930.

Persons previously honored by the distinguished service ruby were the late Dr. A. C. True, director, States Relations Service; the late Dr. W. D. Bentley, assistant director, Oklahoma Extension Service; J. A. Evans, associate chief, Office of Cooperative Extension Work; and W. B. Mercier, director emeritus and extension adviser, Louisiana Extension Service.

THIS GROUP of 58 senior 4-H club members and their leaders from Lake County made the second annual pilgrimage to the University of California Campus. Saturday, September 23, was spent in visiting various buildings and activities, where they were greeted by outstanding men of the university and received inspirational and instructional information. Glenn Waterhouse, assistant State 4-H club leader, acted as guide for the group, and L. C. Barnard is county agent of Lake County.

New Film Strips

EIGHT NEW FILM STRIPS as listed below have been completed by the Office of Cooperative Extension Work in cooperation with the Agricultural Adjustment Administration, the Bureaus of Agricultural Economics, Animal Industry, Entomology, Forest Service, and Home Economics. They may be purchased at the prices indicated from Dewey & Dewey 7603 Twenty-sixth Avenue, Kenosha, Wis., after first obtaining authorization from the United States Department of Agriculture. Blanks for this purpose will be supplied upon request to the Office of Cooperative Extension Work.

Series 171. Diagnosis of Bee Diseases in the Apiary. Illustrates the symptoms of the different diseases of bees distinguishable in the apiary and methods of control. 58 frames. 35 cents.

Series 270. Farm Home Life Today. This series is self-explanatory. It was compiled to give a general conception of modern home life on the farm as it may be found throughout the country. 93 frames. 49 cents.

Series 295. Satisfying Farm Homes—the Result of Home Demonstration Work. (Home demonstration series Part II.) Illustrates the contribution of home demonstration work in making the farm home efficient and satisfying. 62 frames. 35 cents.

Series 314. Cooking Meat According to the Cut. Illustrates the principles of cooking the two types of meat, the tender and the less tender cuts, so as to conserve the food value and bring out the flavor and appetizing qualities of each to the fullest extent. 51 frames. 35 cents.

Series 319. National Forest Playgrounds. Illustrates that the National Forests not only serve the Nation by yielding timber and other products, protecting watersheds and providing range for livestock, but also offer opportunities for recreation to vacationists, tourists, and health seekers. 74 frames. 42 cents.

Series 322. Canning Fruits and Tomatoes at Home. Supplements Farmers' Bulletin 1471, Canning Fruits and Vegetables at Home, and shows the method of home canning fruits and tomatoes advocated by the Bureau of Home Economics. 55 frames. 35 cents.

Series 324. The Hog-Corn Problem, 1933–34. Depicts the hog-corn problem, its effect on the Corn Belt farmer, and the program for general agricultural betterment. 34 frames. 28 cents.

Series 325. The Cotton Problem. Illustrates the cotton problem showing its effect upon the southern cotton farmer and the program for general agricultural betterment. 32 frames. 21 cents.

Revised Series

The following series have been revised:

Series 230-A. The National 4-H Club Camp. Illustrates how the camp, which is held annually, is conducted and the various recreational and educational activities in which the boys and girls participate. 76 frames. 42 cents. (If desired in glass slides request Series 230 of same title. It consists of 42 slides.)

Series. 241. The 4-H Club Story. Illustrates the activities connected with boys' and girls' 4-H club work. 66 frames. 42 cents.

Series 242. Seeing Washington. Illustrates points of interest in Washington, D.C., and vicinity. 70 frames. 42 cents.

Series 264. Rug Making—A Fireside Industry. Illustrates how farm women and girls through the influence of home-demonstration agents, have become interested in reviving the old art of rug making by utilizing home-dyed, discarded sheets, blankets, and clothing, and that through this activity a profitable home industry has developed. 95 frames. 49 cents.

Completed Localized Film Strips

The following two localized film strips were completed during the months of November and December by the Office of the Cooperative Extension Work in cooperation with county extension agents, specialists, and other extension workers. The photographs used were all local pictures, either selected or taken by the agents themselves.

Series 1111. Farming in Chemung County, N.Y. 40 frames. 28 cents.

Series 1112. Timely Topics for the Maine Farm Home. 65 frames. 42 cents.

IN 1919 the New Hampshire Experiment Station started a campaign to eliminate Pullorum disease from poultry flocks in the State, as it was estimated to be causing a loss of at least half of all chicks hatched. Ten thousand hens in 47 flocks were tested, and only 6 flocks were found to be free of the disease. The 1932 report of the experiment station listed 202,323 birds tested for Pullorum disease, or over one fifth of the poultry population of the State. The percentage free from infection was 99.51.

TO CONTROL a threatened outbreak of cholera, the county agricultural agent of Currituck County, N.C., vaccinated 1,459 hogs on 63 different farms in 11 communities during 1 week in September.

National 4-H Club Radio Program

Annual Theme: 4-H Club Work Influences the Farm and Home

Third Phase—Attractive Home and Surroundings a Keynote in 4-H Club Work

Saturday, March 3, 12:30 to 1:30 p.m., Eastern Standard Time

4-H Club Work Encourages Attractiveness In and About the Farm Home	4-H Club Girl from Vermont.
The Good Appearance of the Farmstead Should Be the Farm Family's Pride.	4-H Club Boy from Wisconsin.
Beautification in Farm Surroundings Mean for Satisfaction and Contentment.	County extension agent from Vermont.
4-H Club Work Brings Together Rural and Urban Interests.	Field Agent, Extension Service, United States Department of Agriculture.
Music We Should Know—Third Phase of the 1934 National Music Hour, Featuring Compositions by Rimsky-Korsakow, Leoncavallo, Tschaikowsky, Rubinstein, and Haydn.	United States Marine Band.

AN ESTIMATED saving of cash and feed crops amounting to $2,001,460 was made in 22 North Dakota counties the past season as a result of grasshopper-control activities. Control operations were conducted in 18 other counties, but valuations of the crops saved there were not reported.

The crop savings ranged from $932,960 in Ward County, where intensive work was done, to less than $5,000 in several counties where campaigns were not pressed vigorously, according to reports from the North Dakota Extension Service. Ramsey County saved $673,460 worth of crops; Burke County credited a $250,000 saving to grasshopper control; Steele County estimated its antigrasshopper work as being worth $161,280 in crops; and Renville County reported a $129,450 saving.

According to F. D. Butcher, Federal entomologist, who aided the Extension Service in its grasshopper-control program, North Dakota counties spent approximately $136,991 for poison bait materials. The mixed bait was prepared at a cost of about $20 per ton for materials.

The Extension Program for 1934

(*Continued from page 2*)

the near future for an adequate force of well-trained agents publicly financed on a permanent basis. While the immediate requirements of the Agricultural Adjustment Administration make the completion of our staff of county agricultural agents the most imperative need of the hour, I feel just as strongly the need for making available the services of qualified home-demonstration agents to rural women and girls in all counties as rapidly as that service can be financed.

Associations Organized

With the new demands on extension agents to organize and conduct educational campaigns leading to the signing of contracts for production control, there must be a larger dependence on local leaders and demonstrators to make the educational program available to the public. In the setting up of the county wheat production-control associations, thousands of farmers have for the first time not only joined with their Government in a cooperative enterprise, but with their neighbors. Out of these county wheat production-control associations already organized or in process of organization and the other commodity control associations which are projected, I can foresee possibilities of unified effort on the part of farmers such as we have never known before. While the activities of these county production-control associations are very properly limited to the entering into and carrying out of agreements to control the production of a specific commodity, cooperative effort growing out of them may extend far into other lines.

With the very great advances made in recent months in bringing together commercial interests on the one hand and labor groups on the other, there is greater need than ever before for strong, progressive farm organizations with well-trained, thoughtful leadership. If agriculture is to recover its rightful place in our national picture and to maintain it, there must be unified presentation of the needs of agriculture in State and Nation such as can be made only by organized agriculture representing, not as it does now, a minor fraction of the farm population, but in position to speak with authority for the great mass of rural people. It is not to be expected that all farmers or even a majority of them will join any one farm organization any more than that all will agree to the tenets of one political party or one religious denomination. Extension agents should lose no opportunity to work with all farm organizations in their counties and should impress on their constituents the desirability of membership in these organizations.

This is the time for a careful review of State and county extension programs; a consideration of those features which contribute directly to better farm income or better living conditions in rural homes, and elimination or postponement of those which for the moment, at least, do not make a definite contribution to this end. With the present necessity for economies in county, State, and Federal governmental operations, we must be able to show that every dollar made available to us is expended for a practical purpose, is expended in a way that brings the largest return to the rural people of this Nation. We need capable, well-trained extension agents in every rural county, financed with public funds, aided and supported by strong farm organizations, and supplemented with earnest, interested men and women who will assume community leadership of both adult and junior groups. There is need, as never before, for able, tactful administration and supervision and for adequate specialist service. It is my belief that, while these are times that try men's souls, the Extension Service, taking the country as a whole, is in better repute than ever before, and I confidently expect to see it go on to larger things.

RECORDS for the past year show 200 West Virginia 4-H clubs with a "Standard" rating for 1933 and 71 clubs completing all project work 100 percent. This is a gain of 20 "Standard" clubs over last year's total and of 13 clubs making a 100 percent record.

·ACROSS · THE · EDITOR'S · DESK·

Teachers of Agriculture

BEGINNING with this issue, the REVIEW is being sent to all teachers of vocational agriculture. This arrangement has been made by Director Warburton with the very helpful cooperation of M. S. Eisenhower, Director of Information, and meets an urgent request from C. H. Lane, Chief, Agricultural Education Service, Federal Board for Vocational Education, for the inclusion of teachers of agriculture on the mailing list of the REVIEW. I am sure that extension workers generally will be glad to know that teachers of agriculture as a group will now be among the regular readers of the REVIEW and will have this opportunity to become familiar with extension activities, not only in their respective localities but throughout the country. In his letter to Director Eisenhower asking that steps be taken to add teachers of vocational agriculture to the REVIEW mailing list, Director Warburton expressed his earnest desire for the fullest possible cooperation between extension workers and teachers of agriculture. He said: "We trust that Dr. Lane's request will be approved as there is a distinct need for a better understanding between these two groups of educational workers which are exerting such a tremendous influence upon farming and farm life. The efforts of these two organizations dedicated to public service should be more closely coordinated in order to achieve with the maximum efficiency the same ultimate objective—the improvement of farming. Each group, although attending to its own task first and using its own distinctive teaching methods, should lose no opportunity to promote in every way possible the work of the other group."

Dealing With Human Nature

BEFORE his inauguration as Mayor of New York City, I was fortunate in hearing Mayor LaGuardia speak before the National Press Club on the rapid developments of the year. He made one point, in particular, that I think cannot be too strongly emphasized. Speaking of the many and varied governmental efforts to make needed adjustments in agriculture and industry, he said that we are not engaged so much in dealing with problems in economics as in problems of *human nature*. If this is the case—and I believe it is—all of us, I think, who have to do with the great programs of commodity production adjustment may well concern ourselves a little less with the niceties of factual detail and much more with how we can influence public thought and action to accomplish the ultimate balance of production and demand desired. The way to deal with people, I think we have found in extension work, is to work with them, to know them, and talk to them simply, clearly, and honestly, and to have them on their part know and work with us toward meeting their very *human* needs as well as their "economic requirements."

Sense About Prizes

I AM SURE that the statement about prizes for 4-H club achievement made by Director Warburton before the Association of Land-Grand Colleges and Universities, in November, will receive an enthusiastic "Amen" from every friend of 4-H club work who has given this matter study and honest thought. Director Warburton said: "Occasionally prizes or returns to club members are out of all proportion to the accomplishment of the boy or girl. When the sweepstakes calf at a livestock show sells for ten thousand dollars merely because two or more commercial concerns get to bidding against each other for the advertising they may get out of it, while dozens of other calves almost as good hardly bring the current market price, too much emphasis is being placed on the winning of a championship and not enough recognition is being given to the rank and file who have done their level best. It is pleasing to note that in this depression many very successful club shows and exhibits have been held at which no prizes were offered other than the ribbon denoting first, second, or third place. At these shows there was no noticeable diminution in the quality of exhibits or the keenness of the competition, and I am sure there was far less heartburning and jealousy on the part of those who were not quite good enough to win top honors."

The Long View

I SAW some weeks ago that unusually striking motion picture, Berkeley Square, in which the people of two separate centuries are for a time made to live and get along together as best they can. Toward the close of the picture, a vivid contrast is drawn between what is envisioned on the one hand by a man in a rowboat following the course of a river and on the other hand the vivid scene that lies beneath the passenger in an airplane overhead. The man in the boat sees a different scene with each turn of the river and *only* that; maybe, a grove of oaks, here, a stretch of clover field, there, and, around the bend, hidden from his immediate view a town comes down to the water's edge. The traveler in the airplane sees all of these separate scenes at once. His view is comprehensive. Each of the separate scenes that make up this view is equally clear and vivid to him.

I think there is a thought in this contrast for us, particularly, in this year of continuous and hard driven effort to aid in the needed adjustments of agriculture and rural life. As we take each turn in our course, absorbed in this, today, and that, tomorrow, we need sorely to find a way to glimpse the whole panorama of our effort stretching over the weeks and months—to get, at least, once in awhile, *the long view* and to know whither we are headed. R. B.

AGRICULTURAL ADJUSTMENT—

HOW IT WORKS

Farmers and the public generally should have a clear and complete understanding of activities being carried on under the Agricultural Adjustment Act.

To help extension workers give them this information the Department has made available the following publications:

G–1 The Agricultural Adjustment Act and Its Operation.
G–2 The First Four Months Under the Farm Act.
G–3 Progress on All Fronts Under the Farm Act.
G–4 Dollars to Farmers Boom Business.
Economic Trends Affecting Agriculture.
Economic Bases for the Agricultural Adjustment Act.

These publications explain the economic and social justification for adjustment policies, the sound economic principles upon which the act is based, progress being made in achieving production adjustment, and the benefits obtained. They are in addition to those that have been published about wheat, cotton, tobacco, and corn and hogs, the production of which is being adjusted.

County extension agents may procure supplies of these publications from the Extension Service of the United States Department of Agriculture. Orders should be sent through the office of the State extension director.

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UNITED STATES DEPARTMENT OF AGRICULTURE
WASHINGTON, D.C.

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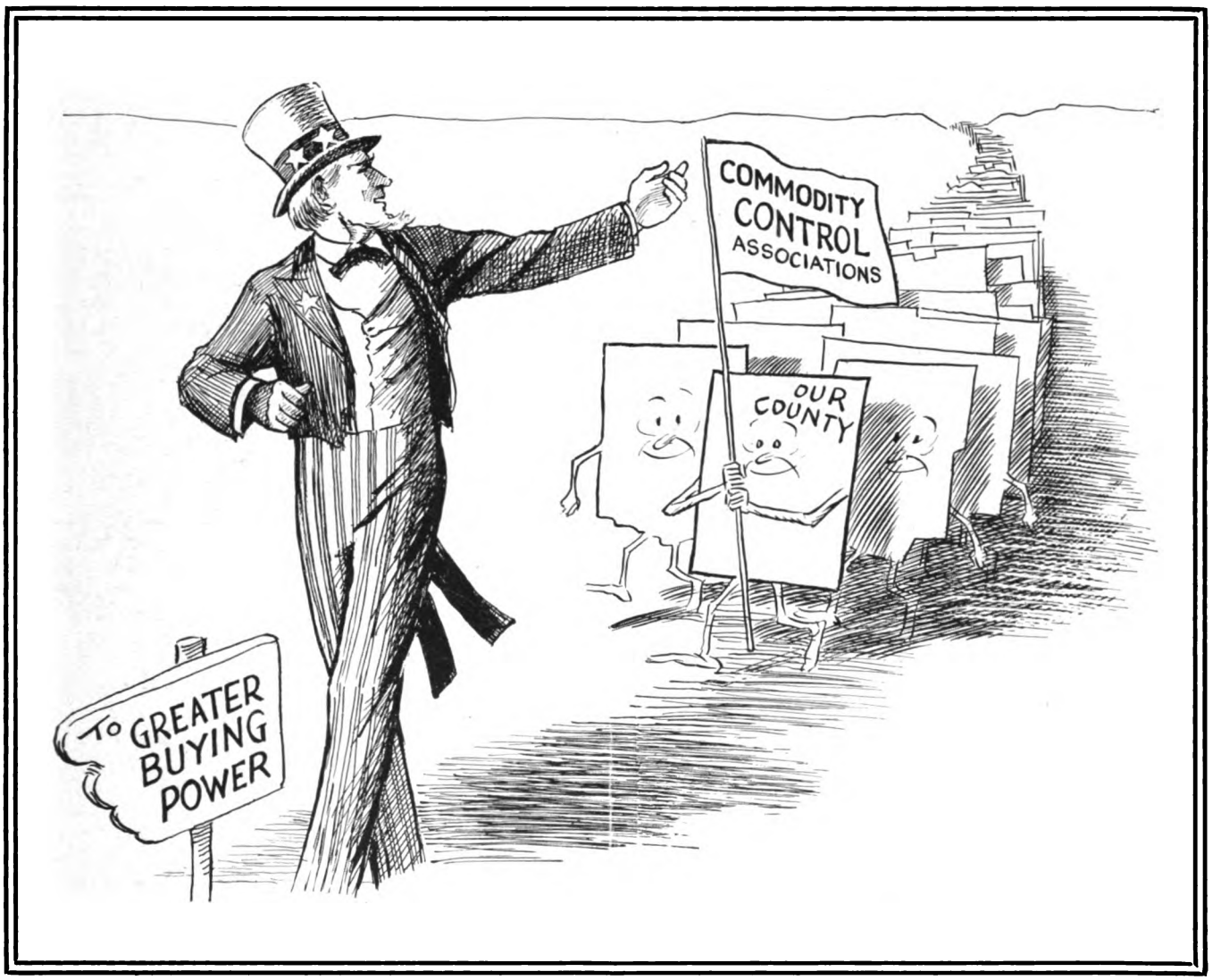

ISSUED MONTHLY BY THE EXTENSION SERVICE
UNITED STATES DEPARTMENT OF AGRICULTURE
WASHINGTON, D.C.

FOR SALE BY THE SUPERINTENDENT OF DOCUMENTS, WASHINGTON, D.C. - - - - SEE PAGE 2 OF COVER FOR PRICES

Contents

In This Issue

SHALL we put dairy production under control? This is the question Secretary Wallace puts squarely up to dairy producers. He says, "I believe it essential that any dairy program adopted should contain as one of its basic features a method of production control that will keep production in step with increases in consumer purchasing power and prevent the supply from outrunning the demand to the degree that causes disaster."

WHAT the corn-hog production adjustment plan proposes to accomplish in 1934 is presented by A. G. Black, Chief, Corn-Hog Section, Agricultural Adjustment Administration. He feels that farmers have come to grips with the facts of the changed demand situation, and are developing that group-consciousness and facility for mass action which is necessary to keep alive any program of national scope or to shift to a newer and better one, when necessary.

WHAT part does the production control association play toward adjusting production? George E. Farrell, Chief, Wheat Section, Agricultural Adjustment Administration, answers this and other questions. Concerning the future importance of these associations he says, "To see that the adjustment program shifts from an emergency to a more permanent basis without losing the machinery to keep it on a stable basis, requires that the county production control associations be used to the fullest extent, that they be kept alive, virile, and with the fullest awareness of their opportunity."

IN HER discussion on the selection and use of local leaders, Mrs. Annette T. Herr, Massachusetts State home demonstration leader, says, "There has never been a more opportune time for leaders of all kinds who have been trained through different channels to show their initiative and resourcefulness."

AS A RESULT of the intensive educational work carried on by the Interstate Early Potato Committee during the last 5 years early potato growers in the Southeast were alert to the danger of low prices being paid for their crop if the potato acreage were increased by 25 percent. They got busy and through the efforts of their cooperative producers' and financing organizations outlined a production control plan which is receiving whole-hearted response from potato growers from Maryland to Florida.

On The Calendar

Eastern States Regional Conference, Home Management Specialists, Boston, Mass., March 5–6.

Eastern States Regional Conference, Home Management Specialists, Philadelphia, Pa., March 8–9.

Southwestern Exposition and Fat Stock Show, Fort Worth, Tex., March 10–19.

Fifty-eighth Annual Convention, Texas and Southwestern Cattle Raisers Association, San Antonio, Tex., March 20–22.

Farm and Home Week, Orono, Maine, March 26–29.

Fifteenth Annual Feeders Day at Colorado Agricultural College, Fort Collins, Colo., April 5.

National 4-H Club Camp, Washington, D.C., June 14–20.

American Association for the Advancement of Science, Berkeley, Calif., June 18–23.

FARM records kept by growers will make available much of the information required for the preparation of their contracts for reducing crop production. This is the belief of Chester C. Davis, Administrator of the Agricultural Adjustment Act. Consequently a book in which to record information as to production, sales, purchases, and inventories of the basic commodities has been prepared by the Agricultural Adjustment Administration in cooperation with the Extension Service and is now available through county extension agents for such use.

NORTH CAROLINA farmers now have more actual cash in their pockets than at any time during the last 5-year period. Their own efforts toward production adjustment and their full cooperation with the Administration in the emergency measures have helped bring this cash to them. Further, by growing their own food and feed, they have been better able to apply the returns from their cash crops to interest charges on mortgages and to retire production credit liens.

THE EXTENSION SERVICE REVIEW is issued monthly by the EXTENSION SERVICE of the United States Department of Agriculture, Washington, D.C. The matter contained in the REVIEW is published by direction of the Secretary of Agriculture as administrative information required for the proper transaction of the public business. The REVIEW seeks to supply to workers and cooperators of the Department of Agriculture engaged in extension activities, information of especial help to them in the performance of their duties, and is issued to them free by law. Others may obtain copies of the REVIEW from the Superintendent of Documents, Government Printing Office, Washington, D.C., 5 cents a copy, or by subscription at the rate of 50 cents a year, domestic, and 75 cents, foreign. Postage stamps will not be accepted in payment.

C. W. WARBURTON, *Director* C. B. SMITH, *Assistant Director* REUBEN BRIGHAM, *Editor*

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Shall We Put Dairy Production Under Control?

H. A. WALLACE
Secretary of Agriculture

ANY ADEQUATE program leading to the improvement of the situation in which the dairy farmer finds himself today must be predicated on two facts above all others; first, the fact of low consumer purchasing power; and second, the fact of relative overproduction in dairy products. Unless we do something about those two items, we won't be doing anything substantial.

Certainly, in spite of more cows and greater milk production power, it would be a grave mistake to regard the dairy industry's problem solely as one of overproduction. When we speak of the overproduction of dairy products we necessarily mean the production of such products beyond the ability of consumer purchasing power to absorb at anything above distress prices to farmers. Experience with stabilization operations indicates that attempts to raise prices in advance of improvement in consumer purchasing power and without any check on production are followed by such quick upturns in production as to cause a fresh and disastrous collapse in prices. Still, there is a great potential consuming power among the American people for dairy products. There are, also, large sections of the country not now receiving enough dairy products to constitute a reasonably balanced diet. Therefore, I believe it essential that any dairy program adopted should contain as one of its basic features a method of production control that will keep production in step with increases in consumer purchasing power and prevent the supply from outrunning the demand to the degree that causes disaster.

It is necessary to have a dairy program which offers help to the entire industry. We must recognize the interrelation of various dairy commodities to each other, and continually keep the principle in mind that reasonable restraint of production should govern the industry during the period of recovery in consumer buying power. Milk-producing sections of the country demand broader and more fundamental adjustments than those thus far undertaken, and I believe they are ready to consider and accept a workable plan.

Consumer Purchasing Power

In proposing a plan for consideration by dairymen, I should like to point out that benefit payments made under the funds available should set in motion forces having favorable effect upon the purchasing power of consumers. Our experience with payment of benefits in the cotton and wheat regions indicates that increasing the income of farmers is quickly and strongly reflected in business and industrial recovery in the areas. Thus payments to dairy farmers, like those made to the cotton and wheat producers, should to some extent at least result in a recovery in consuming purchasing power which would start a cycle of increasing demand for dairy products. The December figures indicate that the difference between average cash price for butterfat in all forms of milk sold and the fair exchange value under the act is almost 16 cents. Obviously, we cannot have a tax rate that high.

I have endorsed before Congress an emergency plan for $200,000,000 over and above this year's receipts from processing taxes, to be used for the beef and dairy cattle industries, as a supplement to receipts from processing taxes in financing the program this year, and to advocate inclusion of beef cattle within the terms of the Agricultural Adjustment Act. Of course, money taken from the Treasury must be replaced out of either processing taxes or other tax receipts. The intent of the Adjustment Act is to provide a continuous source of revenue, and the thought is that ultimately when consumer purchasing power is on the upgrade, the industry will not feel the tax as much as in the present emergency, so that then it will be easier to replace out of processing taxes the special fund made available now.

The proposed special fund is desirable because both dairy and beef producers, pending recovery in consumer buying power, would feel the processing tax more than export agriculture, whose prices are fixed in the world markets. The appropriation will enable advance payments to reach the farmers by the time a substantial tax is felt. We believe that as the market is freed from the pressure of oversupply, the tendency for the tax to be reflected in producer price will disappear. Further aid could be obtained through additional surplus relief purchases, affording dairy products to the needy unemployed who otherwise would be unable to obtain them, with the purchases timed to coincide with dairy price advances.

Farm Allotment

The tentative plan which the administration is offering to the dairy industry is an individual voluntary farm allotment proposal, financed by a processing tax on all butterfat in milk and its products and a compensatory tax on oleomargarine. The rate of the processing tax would eventually reach 5 cents or more per pound of butterfat in all milk and its products, with a compensatory tax on oleomargarine equivalent to the tax rate on butter.

A 3-year base period, with individual production of butterfat for 1931, 1932, and 1933 established for each farmer, is contemplated. The goal to be sought is an individual reduction of 15 percent in milk and butterfat produced for market in the year ahead below the quantities sold in the past year, with the prospect that this would assure a 10 percent net reduction, or whatever fraction of this percent may appear necessary.

Benefit Payments

The method of securing reduction on the farm is to be left to the judgment of cooperating producers. Compensation to cooperating producers is to be secured through benefit payments or premiums

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on sales on an agreed reduction basis under contract.

The quantities would apply to individual dairymen on a voluntary system. Each producer would have his quota of total sales for the year divided into four parts, but such quarterly division of each individual's total allotment would be left largely to each individual's choice. As substantial an advance payment as possible would be made to each cooperating producer soon after his contract is accepted. Additional payments might be made quarterly.

The plan is intended to be operated in a flexible manner so as to permit expansion of the industry as rapidly as consumer buying power expands. After the emergency oversupply is reduced, the industry should be guided toward a controlled expansion up to the limit of consumer purchasing power.

In addition to the use of funds for direct individual adjustments to secure the proper balance between supply and demand, we propose to inaugurate an intensive educational campaign among cooperating producers to assist them in determining and applying the most economical and effective methods of complying with the reduction specified in their contracts. The Bureau of Dairy Industry and the Agricultural Extension Service already have mapped out tentative plans to fit such a campaign. The object is to assist farmers in economical production and aid them in selection of profitable and practical means of production adjustment. It is further proposed to allocate such sums as Congress may determine for two other purposes.

Eradication of Tuberculosis

One of the plans is to engage in an intensive campaign to eradicate tuberculosis in dairy cattle. For a 2-year campaign on a joint basis as at present, sharing costs between the States and Federal Government, the Federal share of the expense is estimated at about $5,000,000. The various States requiring further eradication of tuberculosis in cattle would appropriate sums to assist in the work. It is estimated that there are about 5,000,000 head of dairy cattle yet to be tested for tuberculosis, with about 600,000 head as the number normally expected to be subject to removal.

Speeding up this campaign so as to complete the testing in one year would require about $40,000,000 which would be expended mostly in four or five States. The tuberculin testing campaign is recognized primarily as a health and public welfare measure rather than a direct means of production control. Hence it does not appear equitable to ask the dairy industry as a whole to accept a reduction in benefit payment funds sufficient to finance so large a program.

The other plan involving use of part of the emergency fund relates to possibility of removing normal dairy cows of good production from intensive dairy areas in the leading dairy States to regions in the South where thousands of families have existed for years without a proper proportion of dairy products in the diet. Such cows will be selected with care in areas where animals of required standards are plentiful, particularly in regions where herds are being maintained relatively free from tuberculosis. Similarly their distribution would be handled so as to assure producers that such cows would not be used for commercial purposes, but would stimulate the greatly subnormal demand for dairy products in those regions. This plan is advanced contingent upon its acceptance by the dairy industry, although it already has been urged not only by spokesmen of the industry, but also by persons who are well informed concerning the dietary deficiencies of some southern regions. The definite sum to be allocated for such purposes has not been stated. It would probably not be large at first so that the plan might be given a fair trial in a limited way.

Cooperation Needed

This dairy program is not submitted as anything that is hard and fast or that is to be imposed on the dairy farmers of this country. We simply submit it, as it is our duty to do, as the best plan that we have been able to devise after months of discussion and study of the many proposals which have been made to us. We know that we cannot make it succeed unless the dairy farmers of this country want it and support it, and unless they cooperate whole-heartedly in its operation.

We are willing to accept any modifications which, after full discussion by farmers and their representatives, appear sound and desirable. If the dairy farmers or any substantial group in industry do not want this program we are willing to abandon it because we doubt whether it can succeed without strong support from the dairymen. If dairy farmers are willing to wait for substantial price advances until consumer purchasing power increases, the Government will be only too glad to keep hands off. But we are frank to say that if some sound and comprehensive program is not adopted soon the path of the dairy industry is likely to be rough. Our course will be determined by the response of the dairy farmers and their representatives to this program.

Records Save County $1,800

BECAUSE S. R. Boswell, agricultural agent for Sevier County, Utah, adopted a hobby of keeping authentic thresher records farmers of Sevier County will receive about $1,800 more in Federal wheat-adjustment payments than they would have done if records had not been kept, according to Director William Peterson of Utah. It all happened in this way.

When the Federal Government offered the wheat growers benefit payments for curtailing wheat production in 1934–35, one of the most difficult problems to solve was the furnishing of authentic information regarding the actual production in the county. Based on the census figures of 1930, the Department of Agriculture gave Sevier County a 6 percent increase in wheat production for a basic 5-year average in determining the allotment for the county.

When Mr. Boswell and his assistants in the wheat-adjustment program began to make up the necessary papers concerning the wheat yields, to send back to Washington it was discovered, according to the threshers' records, that the Government adjustment factor figure was low. Frank Andrews, State statistician, was called in to help solve the problem. After making a thorough investigation he recommended to the Washington authorities that the Sevier County allotment be increased 19 percent instead of 6 percent. This change was granted, and the county production was raised by 10,968 bushels, giving a domestic allotment, according to the plan, of 5,922 bushels more, for which the Sevier growers who signed curtailment contracts were allowed 30 cents a bushel. Thus, approximately $1,800 more will be paid to Sevier wheat growers for cooperating with the Federal Government.

Since 1927 Mr. Boswell has been encouraging the threshermen of the county to keep accurate records and report them to the extension office at Richfield. It seems now that Mr. Boswell must have had some intuition as to the use he would make later of these records. So accurate were these reports made by the threshermen of the county that out of the 298 growers who made application for contracts, Mr. Boswell obtained authentic thresher records for 289. Three of the remaining nine growers had kept combine harvester records themselves and the other six fed their entire crop to livestock and poultry instead of having it threshed. Thus in one stroke Mr. Boswell brought to the Sevier wheat growers alone almost twice the amount of this county's yearly budget for extension work.

Corn-Hog Production Adjustment for 1934 What It Proposes to Accomplish

A. G. BLACK
Chief, Corn-Hog Section, Agricultural Adjustment Administration

ALL of us are more or less familiar with what the past year has brought. Not only has the domestic-allotment principle, with some modifications, been made a law, but already a number of crop-reduction programs under this law have been or are being put into operation. A corn-hog program, based to a large degree on the recommendations of producers themselves, is one of them. Further, the participation by farmers in these programs has been little short of amazing.

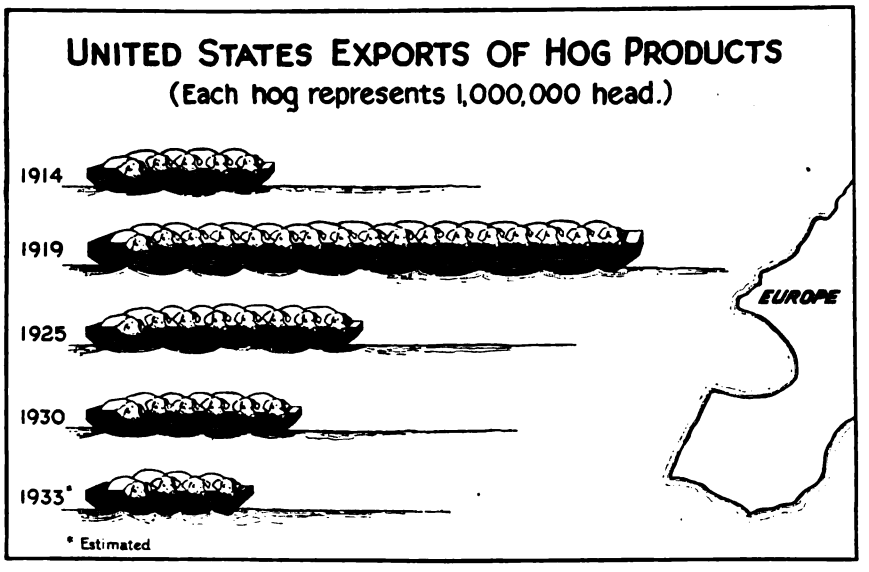
The voluntary production-adjustment theory met its first crucial test in the cotton plow-up campaign in the summer of 1933. We are all more or less familiar with the pleasing results of that campaign. Extension people and volunteer workers rendered yeoman service in putting that hastily contrived emergency program into effective operation. It can truly be said that the successful conduct of the cotton plow-up campaign has given great impetus to other crop-reduction plans, including the corn-hog program.

Last fall the wheat farmers of this country had their opportunity also to demonstrate that they were willing to fit their own operations into a sound production schedule for the whole country and to share in the benefits which will accrue from such adjustment. Again the Administration's program was well received and given wide support.

Corn-Hog Adjustment

As this is written, a corn and hog adjustment program for the year 1934 is getting under way. Field workers report extraordinary interest at the educational meetings which are preceding the actual campaign for producers' signatures.

A. G. Black.



The accompanying graph constitutes a vivid explanation of one reason why the prices for corn and hogs have been so low the last few years. The main reason is the severe decline in the export demand for United States hog products since the 1919 peak.

In 1910–14 European nations took the equivalent of nearly 6 million hogs. This was only a moderate export level, but the total United States hog production at that time was in good balance with the combined domestic and foreign demand.

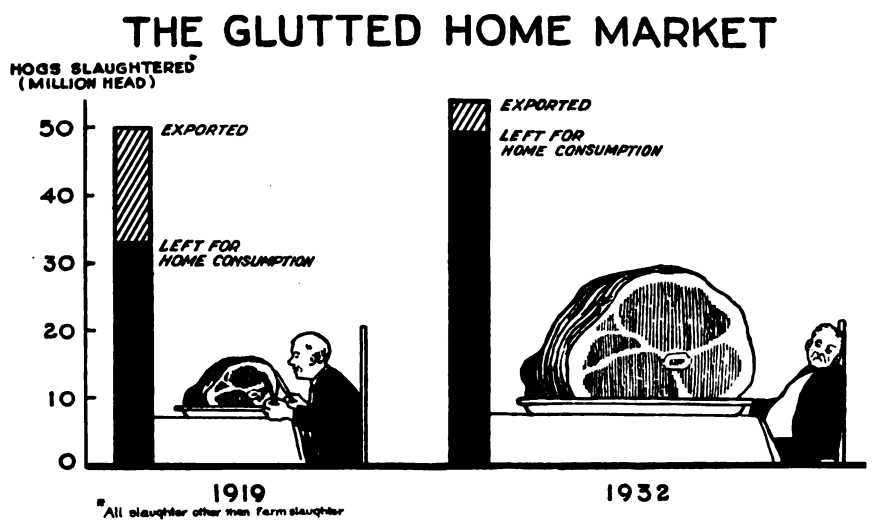
Under the stimulus of the World War, foreign purchases of our hog products jumped to the equivalent of about 17 million hogs. But since the war our exports have dropped back again to the equivalent of about 4 million hogs. This decline has been due to a rapid restoration of hog production in European countries since the war, particularly in Germany and Denmark, and more recently because of tariffs and of quotas which limit the quantity of imports.

Meanwhile, hog production in the United States has continued to increase at about the same rate as the population. Consequently, the products no longer shipped abroad have become excess products on the home market and have driven down hog prices. Some adjustment to this changed demand muht be made if hog prices are to be raised to a more favorable level. The corn-hog production-control program, now being offered by the Agricultural Adjustment Administration, will help farmers bring about this necessary better balance.

Farmers have never followed any project more eagerly. Although the percentage of participation probably will be high, it is enough to note what appears to be an astounding change in attitude from a year ago.

Farmers are coming to grips with the facts of a changed demand situation which was pushing them further each year between the relentless millstones of debts and low prices. By taking hold of things themselves, farmers are developing that group-consciousness and facility for mass action which is necessary to keep alive any program of national scope or to shift to newer and better ones.

After the war the excess corn production that began to develop as soon as horse and mule numbers started to decline was temporarily obscured by an abnormal foreign demand for hog products. Hog production was increased to fill this demand and incidentally absorbed the corn being released from horses. In 1930 and 1931 short corn crops also temporarily removed the pressure of excess production. But in the fall of 1932 the need for production adjustment was made obvious in a rather vivid way. That year farmers harvested nearly 3 billion bushels of corn. Favorable weather had resulted in a larger-than-average yield on a larger-than-average acreage. Men labored into the winter getting out the crop. Many had to build



Hogs now consume nearly one half of the annual corn crop in the United States. Most of the corn released by the decline of 11 million head of horses and mules on the farms and in the cities during the past 20 years has been diverted to hog feeding. This chart indicates the necessity for an adjustment in corn production, at least sufficient to correspond with any reduction in hog numbers. A substantial reduction in corn—the main feed supply for hogs—will help bring the supply of hogs into better balance with effective demand and it will raise the purchasing power of corn. If corn production is not reduced by an amount sufficient to compensate for the reduction in hogs, corn supplies available for other purposes will increase substantially, corn prices will decline with respect to other livestock, and eventually production of more livestock will be stimulated to higher and less profitable levels. But the Agricultural Adjustment Act seeks a net reduction in agricultural production, not a shift. Acreage of corn, therefore, is the important key to the corn-hog production problem. The sound solution is to scale down the production of both corn and hogs.

temporary cribs for the first time in several years. But along with this bountiful crop came the lowest prices in several decades. Corn at 10 cents or less was so cheap that many farmers used it as fuel in stoves. A situation of this kind sinks deep into the consciousness of men.

The impressive simultaneous appearance of heavy supplies and low prices carried from the 1932 corn crop right into the 1933 hog crop. When the increase in hog marketings during the summer of 1933, and the prospective heavy marketings because of a larger-than-average spring pig crop, threatened to knock the bottom out of hog prices for the second winter in a row, representatives of producers urged upon the Agricultural Adjustment Administration an emergency scheme for buying up a surplus of unfinished pigs and sows about to farrow. An emergency program of this sort was adopted and carried out. Although prices still are at a comparatively low level, the return from hogs marketed this winter will be considerably larger than it otherwise would have been without any adjustment in supply.

Benefits Shared

Another reason why farmers seem to have responded unanimously to the idea of crop-production adjustment is the assurance that the participants under plans now being offered really will share in the benefits. Heretofore, production-control schemes had no machinery for controlling the distribution of the benefits. Nonparticipants, who had the same or possibly a larger production to sell, profited at the expense of philanthropic individuals who assumed the responsibility of cutting their output.

Under the 1934 corn-hog adjustment plan those who sign up to reduce production will share in the benefits from adjustment, as represented in part by the collection of processing taxes on corn and hogs. The participant will receive an income of two parts, the open market price which is paid as usual at time of sale plus the reduction payments from the Government. Those who do not participate in the plan will not share in the proceeds from the tax.

Although there have been many conflicting interests among Corn Belt farmers over the past year or so, a feeling has developed that a common interest, as between livestock feeders and the farmers who grow feed for sale, does exist and that this common interest properly should transcend other considerations. Up until recently we have been so busy watching the play of market forces and comparing prices of livestock and feeds that we have forgotten to ascertain whether or not the production of both might not be in excess of market demand.

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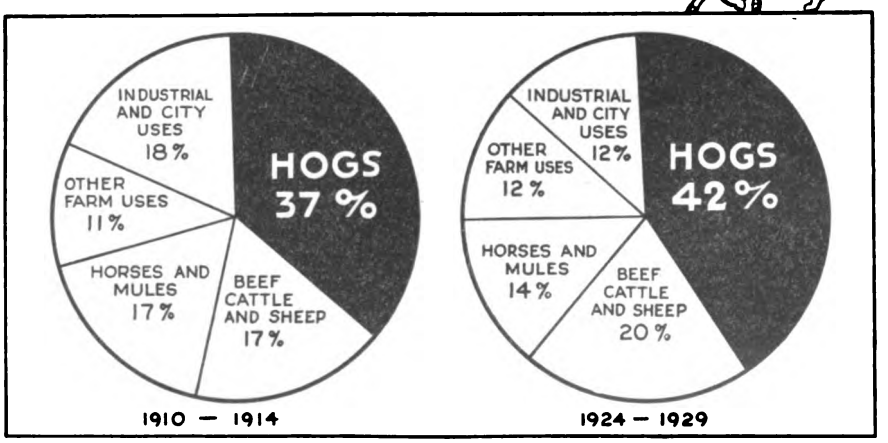


Hog production in the United States has increased at about the same rate as our population, but the quantity of hog products available for home consumption has increased materially because of a severe decline in our exports since the World War. The American people recently have been consuming around 14 percent more pork and lard than they did in the pre-war period, and they are now eating a higher percentage of the total production of hogs than 20 years ago. However, this excess of hog products in the home market has depressed hog prices. The recent increased consumption is a reflection of the comparatively low prices at which the pork had to move, rather than of any substantial pick-up in consumer requirements or preference for hog products. A more moderate hog production would eliminate the excess on the home market and would result in a higher price per hundredweight and a larger total return from the whole hog crop. This the corn-hog plan of the Agricultural Adjustment Administration seeks to bring about by adjusting production to present-day needs.

30 Years in the Cotton Belt

J. A. EVANS
Associate Chief, Office of Cooperative Extension Work

THIRTY YEARS is a long time in a man's life. It's a long time to work with the same people. But that's what I have been doing, and I've enjoyed it, too.

For 30 years I have been associated with agricultural extension work in the Southern States. The appropriation under which the Farmers' Cooperative Demonstration Work was started was made by Congress in November 1903. Dr. Seaman A. Knapp, who is sometimes called the "father of agricultural extension", was placed in charge of the work; and I was one of his first assistants.

I was assigned to a territory in Texas, one of the two Southern States where extension work was first started, and I've been associated with Cotton Belt farming from that day to this. During that 30 years I have seen many changes in the South. I have seen the South fight its way up from the bottom—through storms, droughts, boll weevils, panics, wars, and depressions. And, I saw it do last year what everybody said would never be done—plow up 10 million acres of growing cotton to reduce the supply and increase the price.

Chief Cash Crops

Cotton is, naturally, the chief cash crop in the Southern States. The American Cotton Belt has more natural advantages for producing cotton than any other country in the world. The South harvested in 1903, the year the demonstration work was started as a means of fighting the boll weevil, 27 million acres of cotton. I saw that acreage rise to 35 million acres in 1914, drop to 28 million in 1921, and mount to the all-time record of 44 million acres in 1926.

During the same 30 years I saw the size of our cotton crop rise from 9 million bales in 1903 to 16 millions bales in 1914, drop to less than 8 million bales in 1921, and rise to the all-time record of 18 million bales in 1926. The price of cotton, in that same period, rose from 6 cents a pound in 1904 to the peak price of 44 cents in 1919, and then dropped back to a nickel a pound in 1932.

During this 30 years I have seen the carry-over of American cotton rise from practically nothing to the all-time record of 13 million bales last year. And that brings me to the main point in this discussion, Why is our carry-over, or supply of cotton, so big now? Why is it so much bigger than it used to be?

The answer, both statistically and from my own observation, is that we have continued to increase production during a period of falling consumption. We have increased our production of cotton faster than the world could use it at a reasonable price, and, that condition has placed us where we are with the biggest supply of cotton in history, and with prices just prior to the cotton-adjustment program around the lowest in history.

During the 30 years I have worked in the Cotton Belt I have observed one thing—one law that has worked as regularly as the rising and setting of the sun. That law is that the size of the cotton crop has an effect on the price of cotton. When we have a big crop, we invariably have a medium or low price. When we have a little crop, or a shortage of cotton, we usually have a good price, and sometimes a high price.

J. A. Evans.

But, regardless of the price or the size of the crop, I have observed that the world usually takes over a period of years about the same amount of cotton. It may take a little more when the supply is big and the price is low, but year in and year out, the world consumption of cotton remains on about the same level, with a slight increase, of course, in normal times for the increase in population.

When we produce about the amount of cotton the world can use at a fair price, the grower usually gets a good price for his cotton; but when we expand our production, and oversupply the world with American cotton the price drops, and the producer suffers.

So, why not then plan to produce each year as nearly as we can the amount of cotton that we know we can sell at a fair price. We know now approximately what that amount is, and we know how to produce it economically; so it seems foolish that we should go on overproducing and wrecking the market when we have an alternative.

Cotton-Adjustment Program

The alternative is the cotton-adjustment program. The aim of the program is to reduce cotton acreage until the world has had time to use up some of our burdensome surplus and restore the normal balance between supply and demand, and thereafter, to plan production to meet known demand. The program does not aim to create a shortage and encourage foreign countries to come in. It aims to control production without creating a shortage of American cotton.

The cotton adjustment contract that is being offered to cotton farmers proposes to do the very thing that cotton farmers have wanted for 25 years. For 25 years the agricultural colleges and the agricultural leaders of the South have been advocating a live-at-home program of farming. In my 30 years of extension work I have observed that farmers who followed this rule were always fairly prosperous, whether times were good or bad.

We have had many acreage-reduction campaigns in the Cotton Belt; but last year was the first time in the history of the South, and of the country, that farmers were paid for reducing their cotton acreage. It is the first time we have ever had a program that was self-supporting.

This is the supreme opportunity for the South to put itself on a permanent basis of profitable agriculture. Under the plan of the cotton-adjustment program the cotton farmer has an opportunity to reduce his cotton acreage and get paid for doing it. He has the opportunity to grow food and feed crops for home use on the rented acres; an opportunity to build better pastures, to prevent his soil from washing away, and to build up the fertility of the soil by growing soil-improving crops on the rented acres.

Last, but by no means least, the cotton-adjustment program offers the farm women of the Cotton Belt the greatest opportunity they have ever had to grow more small fruits and vegetables for home use, and to have more time for enjoying some of the pleasures of life.

Agricultural Adjustment Administration Encourages Farm Record Keeping

CHESTER C. DAVIS
Administrator, Agricultural Adjustment Act

EXTENSION workers can greatly expedite the administration of the Agricultural Adjustment Act by assisting farmers in keeping the records required in the administration of this act. From the very beginning the Administration has felt the need for more accurate information from individual farmers, both in guiding our general policies and in dealing with these individuals. In order to meet the need of farmers for a simple book in which they might record information as to production, sales, purchases, and inventories of the basic commodities, the Agricultural Adjustment Administration, in cooperation with the Office of Cooperative Extension Work, has prepared such a form for general distribution.

These books will be available soon and will be distributed through the offices of the various State directors of extension. They can be obtained from these State offices for distribution within the counties.

Farmers are not required to keep this specific record book. On the contrary, it is intended to be used as a supplement to the record books already in use in many States, by being made available to those farmers who have not been keeping such records. For this reason, this book has been made very simple, with due consideration given to the necessary information. Arrangement of the form is such that a farmer need not use the entire book, but can use that part which pertains to his particular type of farming.

Records are Valuable

With such a record of the year's business available, cooperators in the production-control plans will have easily accessible much of the information required for the preparation of their contracts and for proof of their compliance with the terms of these contracts. By having available correct information they will be able to obtain their benefit payments more quickly than otherwise would be possible. Such records should be valuable also to farmers making applications for loans from either their local bankers or other credit agencies.

These records should likewise prove to be useful to extension workers who have felt the need for local farm business information, but who have not been able to acquire such data.

Although the committee which prepared this book found it impracticable to include all the details of the farm business and still have a book applicable generally to all sections of the country, they have made it thorough enough to permit of some major analyses of the farm business. Such analysis is a primary requisite to an intelligently planned agriculture and an agricultural extension program. A wide distribution of this simplified record book should aid materially in promoting farm record keeping and farm accounting and thereby lead to a better understanding on the part of the individual producer of the problems facing him as an individual and agriculture as an industry. The acquisition of this understanding is an essential step in the development of the most desirable long-time program for the individual farmer and the agricultural industry as a whole.

Planning Farm Business

With such a body of information available for the use of those engaged in the development of this long-time program, progress in the improvement of agriculture's position should be materially accelerated. This information from farmers in different areas should be useful to those who are developing long-time programs. Also, it should enable the individual farmer who keeps the record to plan his own business in relation to this long-time program.

I have observed the excellent work in record keeping which has been accomplished by many of the State agricultural colleges with limited groups of farmers in their respective States. The wide distribution of this simple farm record book should not only facilitate the work of the local production control committees, but also should serve as a valuable supplement to the work already being done by the extension groups in the various areas.

Every effort should be made to get a copy of this form into the hands of every farmer who is cooperating with the Agricultural Adjustment Administration if such farmers are not already keeping an adequate set of farm records.

Michigan Women Make Over Clothing

Five hundred women in Oakland County, Mich., have been busy remodeling clothing. Up-to-date dresses have been made from those worn some 5 or 6 years ago; and surprising changes have been made in them at very little cost.

Most of these dresses presented one or more of the following problems: Lengthening, changing the color, replacing worn sleeves, raising waistline, or making the neckline up-to-date. Yokes at the waist or neck usually solved the lengthening problem and the new large sleeves filled the arm's eye that was badly worn. Even new backs were put in if the strain on the garment had been too great. A new collar was one of the main ways of changing the low neckline.

Suits and silk coats became dresses with astonishing ease. One silk coat was made into a dress by using one sleeve for the front, the other for the back with gay-colored sleeves made from other old material.

Hats were entirely revamped. Attractive purses and scarfs were made from odds and ends of material.

When these various articles were completed, exhibits were made in store windows of Walled Lake, Milford, Rochester, and Oxford. Much comment was made on these by people who had never before heard of the extension groups. One woman went into the furniture store whose windows were being used and asked, "Have you a black dress like the one in the window in size 38?"

The County Production Control Association

GEORGE E. FARRELL

Chief, Wheat Section, Production Division Agricultural Adjustment Administration

THE PEOPLE of the United States are paying, through the Agricultural Adjustment Administration, millions of dollars to farmers to withhold land from crop production. The cost is high. Are we getting for our money anything other than these idle acres?

We are getting much more. There is more in the wheat, cotton, tobacco, and corn-hog programs than acreage reduction. They are steps toward a new conception of American agriculture by the American farmer. They are the beginning of a greater realization by the farmer of his part in the Nation's agriculture.

The stepping stone for this transition is the county production control association. Already half a million wheat farmers have organized themselves into 1,450 of these associations. The other adjustment programs contemplate organization of many hundreds more.

The county production control association is a new and potentially powerful influence in American agriculture. It is something new when the farmers who produce more than 80 percent of the country's wheat can get together and organize themselves to reduce consciously the national wheat acreage.

I am certain that county agents have the fullest appreciation of what this means. When I write of the farmers organizing themselves, I do not wish to minimize the work of the county agent. He has been the driving force in each county in the wheat and other programs, and their success is largely due to him.

At the same time, half a million wheat farmers forgetting farm organization lines, politics, and all the rest, and getting together on this one proposition tell a story that should be shouted from the housetops for those who say the American farmer will not and cannot cooperate.

These farmers are taking the first steps in what Secretary Wallace has called "social discipline", and which he defines as a "willingness to modify individual behavior for the larger purposes of society." They are demonstrating economic planning.

Adjustment Payments

Adjustment payments have been a powerful influence. Money talks. But speaking for the wheat program, I predict that after this money stops talking the lesson on social discipline in wheat production will remain. I believe that once the American farmer sees what he can do through organized, well-directed production control, he will be reluctant to abandon that control. I believe that eventually he will be as anxious to retain the advantages of this control without adjustment payments, as he has been in the last year to embrace the program with payments.

George E. Farrell.

The acres taken out of production will prove, I believe, the greatest single force for driving home a full appreciation of this program. Each cooperating farmer will have on his own farm in 1934, a plot of land taken out of production. As he works in his field he will be reminded daily by that posted plot that he is contributing something to the national program. As he goes to town he will see similar plots in his neighbors' fields. They will be incomparable object lessons in the need for planning and wise production control.

Production Control

This removal of fertile acres from production is a drastic step. On a long-time basis it is illogical. (However, we learn abstractions after we comprehend concrete examples.) Apparently nothing less than this "demonstration" on millions of fields will clinch the idea that sound production control, aided by the centralizing power of Government, and executed by individual farmers, working through their own local organizations, is essential for a stable and remunerative agriculture.

The county production control associations have a larger field than distributing adjustment payments. They are the machinery through which future production must be guided and controlled. It seems to me that the association has three fields of activity. First is the mechanical, fact-gathering, routine work. Second is the task of keeping its members informed of the local, national, and international situation regarding the particular commodity. The third is in providing the machinery for the individual farmer to do his part in actually translating a national agricultural plan into action.

Work of Associations

Activities of the associations so far have been mainly mechanical. This is their most obvious work, but to limit them to this would be to lose much of their potential usefulness. The farmers who wrestle with wheat-production figures and acreage overruns have demonstrated the value of the associations in securing accurate information regarding individual farms. This work plainly should continue. The associations can keep records from year to year on the production of each farmer and make unnecessary in the future the tremendous task of getting past records which confronted the Agricultural Adjustment Administration in the initial wheat program.

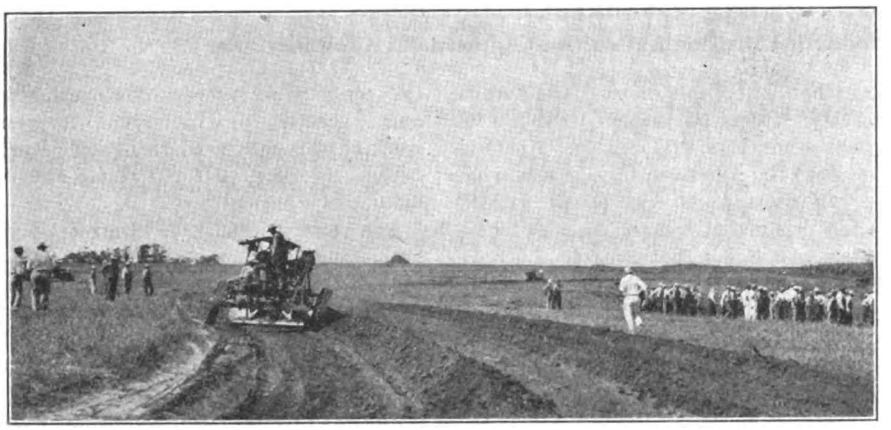
The second and third fields of activity of these associations tie in with the centralizing power of the Government, and yet they allow local administration by each association.

No single farmer, or small group of farmers alone can hope to keep abreast of the shifting national and world agricultural conditions which vitally affect him. He must have adequate information from some impartial source. That source, logically, is the National Government. Through the information-gathering machinery of the Government, the facts the farmer needs can be brought directly to him through the county production-control association.

Through the county production-control association, too, the individual can act

(*Continued on page 24*)

Local Leaders Terrace Kansas



A JUMP FROM 1,000 to 70,000 acres of terraced land in 5 years is the record made by Kansas.

In 1928, terracing work made its small beginning on 1,000 acres of demonstration terraces. In 1929, there were added 2,800 acres, 14,000 in 1930, 22,000 in 1931, 15,000 in 1932, and nearly 15,000 acres this year. The area in Kansas now protected by terraces is approximately 70,000 acres.

How has this outstanding success of the terracing project in Kansas been brought about? "Local leadership" is the answer of John S. Glass, Kansas extension specialist in rural engineering, who is in charge of the State terracing projects. Mr. Glass gives the lion's share of the credit to local leaders, who, under the supervision of their county agents and the extension specialists, have spent much time and effort in spreading the gospel of terracing among their neighbors.

In developing such local leaders, it was found almost without exception that the successful leaders were those who had proved over a period of years that they were willing to accept new ideas, and having accepted such ideas, were willing not only to profit by them themselves but were anxious to assist their neighbors to enjoy the same profits.

Having picked men in the various counties who were of the type willing to accept new ideas, Mr. Glass began his training period. The best potential leader in the world is worthless unless he is thoroughly informed concerning the subject in which he is to lead.

Local leaders were trained in 23 leader-training schools during 1929. In 1930, 80 of these schools were necessary, and the same number were held in 1931. Altogether, some 555 local leaders have been given training and are of great value in carrying on the Kansas terracing project. In addition, more than 2,000 others have received partial training and are assisting in the work.

It is interesting to note that in Coffey County the county agent was called out of the county before the 1931 work was finished, but the local leaders carried on to the extent of terracing 300 additional acres without the benefit of county-agent supervision.

These local leaders who have been trained in the terracing work are continuing the work in their various counties, and each year finds more farm land protected by terraces from washing and gullying. There are approximately 100,000 farms in Kansas which require terracing.

An obstacle in the path of terracing progress is the fact that 42 percent of the farms are tenant operated. "But we are not worrying about that yet", said Mr. Glass. "We have more than 55,000 owner-operated farms to work on before we get to the tenant-operated farms. If our local leaders continue as they have, we'll get Kansas terraced."

Rural Pageants

NOT ONLY in America, but all over the world, rural people are taking a renewed interest in pageants and festivals. Many of these native festivals and ceremonies are described in a booklet "What the Country Women of the World are Doing", published by the Associated Country Women of the World. The United States is represented by the description of a pageant given by home demonstration club women in Marathon County, Wis., and Rice County, Minn.: "The Pioneer Woman," presented in many counties in South Dakota; "Historical Moments in Home Life in the United States," put on in Middlesex County, Mass., a description of a New England Thanksgiving; and some of the other more familiar celebrations.

Typical festivals from many countries are described and suggestions given for putting on rural pageants. The booklet can be obtained from the Associated Country Women of the World, 26 Eccleston Street, London, S.W.I., for 2 shillings sixpence.

IN MISSOURI an underground egg-cooler has been designed. This is one of the steps in the program for the production of quality eggs. This program has been developed in an effort to obtain greater cooperation between the producers and buyers. The buyers desired to purchase eggs in larger quantities and of a standard grade, somewhat higher than the run of farm eggs. These factors were the incentive to a change in production methods. Dealers' meetings, candling schools, quality egg shows, egg demonstrations, printed circulars, and circular letters were some of the educational features of the campaign for quality egg production.

The County Production Control Association

(*Continued from page 23*)

most effectively upon a national program. Suppose, in the case of wheat, that for 1933 the national and world conditions are such that a 10-percent reduction in wheat acreage from the base period is deemed sufficient to keep production and consumption in balance. The conditions which led to this decision would be announced to association members as they developed. When the decision was reached, the word would go to the associations and each farmer, under contract to reduce as necessary, could then individually do his part to put the plan into operation.

County production-control associations are formed, ready to help keep a sane agricultural program going. The potentialities for social discipline are there if we but use them.

To see that the adjustment program shifts from an emergency to a more permanent basis without losing the machinery to keep it on a stable basis requires that the county production-control associations be used to the fullest extent, that they be kept alive, virile, and with the fullest awareness of their opportunity.

Selection and Use of Local Leaders

MRS. ANNETTE T. HERR

State Home Demonstration Leader, Massachusetts Extension Service

ONE OF THE principal objectives of the extension service program is the development of the homemaker. At times, the trees may obscure a view of the forest, but the true measure of achievement in our work is the growth of the individual.

There has never been a more opportune time for leaders of all kinds, who have been trained through different channels to show their initiative and resourcefulness. Homemakers are more aware of the need for their dynamic participation in affairs of local, State, national, and even international scope.

Have our leaders measured up to what has been expected of them by our own group, and by the large circle of people whom we have not served directly?

Parent Education

A few illustrations will answer this question. One leader in the child development, and parent education program met with young mothers in her community over a period of 2 years. She led and guided the discussion of the problems brought by these mothers. Under her leadership, a mothers' club of 50 members was formed. Through their own initiative, the women have secured help in different phases of the subject from outstanding people of the State. They continue to select leaders to send to the leader-training conferences held by Mrs. Morley, child development and parent education extension specialist. These leaders have small groups of the mothers' clubs. The fine thing about this piece of work is that more leaders are being developed; they are using their initiative to meet their local needs; and the study is continuing after the meetings of the organized project work are ended.

In another case in child development and parent education, a young mother has served as leader for 3 consecutive years. This year she is recognized in her community as the person to whom to turn for suggestions and assistance. She has definitely helped with weak groups, with groups which had difficulty in getting started, and in keeping up interest in other groups. At the beginning of the project this fall, five groups of mothers reported as having been started through the influence of her leadership.

In taking initiative, in getting facts, and in making plans for helping the welfare agencies to take care of food and clothing needs of families on relief rolls, our leaders have been outstanding and recognized by all agencies as the people to whom they can turn for guidance and help.

A nutrition leader in one town has trained other homemakers to make a home-to-home canvass among the women on relief, in order to give them help in buying foods which will meet the nutritional requirements insofar as that was possible with the money allowed for food.

In one of the cities when a nutrition project for helping families with their problems was organized, a nutrition leader who had been very active in the extension program over a period of 10 years was asked to organize and supervise the work. This leader has planned many different kinds of programs for these homemakers; for instance, meetings in the meat shops, so that the women could learn about the cheap cuts of meat. Printed directions for using cheap cuts, compiled from suggestions of homemakers who have had successful experience in using these cuts, were given to the women. The merchants cooperated in a very fine way. The meat shops were opened at night and definite plans made to have study groups get this information.

Responsibilities of Leaders

The responsibilities which leaders assume during the time that an organized project is being carried in a community are only one index of the interest which these leaders have in raising the standards of home and community life. The enthusiasm which they have for finding the facts of the situation and the courage with which they face these facts is evidenced long after the regular programs are brought to a close.

Another objective of the home-economics program of the Extension Service is to make homemakers think so that they are "aware" of situations, and so they may evaluate the factors which go to make fine living. There is nothing which stimulates thinking more than responsibility and a desire to do something about it. Group discussion by leaders is thought-provoking and leads to this problem of "awareness" of existing conditions in family and community life.

The teaching leaders, as a rule, are selected by the group of homemakers. Help is given in planning through the job to be done and deciding on the type of person qualified to do this job. In some places, the leaders are selected by the town chairman, community committee, or home demonstration agent. We have found these methods less satisfactory, as it is most important that the members of the local group feel their responsibility to do their part in carrying the project. This seems to work out in a better way when they participate in the selection of leaders.

Length of Service

We are often asked as to the number of years a leader serves her community, county, or State. Our interest is not particularly in the length of time a leader serves. A homemaker, because of heavy responsibilities at home and in other organizations, may feel she can serve as a teaching leader for only a short period. This fact does not mean that she is not a valuable person in the field of leadership. Some of our finest leaders can serve only a few months at a time as teaching leaders, but their leadership permeates the community, and their influence is widespread. There are some homemakers who have definitely decided to use what abilities in leadership they may have in just one organization, and they have been active leaders in the Extension Service over a period of 10 or 12 years. We find very often that new leaders bring many new homemakers—that is, new to the opportunities offered by the Extension Service—into study groups.

Awards to Leaders

The problem of awarding leaders comes up repeatedly. Although money cannot repay leaders for the kind of service they render, perhaps the paying of at least their expenses might be justified. However, service is part of living, and these homemakers choose to give their services for this kind of adult education. Many of our leaders have been asked whether they would favor some type of award for leaders. The concensus of opinion has been that they are repaid by the personal help which they receive. In some communities, the leaders' expenses are paid, but in most places the leaders bear this expense themselves.

Other educational agencies, especially those who are engaged in relief work, are most eager to use the leaders trained by home demonstration agents and specialists, as they realize that they have had training in getting facts, organizations, setting up a plan, and executing the plan.

Some of the things which leaders have done during the past year are as follows:

1. Taught groups of homemakers.
2. Helped in gathering data.

(*Continued on page 26*)

Adjusting Agriculture in North Carolina

I. O. SCHAUB
Director, North Carolina Extension Service

CHANGING economic situations in North Carolina during the past few years have found the "Tarheel" farmer constantly shifting his plans to meet new conditions imposed. He tried valiantly to meet the situations by his own efforts, but he usually found himself at the end of a year in a somewhat worse condition than that of the previous year. Probably he was well supplied with food, but his clothes were more threadbare, and he despaired of keeping his taxes paid or his interest charges on the right side of the ledger.

Recent weeks have seen a decided change. Things are not yet wholly satisfactory, but there is a turn for the better. The farmer is more hopeful, even optimistic.

Two distinct lines of effort are responsible for this. The first was the great effort put forth by the farmers themselves to adjust their crop production to meet the economic demand. This was characterized by North Carolina's successful live-at-home campaign begun back in 1928. During the 5 years since then, there has been a decided shift from the acreages planted to the so-called cash crops to more food and feed crops for home consumption. The number and quality of livestock also were bettered, and the shift prevented many thousands of farmers from losing their lands entirely. By growing their own food and feed, they were enabled to apply the returns from their cash crops to interest charges on mortgages and to retire production credit liens.

Living at Home

This period saw the corn crop gain more than 325,000 acres and the hay crop gain 266,000 acres. There was a tremendous gain in the growing of home gardens, especially among the tenant class. Approximately 83,333 more acres of gardens were planted in 1933 than in 1929, for instance; and this increase in vegetable growing could be called the outstanding accomplishment of the depression period. Most of this acreage was for home use.

There was also an increase of 15 percent in the number of dairy cows; an increase of 16 percent in brood sows, and an increase of 14 percent in laying hens. As in the case of gardens, these increases were used for supplying home needs mainly. Increasing our production of these things took no market from other sections for our people could not have bought them in any event.

I. O. Schaub.

Naturally, there was a corresponding decrease in the acreage of the so-called cash crops. Cotton led in this with a reduction of more than 558,000 acres, which is approximately 34 percent of the area planted to the crop in the State.

The second feature of this adjustment was the putting on of campaigns under the direction of the Agricultural Adjustment Administration during the past year. The first of these campaigns was the cotton-reduction movement in which 52,000 growers signed contracts and plowed up their cotton as promised. Some were reluctant at first; but as they understood the real purpose of the movement, they became enthusiastic over its success.

Following the cotton campaign came the tobacco crisis. When the warehouses first opened, prices were decidedly unfavorable; and, under the leadership of the Governor, a marketing holiday was declared. An intensive campaign was put on to secure signatures to reduction agreements, and in 10 days more than 55,000 of the agreements had been voluntarily signed, representing over 95 percent of the acreage planted to flue-cured tobacco in North Carolina.

When the markets reopened and buyers had the assurance that growers would reduce their crop in 1934, prices began to improve, until now the growers are getting about twice as much for their crop as they would have been paid under the old schedule.

Improved Conditions

As a result, therefore, of the farmers' own efforts toward adjustment and their full cooperation with the Administration in the emergency measures, a majority of North Carolina growers at the present time find themselves with more actual cash than they have had during the 5-year period. This condition reflects itself in the number of automobiles being sold in the State, which during October and November amounted to approximately twice the number sold during a similar period a year ago. This condition is further reflected in the decided increase in the number of sewing machines sold and particularly in the increased business of clothing merchants and others furnishing supplies to farm families.

Recently, I was driving through the eastern part of the State. We had just gone through one of the towns having a large tobacco market when we passed a farmer driving his wagon on his way home from the tobacco market. Before we overtook him, it was clear that he had a number of packages in his wagon. I noticed a bag of sugar, a bag of flour, and other packages which I was unable to identify; but, most significant of all, was the boy's little red wagon which he had evidently just purchased and was taking home. I remarked to my companion, "That is the most significant evidence of better conditions in North Carolina that I have seen in a number of years."

Selection and Use of Local Leaders

(*Continued from page 25*)

3. Helped in relief programs.
4. Supervised community canning.
5. Visited homes to help families on welfare rolls.
6. Assisted in getting families on relief into regular educational classes conducted by extension workers and the department of education.
7. In some communities leaders have taken the initiative in finding a suitable meeting place such as an abandoned schoolhouse, hosehouse, or hall, and in converting it into an attractive convenient community center.

1933 Was a Busy Year for Extension Workers

Production-adjustment campaigns, relief activities, and organization credit facilities on top of the usual routine

Making out the production-adjustment contract was a real job for all concerned.

Bringing together the credit needs of the farmer and the credit facilities of the Government.

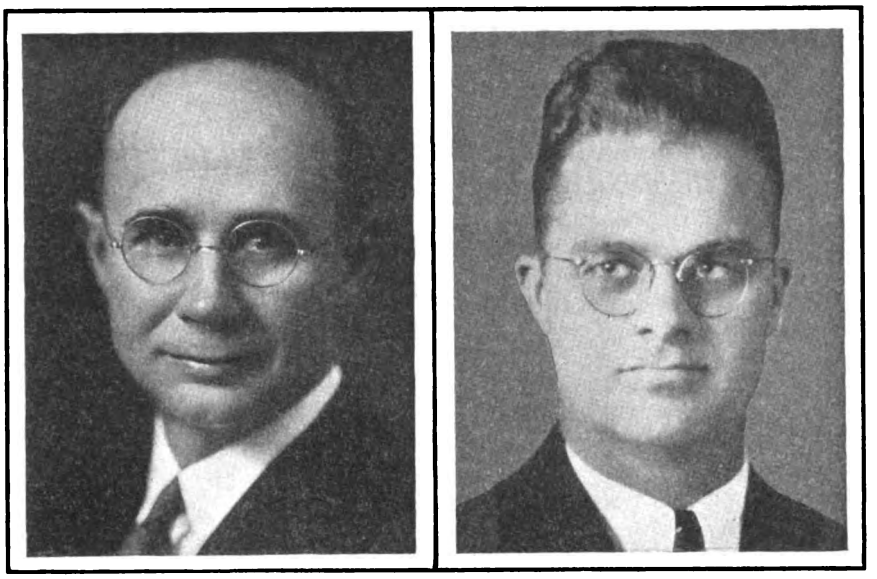
Posters and window exhibits carried the story of the wheat surplus to farmers in the wheat area.

Savings effected through the farmers' mutual exchange helps balance the farm-home budget.

Reading the extension story on the farm page of the local paper.

The products of relief gardens and a community cannery—a familiar sight.

Cooperation in the development of an adequate hot school lunch service enlists the best abilities of the home demonstration agents.



Arthur L. Deering. George E. Lord.

Maine Appointments

THE DUTIES of extension director and dean of the College of Agriculture of the University of Maine have been combined with the appointment of Arthur L. Deering as dean to succeed Dr. Leon Stephen Merrill, who died September 3, 1933. Mr. Deering has been extension director since January 1, 1931.

Mr. Deering was born and reared on a large dairy farm at Denmark, Maine, on January 13, 1888. He was educated at Bridgton Academy in Maine and at the University of Maine, where he received a bachelor of science degree in 1912.

His agricultural experience includes working on his father's farm, working for a Boston milk contractor, taking care of a dairy herd at college, and teaching agriculture at Hartland Academy in Maine, as well as working in the Extension Service. Mr. Deering was county agent in Kennebec County, Maine, from 1912 to 1920, when he became county agent leader of that State. In 1928 he was made assistant director of the Maine Extension Service.

George E. Lord, county agent leader for Maine since 1930, has been apppointed assistant director of the Maine Extension Service. He will continue his duties as county agent leader.

Mr. Lord was born and reared on a dairy farm in York County, Maine. As a boy he became interested in the 4-H club projects which he carried for 4 years. He graduated from the West Lebanon High School in 1918 and followed with a postgraduate course at Sanford High School in 1919. In 1924 he graduated with a bachelor of science degree from the College of Agriculture of the University of Maine. Mr. Lord was county agricultural agent in Franklin County, Maine, for 5 years.

A Good Preliminary Survey

NEWLY appointed County Agent Carl A. Anderson sums up the agricultural situation in Columbia County, Wash., for his director. This is a fine example of the sort of information that is most useful in making up a county program, and in reporting extension progress.

The problems as I see them at the present are the following: A parity price for farm products especially wheat, cattle, sheep, dairy products, and hogs; a farm account system for each and every farm; erosion control, the heavy soil of the higher altitudes are coming closer to rock as each year goes on, and the hills are so steep that no plan yet devised will apply; replanting of pastures, especially along the Touchet, Tucannon, and Pataha; self-supplied farms whenever practicable; a study as to whether commercial poultry raising is practicable in the county; developing an interest for the younger farmers so that they will stay on the farms rather than move to larger city districts; organizing the farm boys and girls under high-school age into 4-H clubs; dispersing of all extension and agriculture adjustment information to the parties interested; solving the dairyman's many problems, especially at the present time of trying to make dairying pay at 16 cents for butterfat and $12 a ton for hay; the laying of the foundation for a land classification program; and the elimination of marginal lands. These are a few of the problems of this district, and there will be and are several that I do not know of at the present time.

It will take more research on my part to decide which of the problems will have to be made the major one for the coming year. I would judge from the appearance of things at present that the Agricultural Adjustment Act will first demand attention, then the farm account system which should easily lead to possible solutions of several of the other problems and be useful information in the land classification program which I believe is going to come in the near future.

In order to give a picture of the Columbia County work that can be done it may be well to know the conditions of the people and the country. Columbia County at present is mostly devoted to the production of wheat and beef stock.

Each farmer generally keeps a few head of hogs and a flock of chickens for his own use and probably a few to sell. In the last few years there has been some tendency toward sheep raising other than on the large sheep ranches, as all farming enterprises have not been paying to the producer.

In the Touchet Valley there are several large orchards which produce a good quality of fruit, but because of the excessive freight rates and low prices of fruit several of these are being pulled out or poorly cared for. There is a demand at the present time for peas grown on the land of the higher altitudes which are being canned in Walla Walla. In certain years quite a few acres of potatoes are grown on higher lands, both the quality and yield being good.

"CORN loans have boomed lumber sales", may be a queer statement. However, the demand for lumber for corn cribs which are required for the storage of loan corn, has doubled in some of the Corn Belt States. Lumber has been shipped from the northwestern and southern mills to fill this need. This is just more evidence of the far-reaching effects of the agricultural adjustment program.

Marketing Georgia's Farm Products

THE selling of Georgia produce to Georgia markets has brought a new income to the farmers of the State. Farmers were faced with depression prices for cotton—their cash crop. Members of the extension staff have aided the farmers in solving this problem of farm income, as related in the following article by Charles Reynolds, agricultural editor, University of Georgia.

Roadside signs help to procure purchasers of Georgia produce.

WITH THE New Year 1932 came the dismal realization that the Georgia farmer was far from adjusted to changed conditions which had already brought cotton, the money crop of Georgia and the South, to the lowest price quotation the commodity has reached in more than 100 years. It was not a characteristic New Year; there was little evidence of hope for brighter days, for a dreaded specter of harassing debt had settled itself on the Georgia farmer and on practically every other group in the State and Nation, although, to that time at least, industry had been able to maintain many important products at a relatively high price. This made the farmer's burden even heavier.

Examining the situation in an attempt to discover opportunities for the Georgia farmer and his family to obtain money, the officials of the Georgia Agricultural Extension Service uncovered other facts, which were outwardly disturbing but which suggested a solution. Marketing specialists studied the tabulations from a survey conducted in the fall of 1931 and found that Georgia had bought during 1931 a total of $48,000,000 worth of staple foods and feeds outside of the State. Most of these could have been grown and bought at home. In addition, they estimated that salable foods and miscellaneous products from the farms could be marketed to return approximately the same amount of money. They also concluded that practically the only thing lacking was a system of getting the products to the potential buyers.

Survey Shows Facts

The survey of 1931 was inaugurated to discover whether or not local markets could be considered as possible sources of income. The requirements of the five largest markets in the State—Atlanta, Augusta, Columbus, Macon, and Savannah—were shown as a result of this survey. The next thing was the dissemination of this information. County agricultural agents and home demonstration agents gathered at the headquarters of the Extension Service, College of Agriculture of the University of Georgia, and were acquainted with the possibilities of establishing a new source of income for the farm home. Through other meetings and conferences, attended by wholesale commission men, leading farmers, and others, additional facts were brought to light.

Steps were taken toward centralizing the marketing activities of each community. In many places warehouses were obtained where the more staple commodities could be stored for the convenience of buyers and transporters. The warehouses also proved advantageous to the farmers in obtaining higher prices. At other points where the volume of business would not justify the renting of warehouses, the buyers were regularly given information regarding the location of produce for sale. Between January 1 and September 1, 1932, these supply depots handled the equivalent of 750 carloads of feed and foodstuffs. These figures do not include any of the more staple products, the regular sales of hogs, corn, poultry, watermelons, and other cash crops of long standing; nor do they include data of the sales between September 1 and December 31, 1932.

Sales of Products

For 1933, extension marketing activities were divided into a women's marketing project, including retail curb markets, with Mrs. Leila R. Mize, extension specialist, in charge, and into a general marketing project, directed by C. G. Garner, extension economist in marketing. The sales of small surpluses of many miscellaneous products from Georgia's farm homes greatly aided farm-family living during the year. These sales amounted to $495,443.07, or a growth of an estimated 94 percent over the previous year. Whereas 20 counties were giving attention to the work in 1932, those participating in 1933 totaled 94.

The income has been partly obtained through sales of curb markets, of which there are now 20. Sales reported through these markets amounted to $281,918. Other income was derived from sales at roadside markets and from direct selling by the producer to the grocer or to the consumer. Of the 32 roadside markets reporting, the average sales amounted to $138.37. The roadside market is one of the most promising undeveloped outlets for farm-home products in Georgia.

In this project and in an effort to realize every possible benefit for the farmer, extension people developed such new or different demonstrations as a country produce store at Columbus, which sells farm-home products on a commission basis; a cooperative home-demonstration group in Crab Apple community, Fulton County, which sells at the Sears Roebuck Market in Atlanta in order to save transportation; a curb market with a cream-testing station, egg circle, and community cannery supplied with electric power at Cordele; a typical open-air curb market at Valdosta; and a method of making

Cheddar cheese in the farm homes of Pickens and other counties.

Marketing work in Georgia has not been free of problems, and many of them have been especially difficult. The cost of assembling and moving produce to market has been prohibitive in many instances, but the retail markets have aided here. The use of depots, both formal and informal, have helped; and some county agents found that roadside signs calling attention to the depots are valuable. But, what was probably the most effective method of overcoming incoordination in the project, according to Mr. Garner, was the use of 5 special marketing agents in the 5 larger centers of the State. These agents were making great strides when called on to aid in the 1933 cotton-acreage reduction campaign of the Agricultural Adjustment Administration. However, the production-adjustment activities of the next few years will hasten the conditions for which extension forces have been hoping—a comprehensive live-at-home program.

Business Increasing

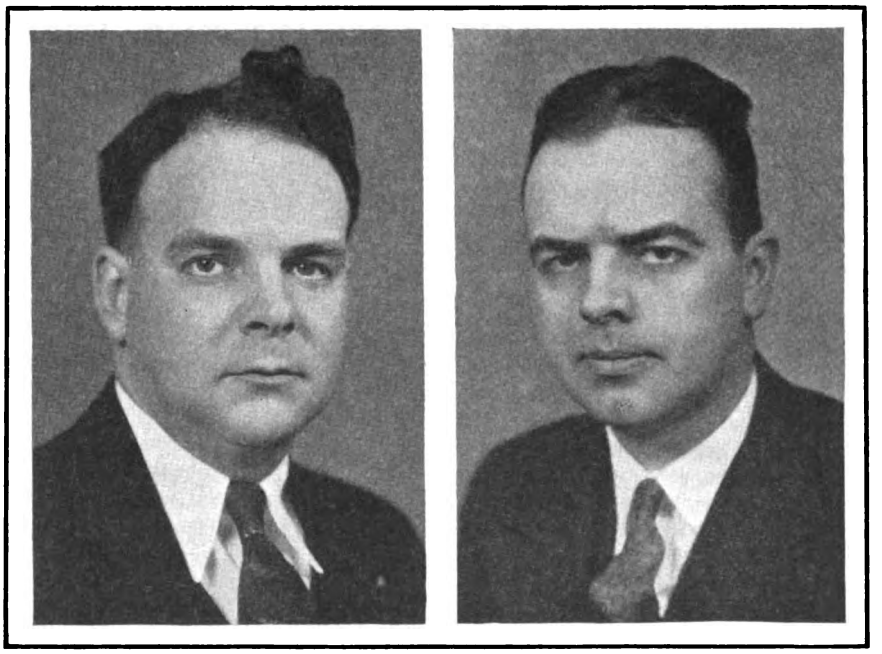
One of the special agents, J. William Fanning, who was in the Macon territory until May 15, 1933, has outlined activities there, in part as follows: "Results were somewhat more definite than before; the attitude of the buyers showed marked improvement as they gained confidence in the program; many new contacts were made and there are unlimited possibilities for the work." Indicating the possibilities, he wrote that one of the regular truck buyers in Macon, through whom several sales had been made, asked about getting giant stringless beans and Marglobe tomatoes from the mountain section near Dahlonega. He wanted several hundred hampers of each during the summer. The information was immediately relayed to the county agent at Dahlonega who later conferred with the buyer. Before planting time the agent called a group of farmers to his office and had them discuss with potential buyers possible prices and demands. Satisfactory marketing arrangements were made.

New Developments

During 1934 there will be several important developments to be considered. "It is possible that the Agricultural Adjustment Administration's programs will intensify the problems because of reduction of acres in basic commodities. At the same time, it is possible that the activities of the National Recovery Administration will culminate in a higher purchasing power among the laboring class in the cities which will call for a greater supply of miscellaneous products," Mr. Garner has declared. A more systematic approach will probably be made to accommodate new conditions.

At any rate, completed plans will create newer outlets for additional thousands of dollars worth of poultry and dairy products, cakes, nuts, popcorn, lye-hominy, fresh vegetables and fruits, home-canned products, some of the more staple goods, livestock, and other products. Special agents will again be employed in marketing projects; and county agricultural and home demonstration agents, extension specialists and other interested persons will attack the problem with renewed vigor because they know the money derived from this source has paid off old debts of long standing, has sent children to school, has allowed better dental care, has bettered home conditions, and has purchased new clothes and shoes.

One little boy said recently that he has "lots more breeches since mother goes to market."



L. S. Ellis. C. G. Garman.

THE NEW appointees of the Farm Credit Administration who will form a cooperative contact between the Extension Service and the Farm Credit system, Dr. C. G. Garman and Dr. L. S. Ellis, will carry on an educational program to facilitate the dissemination of information among county agricultural agents and interested farmers. They will make their contacts through the State agricultural colleges within the 12 land-bank districts.

Dr. Garman will cover the Eastern and Southern States for the Extension Service. Dr. Ellis will work in the Central and Western States. Both of these men have had experience in economic extension work in the past which will be of aid in their present activity.

Due to the increased interest and value which will be attached to the economic problems of farm management and agricultural adjustment by the new program of production credit and production control, H. M. Dixon, in charge of agricultural economics extension, Extension Service, announced the following organization for his staff: L. M. Vaughan will work with the Western States; P. V. Kepner, the Central States; R. B. Corbett with the Eastern States; and an assignment in the Southern States will be made soon. These men as well as others in the division will cooperate with the State extension economists in the development of their educational programs in agricultural economics.

FARM WOMEN of North Carolina sold more than $300,000 worth of produce through club, curb, and other markets during 1933. Cooperation between the town and country women was greatly facilitated by market meetings. Local merchants were willing to cooperate because the farm women spent the money from the sales in buying supplies for the farm home.

Early Potato Growers Plan Controlled Production

INDICATIONS pointed to a 25 percent increase in the early potato acreage of the Southeast. Farmers who had joined production-control associations and signed a contract with the Secretary of Agriculture to reduce their acreage in cotton and tobacco began to look with interest and envy at the good potato profits of last year. High potato prices were largely due to curtailed supply because of unfavorable weather conditions in the Middle West and other competing areas. Southeastern growers and marketing agencies wanted to keep the prices up so as to get an adequate profit. They saw with alarm the tendency to increase acreage, thus stimulating production beyond the requirements of consumers which have proved fairly inelastic. The growing of potatoes in the Southeast is expensive involving a relatively large per-acre cash investment, which would make an expensive crop to destroy when it is once produced. It looked as though something had to be done quickly. Potatoes were not one of the major crops mentioned in the Agricultural Adjustment Act and no arrangements had been made to take advantage of Federal production-control measures.

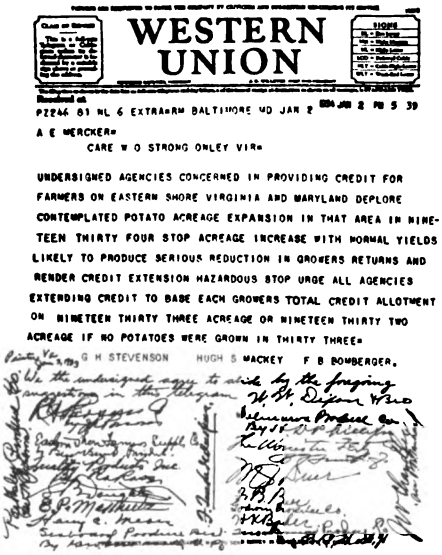
Meetings Held

In this emergency the North Carolina Produce Growers Cooperative Association, representing most of the marketing and financing agencies of the North Carolina and Norfolk, Va., potato growing regions, called a meeting in cooperation with the Interstate Early Potato Committee. About 95 percent of the tonnage shipped out of this important early potato area was represented at this meeting. Fifty or sixty representatives of marketing and financing agencies, together with about 150 of the important growers met at the courthouse in Washington, N.C., on December 21. They agreed that drastic action must be taken to curb the tendency to expand. Those present, representing 75 percent of the tonnage, signed an agreement that no grower would be financed who did not plant in 1933, and that other growers would not be financed for an acreage greater than that planted in 1933.

They agreed further to use their influence in discouraging all growers who do not need financing from increasing the 1933 acreage in 1934. It will be possible to check on the growers requiring financing since now all records showing the number of acres on which crop liens are given are filed in the county court house and are available for inspection. Shippers, representing 20 percent of the tonnage, agreed not to finance more than a specified acreage.

Eastern Shore Acts

The Eastern Shore of Virginia and Maryland, a favored spot for the growing of early potatoes, became aware of the same disturbing indications of a glutted potato market in 1934. News of the North Carolina meeting and agreement reached them and crystallized their



WESTERN UNION

PZ246 61 NL 6 EXTRA=RM BALTIMORE MD JAN 2 1934 JAN 2 PM 5 39

A E MERCKER=
CARE W O STRONG ONLEY VIR=

UNDERSIGNED AGENCIES CONCERNED IN PROVIDING CREDIT FOR FARMERS ON EASTERN SHORE VIRGINIA AND MARYLAND DEPLORE CONTEMPLATED POTATO ACREAGE EXPANSION IN THAT AREA IN NINETEEN THIRTY FOUR STOP ACREAGE INCREASE WITH NORMAL YIELDS LIKELY TO PRODUCE SERIOUS REDUCTION IN GROWERS RETURNS AND RENDER CREDIT EXTENSION HAZARDOUS STOP URGE ALL AGENCIES EXTENDING CREDIT TO BASE EACH GROWERS TOTAL CREDIT ALLOTMENT ON NINETEEN THIRTY THREE ACREAGE OR NINETEEN THIRTY TWO ACREAGE IF NO POTATOES WERE GROWN IN THIRTY THREE=

G H STEVENSON HUGH S MACKEY F B BOMBERGER.

This telegram was read to a group of potato growers and distributors meeting on the Eastern Shore of Maryland to discuss the problem of a threatened overproduction of early potatoes in that area. The signatures at the bottom represent 90 percent of the tonnage of potatoes handled on the Eastern Shore.

determination to get together all those interested in the growing and distributing of Eastern Shore potatoes and do something. The three government-backed financing organizations, the Bank for Cooperatives, Crop Production Associations, and Intermediate Credit Banks, gave their fullest cooperation. "The Eastern Shore growers and distributors showed the most whole-hearted response to a production-control plan of any group I have ever seen", says A. E. Mercker, secretary of the Interstate Early Potato Committee, "and that in the face of exceptionally good prices last year—$3.65 gross f.o.b. per barrel in Virginia and $4.40 in Maryland." The agreement suggested by the three financing organizations from Baltimore in a telegram to the group meeting was signed by representa tives of 90 percent of the tonnage handled on the Eastern Shore.

Will these agreements be effective? Past experience would indicate they would for this is not the first time the early potato growers have taken such a step, though this is on a much larger scale than ever before. In 1929 the growers around Elizabeth City, N.C., were faced with a similar situation. Intentions to plant indicated a big increase in acreage which would most certainly break the market for all. A similar agreement was signed by financing and distributing agencies which kept the acreage in this area about the same as the previous year. As a result, prices stood up, and the Elizabeth City potato growers had a prosperous 1930 season.

These events are not accidental, coming unheralded out of the blue, but point definitely back to 5 years of intensive educational work by the Interstate Early Potato Committee. This committee is composed of representatives of producers' organizations, financing and distributing organizations, United States Department of Agriculture, the State Extension Service in the 5 southeastern early potato States, and the North Carolina State Department of Agriculture, whose entire objective is to make potato production profitable for all. Their efforts have brought about a greater degree of unity of action among those growing, handling, and financing potatoes. Through education, a better understanding of outlook, demand, and supply information has been developed. Intensive efforts have been made to adjust acreage and through this the possible supply of southeastern early potatoes to meet the requirements of the market. From the start the law of supply and demand has been fully recognized. As a result, nearly all agencies in the industry have given a great deal of their time and energy without remuneration to help solve the problems confronting them. The cooperation received is becoming increasingly better so that now from 85 percent to 90 percent of the organizations controlling the financing of production in Florida, 90 percent in Georgia and South Carolina, 95 percent in North Carolina and Norfolk, Va., sections, and 85 percent on the Eastern Shore of Virginia and Maryland are cooperating with the committee under voluntary agreements.

The work of the committee has been entirely educational. Each fall the com-

mittee meets and makes definite acreage recommendations after a careful study of the facts of supply and demand. Growers' meetings to discuss the outlook for the potato crop are then held throughout the area, timing them about 3 months before planting time. The meetings begin in Florida about October and move north, finishing on the Eastern Shore before the first of the year. Often they are held at country stores rather than at schools or courthouses, as the dirt farmer seems to like it better and feels more at ease in asking questions.

Growers have often been able to make acreage adjustments and effect economies in production which have minimized losses or increased profits because of the information gained.

National 4-H Club Radio Program

Annual Theme: 4-H Club Work Influences the Farm and Home

Fourth Phase—More Profitable Livestock and Poultry, a Result of 4-H Club Work

Saturday, April 7, 12:30 to 1:30 p.m., Eastern Standard Time

Building Up My Dairy Herd	4-H club boy from Ohio.
Our Poultry Flock Has Improved Since I Became a 4-H Club Member	4-H club girl from West Virginia.
Community or County Improvement of Livestock or Poultry Through 4-H Club Work	Extension Specialist from West Virginia.
Valuable Educational Training in Livestock Club Work	Extension Specialist, Extension Service, United States Department of Agriculture.
Music We Should Know—Fourth Phase of the 1934 National 4-H Music Hour Featuring Compositions by Shubert, Mendelssohn, Rachmaninoff, Ghys, Yradier and Wagner	United States Marine Band.

Corn-Hog Production Adjustment for 1934—What It Proposes to Accomplish

(*Continued from page 20*)

We are coming to realize that keeping a neutral price relationship between feed grain and livestock really is a trivial thing when both groups of commodities are being produced in excess volume. Livestock feeders are coming to realize that if there are too many cattle and too many hogs to bring prices that compare favorably with the general price level, insisting on cheap feed and resisting group-adjustment programs are not proper ways of correcting the difficulty. Although cheap feed seems fortunate for a short time, if it puts a particular farm enterprise in an unusually favorable position, outsiders inevitably will change over to crowd a more prosperous enterprise.

Without question, the uniformity of interest among farmers had been due in large part to the educational work done by extension workers, teachers of vocational agriculture, newspaper people, and others who have brought before the farmers day after day the real facts of the problem we face. Undoubtedly there is a much better general understanding of the fundamental causes for the disparity between farm prices and prices of other things than we have known at any time in the past. Just the same, it is entirely possible that a large block of farmers for one reason or another may have faith in the production-control program and may sign contracts without having a sufficient understanding of the fundamental facts involved. It is to be hoped that such will not generally be the case. It is unsafe to project long-time programs if the people are not really ready for them.

Extension Workers Assist

It is in this connection that extension workers are a particularly important part of the machinery for putting adjustment plans into operation and keeping them going. Extension workers, teachers of agriculture, and others cooperating in the educational work are doing the Government and farmers a genuine service by helping with details connected with reduction contracts, production reports, etc., but from the long-time point of view they render still greater service by continually interpreting for farmers the real picture of our present-day supply-demand situation. We must develop an interest and understanding which is founded on more than the desire for immediate monetary gain.

Perhaps one of the appealing characteristics, and certainly one of the most encouraging characteristics, of the voluntary adjustment program has been the development of active local administrative units. Most of the work is in the hands of the farmers themselves. Committeemen elected by farmers from among their own folks will be in charge of necessary corrections and adjustments in contracts.

Even though we will not know for a little while exactly to what extent the corn-hog program is being accepted, it is clear that farmers as a group now seem definitely committed to a program of planned agricultural production. The corn-hog section of the Agricultural Adjustment Administration has done its best to devise a plan which will utilize effectively this new trend in thought. We have made every effort to devise a contract which would apply the least difficulty to the many different farm situations. Although many questions have arisen which could not be answered without qualifications, either in the negative or the affirmative, the aim all along has been toward a fair and practical plan outline. Occasional miscalculations probably have been made and more probably will be made in the future. But as we develop a real spirit of cooperation, necessary modifications can be made without misunderstanding and confusion.

The corn-hog program is the biggest single effort and the most complex yet undertaken. Nevertheless, corn-hog farmers by reason of their recent hardships have become receptive to a new program. This is not to say that we need expect every corn-hog farmer will participate in 1934. Although the individual participant is reducing the number of litters farrowed and marketable hogs produced by 25 percent and his corn acreage by 20 percent under his 2-year average, the percentage of reduction that will be obtained over the country as a whole probably will be somewhat lower. But given reasonable support, the 1934 corn-hog program will make a very substantial adjustment and should improve income as well as prices very materially for the coming 1934–35 season.

The general outlook is bright and we seem to be advancing step by step from a period of discouragement and despair to a period of hope and happiness. May extension workers continue to point the way along this road.

ACCOUNTS of 250 Kansas farmers in 19 counties where intensive farm-management work is now being carried on were analyzed and changes in practices suggested. Reports show that 76 percent of these farmers adopted the suggestions offered.

·ACROSS · THE · EDITOR'S · DESK·

Real Accomplishment

ONE OF the most significant suggestions made at the recent conference of farm paper editors held in Washington on the invitation of Secretary Wallace was that made by Dan Wallace, editor of The Farmer and of the Farmer's Wife, and Clifford Gregory, editor of The Prairie Farmer. In the closing session of the conference which was held with Chester Davis, Administrator of the Agricultural Adjustment Act, these two urged the development and strengthening of the commodity production control organizations to a point where through them the producers themselves might take as far as possible the responsibility for the local application of the adjustment program. By so doing they argued that the Department and the Adjustment Administration would be able to deal mainly with the broad policies involved in making each program effective and would not be burdened with a multitude of details arising from an effort to handle from Washington the many local adjustments that will be required to meet adequately the conditions facing individual producers and various groups of producers.

They pointed out the road that we must travel as extension workers to make the commodity production associations effective. This is the real challenge of the adjustment program to us—to aid producers through their own organizations, an effort to reap fair farm prices and to insure to themselves and their families an adequate standard of living. I recognize the many difficulties that this work involves. It is not an easy thing to accomplish. Yet, if we do succeed in any considerable measure in this effort, I feel that we will have met the test of our day and generation and can be justly proud to have done so.

A Gallant Figure

AS I READ in the copy for this issue of the REVIEW the contribution by J. A. Evans on Thirty Years In The Cotton Belt, my mind goes back 5 years ago to the celebration at Houston, Tex., of the twenty-fifth anniversary of the founding of demonstration work. I have an especially vivid recollection of one part of that historic celebration. It was of J. A. Evans telling the story of the beginning of demonstration work. He read no elaborate paper. He indulged in no rhetorical flourishes. It was a simple direct story that he told of that great leader, Dr. Seaman A. Knapp. In the telling of that story was expressed the faith and undying loyalty to a cause that has made J. A. Evans for 30 years one of the preeminent and loved leaders in the demonstration movement. You felt as you listened to Mr. Evans at Houston the great personal power to win men to his way of thinking that Dr. Knapp possessed. You felt, too, that Dr. Knapp passed this power on to those other men whom he chose to carry on the demonstration movement and with a force that enabled them to extend its influence undiminished to literally millions of rural people, old and young.

I first came to know Mr. Evans in 1915, when I was young, inexperienced, and, I fear, too often impatient with the need of going steadily and slowly at the extension job. Mr. Evans had a way with him then of steadying you down without discouraging you—a rare gift, indeed. He has that gift still. It is a gift that belongs only to those who are young at heart. Mr. Evans has, too, a keen sense of justice and a willingness to fight for a square deal for those whom he considers unfairly dealt with. Hypocrisy, cowardice, self-centered and unscrupulous ambition, and the many other meannesses, great and little, that affect most of us in varying degrees, were left out of the character of J. A. Evans.

Because he has reached the retirement age of 70 years, Mr. Evans is now leaving active service with the Washington office. He goes with our heart-felt wish that he may have many years of happiness and appreciated activity ahead of him. He is to me, as I know he is to the many extension workers who have known and worked with him, a brave and gallant figure.

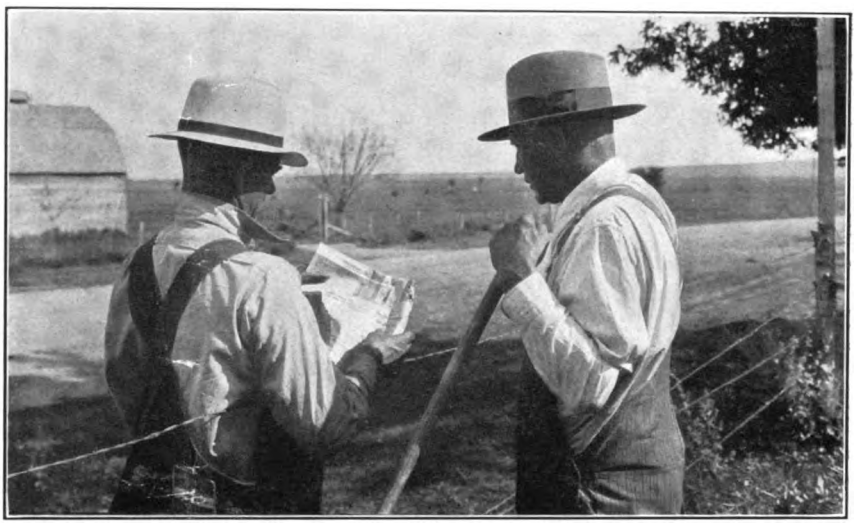
How Shall I Farm?

RECENTLY I went on a rather hasty trip through six of the major corn and hog-producing States when the sign-up of adjustment contracts was getting into full swing. During one of the days I spent in Iowa, I drove with Leslie Combs, extension editor, from Ames to Denison, passing through four counties. As we went, we visited with county agents, newspaper editors, and farmers. Of course, we found producers keenly interested in the allotment benefits coming to them under the plan. But, apparently, they were equally interested in knowing how the new program would affect their future farming plans.

Accustomed to grow on a given farm acreage, a given acreage of corn, and a corresponding number of hogs, farmers were asking each other the question, "How shall I farm my land if I am to grow less corn and fewer hogs?" This impression that I received from talking with farmers was confirmed by both newspaper editors and county agents. "Sure", was the comment, "they are doing a lot more than fixing up papers so they can get some ready cash. They are thinking and figuring how they can best farm under the new program. They hope it is the first step toward a better way of farming and of living. They want to know how they can best plan to make the Adjustment Act do the job for them for which it was enacted."

Certainly, the cotton program, the wheat program, and the corn-hog program are preparing the mental seed bed for a better understanding of intelligent and balanced production. With this opportunity, it is frankly up to us, I believe, to be sure that our suggestions to producers on farm management and the selection of crops to be grown are practical and sound and will insure to them the fair exchange value which is the aim of the Adjustment Act. It is a serious responsibility.

R. B.



PICTURES TELL THE EXTENSION STORY

No matter how clearly you write or how simply you speak, there will always be some who do not understand. *Photographs give authentic support to your statements.*

Here are some of the ways in which county extension agents are using photographs to strengthen the agricultural adjustment program.

1. **For film strips presenting localized information.**
2. **For illustrating news stories in local newspapers.**
3. **For use on printed letterheads for circular letters.**
4. **For use as enlargements in exhibits and window displays.**

PLAN NOW FOR THE PICTURES YOU NEED

PREPARE AN OUTLINE LISTING THE IMPORTANT POINTS TO BE ILLUSTRATED . . . . INDICATE THE MONTH WHEN CONDITIONS WILL BE BEST FOR PROCURING EACH PICTURE . . . . . CONSULT THE OUTLINE FREQUENTLY AND TAKE EACH PICTURE WHEN THE PROPER TIME ARRIVES.

Write for information about uses of photographs in county extension work

OFFICE OF COOPERATIVE EXTENSION WORK
EXTENSION SERVICE, U.S. DEPARTMENT OF AGRICULTURE
WASHINGTON, D.C.

U. S. GOVERNMENT PRINTING OFFICE: 1934

Extension Service Review

VOL. 5, NO. 3 MARCH 1934

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Let us consolidate our gains and let us resolve that this consolidation shall be for the continued progress and especially for the greater happiness and well-being of the American people.

Franklin D. Roosevelt

★ ★

ISSUED MONTHLY BY THE EXTENSION SERVICE
UNITED STATES DEPARTMENT OF AGRICULTURE
WASHINGTON, D.C.

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In This Issue

WHAT are the measures that must be taken to bring about economic recovery? Rexford G. Tugwell, Assistant Secretary of Agriculture, outlines in a clear, concise statement the road we must take to bring about complete recovery. He points out the importance of the simultaneous recovery of both agriculture and industry and their interdependence together with the impetus given to revived buying power by the public works program. "The failure of any one of these three attacks to attain its objective", says Assistant Secretary Tugwell, "means the partial failure of the others and the necessity of beginning anew."

WHAT makes for success in conducting county production adjustment campaigns? County agents C. H. Beddingfield in Alabama, J. B. Hill in Oklahoma, and W. M. Landess in Tennessee, agree that committeemen and local leaders played a big part in getting farmers to plow up cotton in 1933 and to sign contracts to reduce their cotton acreage this year. Representatives of cotton, land, and banking interests, as well as local newspapers and the radio stations, cooperated in conducting the campaign in their counties.

"IS IT possible that the increased purchasing power of farm folks for which the adjustment movement is inaugurated, coupled with an increased desire on the part of farm folks to eat their cake in order to have it, may in time set free the small or large sum of money to install plumbing, remodel kitchens and install other labor-saving devices? Are we alert to this possibility and ready to meet it with the best possible information?" These are pertinent questions raised by Minnie Price, Ohio State home demonstration leader.

THE training of 4-H club officers in Indiana during the last 3 years has resulted in much improvement in the conducting of local club meetings.

Contents

ALFALFA growers of southern California and Arizona, representing a total production of 720,000 tons of alfalfa hay, found cost of production records of much practical value in working out a marketing agreement which has been submitted to the Agricultural Adjustment Administration. Although the cost of irrigation water is generally considered an important item in the cost of production, the records of the cooperators show that the cost of water may not have been a major factor in the success or lack of success, as the cost of labor varied widely.

On The Calendar

Washington State 4-H Club Camp, Pullman, Wash., June 11–16.

National 4-H Club Camp, Washington, D.C., June 14–20.

American Association for the Advancement of Science, Berkeley, Calif., June 18–23.

Farm and Home Week, Amherst, Mass., July 24–27.

THE opinions of Iowa farm women differ regarding the most important benefits to be derived from the Agricultural Adjustment program. Facts gathered from a survey conducted among farm women in 10 counties give increased farm income first place. Also, in the list were such benefits as the opportunity for more leisure time, training in cooperative effort, the development of a long-time national land-use program, and the possibility of developing a better understanding between country and town.

WHAT will farmers do with their contracted acreage? Frank E. Balmer, Washington State extension director, believes that the contracted acreage provides one of the best opportunities for a program of soil improvement and erosion control ever offered to farmers. He presents a program for handling this acreage in his State which includes permanent seeding in gullies, hilltop planting, soil improvement, weed control, and soil protection crops.

MISSOURI extension workers last year planned a program of activities particularly for young people from 18 years of age to the age when adult extension work is taken up. They felt the necessity of keeping up the interest of these young people in agriculture, homemaking, and community-building activities after they had left club work.

THE local news story is an important medium in Illinois for getting information on crop reduction campaigns to farmers.

THE EXTENSION SERVICE REVIEW is issued monthly by the EXTENSION SERVICE of the United States Department of Agriculture, Washington, D.C. The matter contained in the REVIEW is published by direction of the Secretary of Agriculture as administrative information required for the proper transaction of the public business. The REVIEW seeks to supply to workers and cooperators of the Department of Agriculture engaged in extension activities, information of especial help to them in the performance of their duties, and is issued to them free by law. Others may obtain copies of the REVIEW from the Superintendent of Documents, Government Printing Office, Washington, D.C., 5 cents a copy, or by subscription at the rate of 50 cents a year, domestic, and 75 cents, foreign. Postage stamps will not be accepted in payment.

C. W. WARBURTON, *Director* C. B. SMITH, *Assistant Director* REUBEN BRIGHAM, *Editor*

Extension Service Review

VOL. 5 WASHINGTON, D.C., MARCH 1934 NO. 3

The Road to Economic Recovery*

REXFORD G. TUGWELL
Assistant Secretary of Agriculture

CONSIDER the reaction of the country to the first 3 years of depression. Down and down went the curves of business activity. Longer and longer grew the lines of idle workers and the rows of idle machines. The whole constituted a challenge to the American people to act as a body—to remedy a ridiculous situation which had developed out of their acting separately.

What positive measures could be undertaken? Let us see. The breakdown came at a time when our economy was a spotted reality of competition and control—with the control intrusted to irresponsible trustees. In 1929 we did not have a system of free competition and flexible prices. True, in some areas like farming, we have had highly flexible prices and a considerable number of individuals actively competing in both production and price. This flexibility in prices received by the farmer, however, has not been permitted to reach the consumer, so to be reflected back to the producer as an accurate, prompt thermometer of demand. Rigid freight rates, rigid interest charges, and relatively rigid wage rates and dividends of the processing and distributing trades have intervened. From 1929 to 1933, prices paid to farmers fell 61 percent, but retail prices paid by consumers for food fell only 36 percent. If prices throughout our economy had been as flexible as those in the farm area were, it is quite possible that the 1929 depression would have been of minor consequence. The truth was, however, that an important part of our economy had prices which were not responsive—as theoretically they should have been—to changes in supply or demand. At the furtherest extreme are railroad and public utility rates, steel rails, and many other goods and services whose prices were fixed over very considerable periods of time. In such areas, the whole impact of changes in demand are taken in the form of changes in production without any changes in price.

Intermediate between the extremes of flexible price and fixed price, lies most of industry. In this area, prices are fixed for shorter periods of time but are periodically revised over longer periods of time. Thus, in varying degrees, changes in demand are met by changes in production, and more slowly and over a longer time only, by changes in price. This matter of temporary or more permanently fixed prices is vitally important. This fixity is a major disturbing influence in a system which is theoretically competitive. We had a choice, if the situation was to be remedied, of really restoring competition or of extending the areas of rigidity until they include all prices of real social consequence.

Rexford G. Tugwell.

Effect of Depression

Notice how differently the depression has affected different parts of our economy. In the agricultural area in which prices are highly flexible the drop in effective demand during the depression has caused a great drop in prices while production has declined little. The farmers are working as hard as ever, but they get less for their product. Throughout most of industry, the effect of the depression has been essentially different. Prices have dropped relatively little compared to the drop in agricultural prices. The fall in demand has been met for the most part by reduced production. The income of the workers as a body has dropped as rapidly as that of the farm group, not primarily because wages were lower, though that has been important, but because of their being out of employment. Thus, while the cash income of farmers as a body and the income of wage workers as a body have fallen off to an almost equal degree, one has fallen because of a fall in prices and the other because of a fall in production.

This difference in the effect of the depression on prices and on production is of vital importance. It is the key to many of the apparent conflicts between the agricultural and the industrial programs. Perhaps the picture of the depression is best portrayed by thinking of all the different economic activities distributed along a scale according to the amenability of prices to change. As has been suggested, most agricultural activities and certain industries are at one end of the scale and at the other extreme are certain more or less monopolized trades. Between these extremes are ranged the bulk of industry. If we think of the prices and production of different commodities as having been roughly in balance in 1926, the effect of the depression was to reduce prices at the flexible end of the scale and to maintain production there while at the other end prices were being maintained and production was dropping.

Restoring Exchangeability

To restore exchangeability in such a situation we could do one of two things;

* Condensed from an address given by Assistant Secretary Tugwell before the Institute of Arts and Sciences at Columbia University, New York City, on Nov. 16, 1933.

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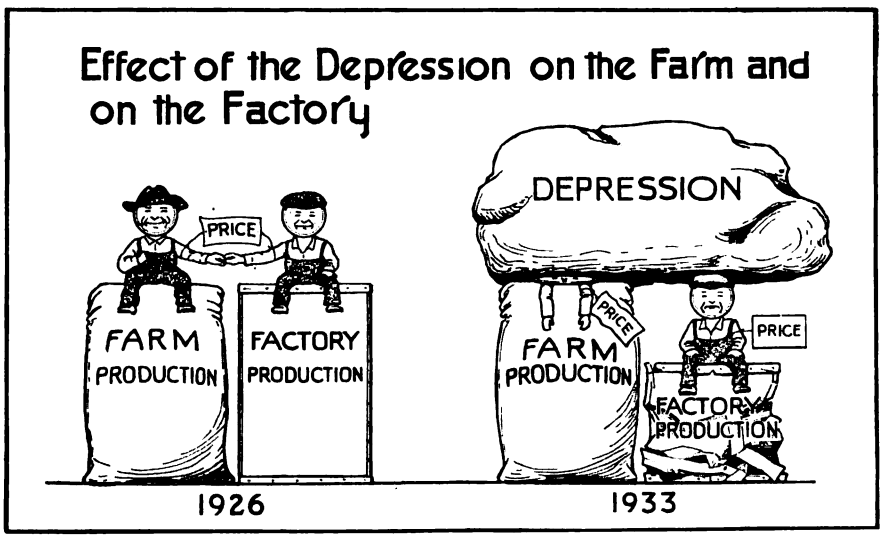

The depression has not affected agriculture and industry in the same way. In agriculture, the drop in effective demand has resulted in a great fall in prices, with production showing but little decline. The farmers are working as hard as ever, but they get less for their product. In most industry, on the other hand, prices have dropped relatively little as compared with the drop in agricultural prices. The fall in industrial demand has been met for the most part by reduced production. Thus, while the cash income of farmers as a body and the income of wage workers have fallen off to an almost equal degree, one has fallen primarily because of lower prices and the other because of lower production.

we could lift the flexible prices to the level of the rigid ones, and simultaneously increase production in the fixed price areas; or we could reduce the rigid prices to the level of the flexible ones, and reduce production in the flexible price areas.

The advantages of the first path toward the restoration of exchangeability are clear, and it is this path which has been taken by the Administration. The major advantage of lifting prices—of lifting most those which have fallen most and lifting not at all those which have not fallen—grows out of the burden of debt created at the old price level. To lower all prices to the level of those which had fallen most would be to overburden the debtors in the country and to endanger the solvency of our many great debtor institutions. Elementary justice thus required a lifting of the flexible prices to parity with the prices which had not dropped rather than the more difficult course of revising downward those which had remained fixed.

Here, then, is the more immediate objective of recovery; to raise prices in the area of flexibility, to raise production in the area of rigidity, and raise both prices and production in the intermediate areas of industry until all groups attain the ready exchangeability which they once had. How is this immediate objective to be reached? From here on we must take up each element of the recovery program separately, remembering that each element is essential and that each depends for its success on the development of the other parts of the program.

The agricultural program may be considered first. Here the immediate problem was to increase the farmers' income. We believed that greater business activity leading to economic recovery would be induced by giving farmers more income than by saving it for consumers. If this were true a definite increase in business in total expenditure and in total income would result. So the farm program by raising prices sought on the one hand to restore price balance, and on the other hand to induce increased total expenditure with increased business activity resulting.

Recovery Program

It is recognized that in the area in which prices are highly flexible, as in agriculture, it is only possible to raise prices by reducing supply or by increasing demand. The total recovery program involves both, though the agricultural adjustment program, taken alone, involves mostly a reduction in production. The need for this reduction is greater because of long accumulated surplus as traceable to the shift of this country form debtor to creditor status during the war. This shift involved such a reduction in our agricultural exports as to unsettle all the relationships which had been established during our long history as an exporter of raw products. Nor can we count on any immediate change. Combined with a positive program for reducing farm production, and as an aid in bringing about reduction, the processing tax has been employed as a means for raising the price paid by the consumer so that it constitutes more nearly an adequate remuneration for the farmer. The proceeds of the processing tax have been distributed in a manner to insure the reduction of crop acreage. So supply is limited to the demand.

A part of the program involves an effort to increase farm exports, a difficult program and a program on which little reliance can be placed for dealing with the existing crop surplus. However, no opportunity is being overlooked, such as furtherance of world commodity controls. Not much can be done of a permanent nature, however, unless we are willing to admit on far easier terms than are at present in force upwards of half a billion dollars in foreign commodities in exchange for our agricultural goods.

Still another element in the recovery program is of a long-run nature; the effort to remove some 40 million acres of land from cultivation, an effort which has beneficial incidental results, such as the arrest of erosion and the conservation of the soil. The relation sought in this way between farm and industrial activity is of a permanent sort and belongs not in the category of emergency action but of long-time planning of land and population.

Increasing Incomes

All this agricultural effort ought to increase farmers' incomes; and if the industrial program is carried on adequately, the whole community must benefit. At the same time success in raising prices to the farmer necessarily rests on the corresponding success of the industrial plan. Through the action just described the supply of farm products is being reduced. Complete success, however, demands that we also increase the demand. If the unemployed population can be returned to work they will be in a position to buy more farm products. This is the farmers' interest in the spread of employment and increased wages. The two are inextricably related.

When we come to the industrial sector of the recovery program, the immediate objectives are almost exactly the reverse of those in the agricultural sector. The main problem is, in some industries, to raise volume of production and volume of payrolls without increasing price; in other industries, to raise volume of production and volume of wages with an increase in price but

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The County Adjustment Campaigns

Agents tell how cotton contracts were signed in their counties

Expert Committeemen Aid Cotton Campaign

C. H. Beddingfield.

Success of both the plow-up and the present 1934–35 cotton-reduction campaign, Lee County, Ala., has been due largely to the thoroughness with which the committeemen have mastered every detail of the cotton contracts. This thorough knowledge was gained by intensive study of the contracts in county-wide meetings of committeemen before the campaign began and by weekly meetings on Saturdays after the sign-up began. At these meetings mistakes and difficulties were ironed out. A list of these was obtained from inspection of contracts which committeemen mailed in each day.

In December, before the campaign began, a letter was prepared explaining the contract and mailed to every landowner in the county. In the meantime, I spent a week studying all the literature available on the reduction plan. The county organization was then completed with the selection of committeemen limited to men who, first of all, commanded the respect and confidence of the farmers in their communities. The other requirements were that committeemen should be men who were "thoroughly sold" on the program and who had the best possible knowledge of farming conditions, including an accurate knowledge of acres and yields.

Landowners were then contacted in 12 meetings held in various sections of the county, at which time details of the contract were explained. The publication of campaign material was made through the Opelika Daily News which has a wide circulation throughout the county. News on the campaign was published daily in this paper.

Committeemen were relieved, as far as possible, of all clerical work by adequate provision being made for this work at the county agent's office. As the contracts were mailed in daily, they were inspected, and all tabulations were made. Those having mistakes or questionable yields and acreages were "flagged" and referred back to the local committeemen before being sent to the county committeemen. A constant check was made to see that average yields were kept in line with the figure for the county supplied by the State statistician.

To my mind, the greatest problem encountered in the campaign was to have the committeemen visualize exactly what constitutes a farm and to secure from the farmer accurate figures on acres and yields for which the land was eligible. This problem was solved by personal inspection of the contracts and by sending to committeemen letters explaining the mistakes in a clear, concise manner.

Favorable sentiment for the campaign was accomplished through numerous mimeographed letters to farmers and committeemen, explanation of the campaign before meetings of civic clubs, and through the daily paper publication of much information on the campaign. As county agent, I made certain that all bankers and leading businessmen in the county were thoroughly informed on the program's value.

Without doubt, however, a major portion of the campaign's success rests on the "expert committeemen." Through their efforts and the cooperation of business and farm leaders, Lee County reached its quota in the reduction campaign early in February and last summer was the first major cotton county in Alabama to "go over the top" in the plow-up campaign.—C. H. Beddingfield, county agent, Lee County, Ala.

Local Leaders

The cotton-adjustment program just being completed in Pontotoc County, Okla., is by far the largest and most important project ever attempted by the Extension forces. About 75 local leaders took direct part in assisting the county agent. The fine cooperation of the business people throughout the county with these leaders brought this program before the farmers and enabled the county agent to put the program over in a satisfactory manner and in the shortest possible length of time.

After receiving detailed instructions from the Washington office on the cotton-adjustment program, a county-wide meeting was called on June 24, in the district courtroom in Ada, where the cotton-adjustment program was explained to about 1,000 farmers and business men. A committeeman for each community was appointed. These men were farmers in that particular community, whom we thought best suited to carry on this work. The duties of this committeeman were to go back to his community and call meetings, explain in detail the cotton-adjustment program, and write contracts.

On June 27 a meeting was held for all committeemen. By this time we had received a bundle of cotton benefit contracts. These contracts were distributed equally among these committeemen, a John Doe copy which we had prepared in our office was placed in the hands of each. Each committeeman on going back to his district, began at once to write contracts, inspect the cotton to be taken out of production, and agree on price.

We did everything possible to aid these committeemen in field work. To keep them up to date on information a mimeographed copy was made of each letter or telegram of instructions received from the State director of extension or the Washington office and mailed at once to each committeeman.

The cotton-adjustment program has been of great benefit to a large number of farmers, as we have been repeatedly told. One farmer writes, "This check will pay me out of debt, and I will have for my own the cotton that I pick or sell." We have also heard from many of these men who participated in the program. One committeeman states, "If this acreage had not been taken out of production, cotton would not be bringing over 4 cents per pound this fall."

While the value of the adjustment program has been of benefit to the farmer as a direct relief, it has also been a stimulant to business recovery as a whole.

It has afforded the county agent an opportunity to serve the farmers in a capacity heretofore unheard of, and this program has been carried on to completion in the most satisfactory manner. I do not know of anyone who is not satisfied with the results. Therefore, it is needless to say that I am proud of the opportunity to serve the farmers of Pontotoc County and to have had the opportunity of assisting them in the huge program just completed.—J. B. Hill, county agent, Pontotoc County, Oklahoma.

Shelby County Cotton-Adjustment Campaign

W. M. Landess.

The county agent in a county like Shelby County, Tenn., in which a large city is located, has a twofold responsibility in a campaign such as the present cotton-adjustment campaign.

First he has an obligation to secure the adjustment in his county, such as every other agent has:

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Jane McCoy, of Tippecanoe County, Ind., leading a group of 4-H club officers in a club song.

Training 4-H Officers

THREE years ago the Indiana State 4-H club leaders turned their attention to the 4-H club meeting. These leaders believed that much could be done to improve the effectiveness and value of these meetings through the training of the club officers. In 1931 series of meetings were held throughout the State.

Each year since the training started additional meetings have been held. In 1933 there were 30 meetings of county club officers with an average attendance of 69 boys, girls, and local leaders, and a total of 2,067 persons who have received this leadership training.

The meetings were held for periods of 1½ to 2 hours either in the afternoon or evening in some available building, such as the schoolhouse. The afternoon meeting proved most successful, although some night meetings were scheduled. The officers of all the clubs in the county were invited to attend. At the meeting the group was divided into sections of presidents and vice presidents, secretaries, news reporters, and song leaders. The leaders present were free to attend any of the section discussions. The presidents and vice presidents were given assistance in handling a meeting, parliamentary law, correct order of business, and the value of planned programs. Secretaries were given aid in keeping records and minutes of the meetings. The writing of news stories and the leading of club singing were topics for discussion in the other sections.

At the close of the discussion period the general group assembled and a model meeting was held, using one officer from each of the sections. This meeting is conducted as a regular club meeting and the full routine of business and recreation is followed through.

As a result of these meetings and the training of the 4-H club officers considerable improvement has been noted in the local club meetings, which have been better planned and organized. A clearer understanding of what should be done and how to do it has been evident. The increased interest in the meetings has resulted in a larger attendance. More complete and concise records of the meetings are now being written. The experience that has been gained by the 4-H club members and leaders has been of value, and will continue to be, in aiding them to play their part in activities of the community. It has given a new idea of responsibility to the club officers.

FARM women in four counties in southern Mississippi added $22,952 to the farm family cash income during the past year through sales of surplus garden, poultry, dairy, and culinary products at club markets, according to Mrs. Emma Lindsey, district agent, who has received reports on the markets from the county home demonstration agents.

The club markets are operated by members of the home demonstration clubs, women's civic organizations, and the local home demonstration agent. Only home demonstration members who prepare, grade, pack, and standardize products according to standards set up by the extension specialist in home marketing are permitted to sell on the club markets.

The County Adjustment Campaigns

(*Continued from page 35*)

but he also has the responsibility of seeing that the business interests of his city make their weight felt over all their trade territory. In both of these projects, Shelby County is very proud of their record in the 1934 and 1935 cotton-adjustment campaign.

To secure our quota of approximately 41,000 acres, we relied on and believed in the community committee plan of work. We placed the entire responsibility on the committeemen, feeling that they know their neighbors. We called these men in for 2 days' training and gave them cards listing every tract of land within their prescribed and mapped areas. We have assisted them in projecting their program through a series of campaign meetings which covered the entire county in a little over a week's time. They have since returned to us contracts that will cover at least the 41,000 acres, executed by more than 2,000 farmers. At the present state of tabulation, the total of these contracts is only 6 pounds per acre above our 5-year average production.

Through the aid of a Civil Works Administration set-up, we have been supplied with efficient help in receiving, reviewing, correcting, and tabulating these reports.

In the matter of meeting Memphis' responsibility toward its trade territory, we called together representatives of cotton, land, and banking interests in the city. This original group organized themselves into a committee, then pledged they would back the Government control campaign 100 percent and would require every person they dealt with in a business way to do the same. The weight of this movement can be judged by the fact that one individual present pledged his company which controlled several thousand acres of cotton. They put on an active campaign over the radio, through the newspapers, and by letters and circulars, which have been a great influence over this trade area, so much so that our workers met with little difficulty in securing the required quotas. —W. M. Landess, county agent, Shelby County, Tenn.

Adjusting the Home-Economics Program

MINNIE PRICE
State Home Demonstration Leader, Ohio Extension Service

Three Guiding Principles

1. The basic long-time objectives must guide the adjustments in content, program, and methods.
2. The underlying philosophy of meaning of the adjustment program with its stress on human welfare and on humanistic and social values is especially significant to the home-economics extension program.
3. The adjustment program depends for success upon group action and group understanding, both of which are in turn affected by our methods of procedure and program content.

WHAT are some of the factors in this adjustment period of which we must be aware and with which we must deal? The underlying philosophy of the adjustment program will surely affect our thinking and our planning. The philosophy of this adjustment program does not affect the homemaker to the exclusion of the others in the rural family, but, in my opinion, the rapidity with which this philosophy affects rural life will depend much on the homemaker. Therefore, if this underlying philosophy is sound and important it must have more attention in the home-economics extension program.

Reduced production, which is a part of the adjustment program for the time being, can set free time in which culture and richness of life may be developed—a culture which bank failures or fly-by-night speculators cannot take from the farm family. The homemaker in that farm family, more than any other member, will influence the family's attitude toward this time that is set free and will determine in many places whether or not such time shall be set free and utilized for enrichment of life.

The adjustment program is truly more than a plan for economic recovery. It holds possibilities for the recovery and development of those qualities on which satisfactions in life depend, for hundreds of persons are thinking constructively today where only one thought yesterday of the possibilities of putting the safety and happiness of human life in rural areas on an equality with people in urban areas to which rural life has in years past contributed so much. The relationship between economic law and an adequate program of human welfare is recognized today by an increased number of people and calls for leadership in planning as well as in execution of plans relating to home and community life.

Group Action

The adjustment program is dependent on intelligent and willing cooperation and group action. Collective planning

Minnie Price.

and action for collective welfare is a part of the thinking in this movement. The need for group action for betterment of health facilities, reading, recreation, and dozens of other activities has been emphasized for years past. Home economics extension as well as other types of extension may well look to the program and to the methods used to see that we are not encouraging individualistic activities to the destruction of cooperation. Can home-economics extension contribute to the development of group action that is commendable? Is the challenge of today great enough to move us so that we can contribute in great measure to this mood? To get very far with group action demands a change in the warp and woof of the thinking of the American rural people including many of us who stand as teachers. Group discussion, group planning of programs, and other group activities can contribute to this move away from individualism, provided they are so conducted that those who make up these groups are allowed freedom in thinking and given opportunity to express this thinking.

We have considered three angles of the underlying philosophy in this adjustment program. What are some of the problems affecting home and community life with which we must reckon?

First among these problems are those pertaining to health. Rural women are asking that information regarding protection from disease, sound nutrition, child health, truth in advertising of foods and drugs, and similar questions be made available to every mother and homemaker.

Consumer problems have long had some attention in the home-economics extension program, and the adjustment period reveals the need for added emphasis.

Creative Arts

We all acknowledge values in wholesome recreation and leisure-time activities, but tradition has kept us from too whole-heartedly endorsing a recreation program in extension. Farm women, when meeting to discuss programs, are forcing us, as we assist with these program plans, to clarify our viewpoints. They are asking us to develop methods whereby play, music, reading, nature study, and various forms of creative arts may have some attention.

More of the living is produced today than previously at home as defense against the lowering of the standard of living. These efforts are visible, tangible activities, easily recognized, easily praised, and likely to occupy the center of our thinking in this adjustment program. They are not likely to drop out of the picture for some time yet.

Homes are inadequately equipped to carry on even the ordinary tasks of homemaking, to say nothing of the added tasks such as soapmaking and breadmaking and others which have come back into the home. Is it possible that the increased purchasing power of farm folks for which the adjustment movement is inaugurated, coupled with an increased desire on the part of farm folks to eat their cake in order to have it, may in time set free the small or large sum of money to install plumbing, remodel kitchens, and install other labor-saving devices? Are we alert to this possibility and ready to meet it with the best possible information?

As citizens of the communities in which we are working and also as public servants the home-economics extension staff members and rural women of extension groups have contributed to relief work from their background of knowledge and will continue to do so. This relief work has been added to a program and has not supplanted the long-time educational program for rural homemakers.

The unity of rural and urban interests is becoming more apparent, but failure to acknowledge this gives rise to social and economic questions which need attention. Population trends may also affect emphasis in programs.

Family Relationships

The grouping of two or more families under one roof gives added reason for attention to the field of family relationships and child development, and especially to the need of reaching young mothers with education in homemaking.

With regard to methods, the future of the program depends largely on an adequate research program as a basis for teaching, adequate machinery through which rural homemakers may continue to be articulate, staff members adequate in number and qualified by training and experience, coordinated programs which recognize the family as a unit, and willingness and freedom to venture into new fields and try new methods.

Are we brave enough to experiment with our methods of work? Thinking gets stereotyped. We need an emergency to force constructive thinking. Previous to 1929 there was, and perhaps since 1929 there has been, inadequate examination of procedures. There is an old Scotch phrase which describes it, "The heather is wet." Fires, you know, will not spread in wet heather.

Today the heather is not wet. The fires are burning. Men and women are fumbling for some way out. Rural groups of homemakers are interested in the program of which they have had a taste, and the need for an enlarged and greatly extended program exists. Women trained in home economics can make a contribution if basic objectives are kept in mind and if new ventures can be made. It is truly a time for high thinking and careful examination of programs, methods, and results.

NORTH CAROLINA farm women canned 11,570,950 quarts of surplus food during 1933. Extension workers trained 1,125 community workers, who in turn carried the instruction to rural women in all parts of the State.

Florence E. Ward

Florence Elizabeth Ward, a member of the Extension Service of the United States Department of Agriculture since 1915, died at Garfield Hospital, Washington, D.C., February 23.

On November 1, 1915, Miss Ward came to the United States Department of Agriculture as an assistant in boys' and girls' club work. With the development of extension work with women she was given charge of home demonstration work in the 33 Northern and Western States. She held this position from March 1, 1918, to July 1, 1923, at which time the offices of extension work in the South and in the North and West were consolidated. Miss Ward was then appointed regional agent in charge of extension work in the 12 Eastern States, which position she held until her death.

During the World War Miss Ward aided in food conservation work carried on among the women of the United States. At the close of the war while emergency home demonstration agents were still employed a survey of 10,000 farm homes was made. Miss Ward wrote a bulletin, entitled "The Farm Woman's Problems", which was based on the study which she and her assistants made of the facts obtained from this survey.

Among other publications of which Miss Ward was the author are: Status and Results of Home Demonstration Work, Northern and Western States, 1919; Status and Results of Home Demonstration Work, Northern and Western States, 1920; Status and Results of Home Demonstration Work, 1921; and Home Demonstration Work under the Smith-Lever Act, 1914–24.

Born at Mauston, Wis., Miss Ward was reared on a farm. She graduated from the National Kindergarten College in Chicago during 1903. She was in charge of the kindergarten training department, Iowa State Teachers' College, from 1906 to 1914. While serving in this capacity, Miss Ward went abroad under the auspices of the National Civic League to study problems of women and new developments in the care of children. After studying with Madame Montessori in Rome she wrote a book, entitled "Montessori Method and the American School." She also contributed to a number of publications and periodicals relating to education and rural life. From 1914 to 1915 Miss Ward was professor of vocational education at the State College of Washington.

C. W. Warburton, Director of Extension Work, made the following statement concerning Miss Ward. "Miss Ward brought to cooperative extension work the training of an educator and a sympathetic understanding of farm problems gained from her farm upbringing. She was a prominent figure in the development of the present cooperative extension work and contributed much to the present system, particularly in home demonstration lines."

Miss Ward was especially competent in her contacts with people of distinction. Her culture and wide acquaintance made her valuable as an extension worker. She was interested in her work from a professional standpoint and in the advancement of women's interests.

Miss Ward has long been active in club circles. She was a life member of the National Women's Country Club, and held membership in the Arts Club of Washington, the Women's University Club, the Women's City Club, the League of American Pen Women, and the Women's National Farm and Garden Association. She was counselor of the home demonstration committee of the General Federation of Women's Clubs, a member of the committee of publications and promotion of the American Child Health Association, and manager of the Rural Life Bureau of the National Congress of Parents and Teachers.

Miss Ward was 61 years of age. She leaves a sister, Mrs. L. W. Beem.

ONE hundred and ten 4-H boys and girls of Larimer County, Colo., with their leaders recently celebrated the completion of 15 years of club work in the county. At the banquet local leaders and State leaders made short talks and the boys and girls were presented with awards for excellency of work.

Planning a Contracted Acreage Program

In accordance with the acreage reduction contract of the Agricultural Adjustment Administration

FRANK E. BALMER
Director, Washington Extension Service

THE Replacement Crops Section of the Agricultural Adjustment Administration has commented very favorably on this program for handling contracted acreage as an example of what can be done from a State standpoint.

THE "contracted acreage" is without doubt one of the most vital problems of the entire controled production program. The Agricultural Extension Service is vitally interested in the contracted acreage because it provides one of the best opportunities for a program of soil improvement and erosion control ever offered the farmer.

Soil Improvement

Completion of the sign-up for the wheat adjustment campaign found wheat growers of the State of Washington with approximately 293,000 acres of land which must be retired from wheat production for the crop year of 1934. As the Extension Service is primarily interested in the soil-erosion and soil-improvement aspects of the problem rather than the policing problems of the County Production Control Association, steps were immediately taken to formulate a plan whereby a project of soil improvement and erosion prevention could be worked out which would in no way jeopardize the retirement of these acres from competitive production.

Leonard Hegnauer, extension agronomist, was assigned the task of drawing up such a program in conformity with the wheat and corn-hog reduction contracts. After a series of conferences with the college and experiment station agronomist and soils experts, and a review of the erosion problem with W. A. Rockie, regional director of the new erosion project, Mr. Hegnauer proceeded to formulate the table appearing on this page which segregates the contracted acreage for each county into the uses most conducive to maximum benefits from the standpoint of soil improvement and erosion control. Each county was carefully analyzed beforehand from the standpoint of rainfall, soil conditions, and systems of farming.

Due to the wide variation in rainfall and land contour in the eastern and western sections of the wheat counties, the proposed use of the contracted acreage was placed under five heads, all of which come under either soil improvement, erosion control, or both. Rainfall varies from less than 10 inches in the level or gently sloping Big Bend area bordering on the Columbia River to as high as 30 inches in the hills of the sharply rolling Palouse country where Whitman County, the largest wheat-producing county in the world is located. Rainfall is a severely limiting factor in making up a program for the Big Bend country.

The division headed "Soil Protection Crops" in the table applies largely to the Big Bend counties of Adams, Douglas, Franklin, Grant, and Lincoln, although a considerable area of Whitman and Walla Walla Counties falls into this division. As the winter wheat and summer-fallow system of cropping is used almost exclusively in the State, protective crops must meet this system of cropping. If land is summer-fallowed 2 years in succession, an excess of nitrogen accumulates in the soil in much of this region and causes serious burning of the crop. Due to the light rainfall and sandy texture of much of the soil, wind erosion is a serious problem. Protective crops attempt to meet these two requirements.

The lack of moisture along the western border of the Wheat Belt, or the Big Bend region, makes the growing of legumes and the ordinary grasses practically impossible. Therefore the contracted acreage of approximately 176,000 acres must be protected with a growing crop of wheat or rye until plowed under for summer-fallow. In some places volunteer growth may answer. Wheat or rye, or even volunteer growth, plowed under at the proper time will add organic matter and will not interfere with succeeding crops. They will also play an important part in control of wind and water erosion. Crested wheat grass is being studied as a possibility in this section and may be found adaptable.

Plans for Seeding

The legume soil-building or soil-improvement crops apply to most of the counties in the Palouse area where the rainfall ranges from 16 to more than 25 inches a year. The area will have about 65,000 contracted acres on which it will be highly desirable to seed popular legumes adapted to this State, such as alfalfa and the sweetclovers. While the main function of these crops is to build up the nitrogen and organic matter in the soil, they are also an excellent erosion-prevention crop. Due to the low price of wheat in recent years the wheat grower has been forced to raise every bushel of wheat he could to keep his "head above water", and naturally when

Contracted wheat land

Counties	Acreage under wheat allotment contract			Proposed use of contracted acreage				
	Applications	Signed acres	Contracted acres	Permanent seeding in gullies	Hilltop planting	Soil improvement	Weed control	Soil-protection crops
Adams	891	320,000	48,000	1,000		4,000	800	42,200
Asotin	232	33,805	5,070	200	200	4,000	300	370
Benton	105	47,000	7,050	300	100	1,500	500	4,650
Columbia	437	79,071	11,860	1,500	1,000	6,000	600	2,760
Douglas	850	130,555	19,583	800		2,000	550	16,233
Franklin	378	99,881	14,982	600	300	1,000	400	12,682
Garfield	447	68,265	10,239	1,200	900	5,500	500	2,139
Grant	700	95,000	14,250	700		800	200	12,550
Island-San Juan	36	1,034	155			105	50	
Skagit	1	9	1			1		
Kittitas	146	4,966	745	25		100	40	580
Klickitat	399	50,600	7,590	400	150	2,000	500	4,540
Lewis-Clark	144	1,946	292			262	30	
Lincoln	1,300	270,000	40,500	3,000	1,500	5,000	2,000	29,000
Okanogan	178	13,050	1,957	100		1,200	100	557
Pend Oreille	14	348	52	10		32	10	
Spokane	1,103	111,828	16,774	4,000	2,000	6,000	1,500	3,274
Stevens	296	12,528	1,879	100		1,500	100	179
Walla Walla	751	194,207	29,131	4,500	2,000	9,000	1,500	12,131
Whitman	2,843	407,237	61,085	5,500	6,000	15,000	3,000	31,585
Yakima	117	7,756	1,163	40		150	100	873
Ferry	27	912	136			50	15	71
Total	11,395	1,949,998	292,494	23,975	14,150	65,200	12,795	176,374

Total wheat farmers—1929 census, 14,690.

prices were high he raised the maximum bushels so as not to miss any profits. Consequently, the building up of the soil with legumes has been neglected and contracted acreage gives an excellent opportunity to take advantage of this program.

Hilltops denuded of the rich top layer of soil, exposing clay points in many places, and rapidly washing gullies are two erosion problems particularly prevalent in the Palouse area. Mr. Hegnauer estimated that such hilltops in the wheat area totaled approximately 14,150 acres, while land where gullies should be seeded down amounted to about 23,975 acres. Part of this hilltop and gully area will be seeded through the Federal Pacific Northwest Erosion Control project under the direction of W. A. Rockie. The remaining acres will await more complete arrangements for allowing wheat growers in the Palouse area to take out enough additional acreage of hilltops and gullies to equal the 15 percent of average acres.

Hilltop and gully seedings have been quite well planned out in a general way. The hilltop seedings are especially important because of the initial impetus given to the water rushing down the hillsides and also because huge snowdrifts on north slopes carry away tons of soil when they melt in the spring. While unusually hardy grasses and legumes will be among the recommended seedings, the planting of trees and woodlots will be emphasized for much of the area, particularly on the clay points where there is little hope of completely restoring the top soil. The gully plantings recommended include perennial grasses, alfalfa, sweet clover, and other firm-rooting crops adapted to the different sections. The main purpose of the gully plantings will be to keep the water courses from washing deeper and remove the hazard to machinery and farm animals.

Weed Control

Mr. Hegnauer estimates that more than 12,000 acres should be segregated for the specific purpose of weed control. Weeds are constantly on the increase in many sections and those with perennial rootstocks have become a serious problem in several areas. It would be a serious mistake not to use this opportunity to make a definite attempt at weed control. Clean cultivation, grasses, or legumes to choke out the weeds, or in extreme cases the use of calcium or sodium chlorate sprays would be among the means that could be applied on this acreage.

Combinations of at least several of the five divisions that have been elaborated upon can be applied to the contracted acreage on every farm. The next problem is to secure the cooperation of the individual wheat growers in carrying out the project as a whole. Growers who sign acreage-reduction contracts agree not to use the contracted acreage for realizing cash returns during the term of the contract. They have no desire to violate any provisions of the contract or regulations and are accepting the program of soil improvement and erosion prevention permitted in the reduction contracts and regulations in regard to the use of the contracted acreage.

Records Prove the Program

FARM-MANAGEMENT information obtained from farmers' records is used to advantage in proving the county agent's plan of work in Cheatham County, Tenn. This is a small hilly county in the dark-tobacco areas in middle Tennessee. Most of the farms are small and much of the land is worn and eroded. County Agent P. W. Worden, who worked out the program, was in the county for 10 years and has recently transferred to Union County, Tenn. The program which he has used so successfully is as follows:

First, a terracing project was undertaken on the more rolling land. After terracing, legumes such as Lespedeza and red clover were planted. While the soil is being rested and improved, County Agent Worden was introducing the subject of better dark tobacco with higher yields and improved quality, particularly to the farmers who were cooperating with him but also to the farmers of the county in general. With the increase in soil fertility, due to erosion prevention, legumes and proper fertilization, the tobacco crops on the demonstration farms, as a rule, are of higher quality each year than they were the preceding year. As the supply of feed and pasture increased, due to more legumes and grasses, livestock enterprises were added as supplementary sources of receipts on the larger farms and to some extent on the smaller farms. In adding more livestock to the tobacco farms of Cheatham County, Agent Worden called attention to the value of good type and quality in the animals bought and laid much emphasis on the use of purebred sires.

The time required to establish this program varied from 4 to 8 years, although instances are known where the incomes were more than trebled over a period of 3 years.

To check on this program, a number of the cooperating farmers kept complete records of the year's operations. At the end of each year the farm records were summarized and the information used by the county agent in pushing his county program and also by the farmers in making additional improvement or changes in their farming practices. The county agent then knows that his program has been successful, for he has the dollars and cents results of his efforts. These records have shown the amount of income to be in direct proportion to the extent the program has been adopted on the farm. The facts about farming in the county interpreted in the light of the farm-management records were discussed in community meetings held once each month in 12 communities in the county. Sometimes one of the specialists from the college gave a talk at these meetings on the agricultural outlook or some timely phase of the agricultural situation.

County Agent Worden's farm-management work has been successful because it has furnished both the agent and the farmer with workable information that can be used in improving the farm business. This county has led all counties in the State on average labor income and in percentage of farms having an income after paying expenses and 5 percent interest on the investment.

TWENTY thousand beekeepers in New York State received additional income from the sale of honey amounting to more than $1,000,000. The State produced 10,000,000 pounds of the Nation's 250,000,000 pounds.

ARKANSAS extension workers have figured the relative value of general farm cash crops against the value of home-garden produce. They estimate that a garden of one half acre would produce $100 cash value in food. This is 5 to 10 times the amount which would have been realized from the same area planted to general farm crops. Mrs. I. B. Shinn, a county garden demonstrator, has the following record. In 1931 she sold $199 worth of vegetables; in 1932, $68; and in 1933, $36 besides having ample supplies for home use during the entire year. This seems ample backing for her statement "I have found that one half acre of garden has proved of more help both from the standpoint of health and finances than any other farm crop."

Two Veterans In Federal Extension Service Retire

THE Department Extension Service has sustained a heavy loss through the retirement from active connection with it of J. A. Evans, Associate Chief and regional agent for the Southern States, and I. W. Hill, field agent in 4-H club work for the same territory. Mr. Evans was one of the very first field agents appointed by Dr. Seaman A. Knapp, beginning his service in Texas on February 12, 1904. He has had almost 30 years in demonstration work, continuing in service since 1904, except for 15 months spent in Portuguese East Africa where he made a study of cotton production for the Portuguese provincial government.

Mr. Hill was appointed assistant in boys' and girls' club work on June 17, 1912, and served on the Washington staff without interruption from that time until his retirement on June 30, 1932, on account of having reached the age limit under the provisions of the Economy Act.

The Southern States, in particular, are heavy losers through the retirement of Messrs. Evans and Hill. Probably no person now living knew Dr. Knapp better than did Mr. Evans or has as an intense a loyalty for Dr. Knapp's conception of education through demonstration as he has. Briefly, Mr. Evans was born December 18, 1863, in Illinois. His parents moved to southwest Missouri when Mr. Evans was young and when 22 years of age he went to Texas. All his life Mr. Evans has kept in close touch with farming, particularly in the cotton-growing States. As the demonstration work increased to include other States besides Texas, Mr. Evans was made State agent for Louisiana and Arkansas. In 1911 he came to the Washington, D.C., office as Assistant Chief of the Office of Extension Work, South, and was made chief in January 1920. When the offices directing extension work in the South and in the North and West

I. W. Hill

were combined Mr. Evans was made assistant chief of the new Office of Cooperative Extension Work, and associate chief in January 1930.

In commenting on Mr. Evans' retirement, Dr. C. W. Warburton, Director of Extension Work, said "We very much regret to lose the services of Mr. Evans, particularly at this time, when we are engaged in cotton- and tobacco-production control programs and other activities of much importance in the South. He was a pioneer in extension work and has had much to do in molding extension policies and plans. His long experience, sound judgment, and broad knowledge of southern agriculture made him a most valuable adviser and supervisor, whose keen insight and sane counsel will be greatly missed."

It can be truly said of Mr. Evans that he has rounded out a service to his country of exceptional distinction and value.

J. A. Evans

Mr. Hill was born June 25, 1861, and reared on a farm near Auburn, Ala. He was graduated from Emory College, Oxford, Ga., in 1880. Taking first a position as a teacher at Whitesville, Ga., he held successively the positions of principal of high school, president of an academy, superintendent of the city schools of Gadsden and Opelika, Ala., and superintendent of education for Alabama. He became field agent in charge of boys' and girls' club work in the Southern States in 1912. Mr. Hill is known and loved among 4-H club boys and girls not only throughout the South but in the many States in other sections of the United States that he visited. At the National 4-H Club Camps held in Washington he has presided at the morning assemblies with a genial dignity and tact that endeared him to both the boys and girls in attendance and to those who appeared before them. If ever to anyone, 4-H club work has been a vital living thing, it has been that to I. W. Hill and to the thousands of boys and girls who have heard him warm to his loved task of giving them an understanding of and enthusiasm for what 4-H club work represents.

THE Illinois Extension Service has issued a warning to the many city families who are planning on moving to rural sections. H. C. M. Case, chief of farm management at Illinois College of Agriculture, says that such families should be sure that careful plans have been made for the production and sale of the farm products; otherwise they are likely to be disappointed. Continuing, Mr. Case points out that the small farm should first be considered as a source of family food needs, and second, for the addition of income from one or two sources for which the market is quite definitely assured. Actual farm experience plays a large part in determining a man's chances of success.

A VERY commendable feature in the 4-H club reports from Vermont this year is the long-time service of the members. Two hundred and fifty club members and 150 leaders are completing 4 years of service. Two members of the county club agent staff are entering their fourteenth year of service.

THE Massachusetts Extension specialist in horticulture manufactures, W. R. Cole, looks upon home vegetable gardens as an investment which will make a return of 500 percent. He says that this year a family of five can invest approximately $8.50 in fitting, planting, and spraying the garden and receive returns in the form of food to the value of $45 or $50. In addition, they receive some work, a lot of fun, health, vigor, and satisfaction; and will have fresh vegetables for their table and enough to can some for the winter.

Negro Extension Work

IN PROMOTING a live-at-home program, the 325 negro extension agents have been tremendously successful through community and county-wide organizations. They surveyed carefully the community and county needs, taking into account the customary major and minor crops produced as well as the equipment available.

The program based on this survey embrace the major farm activities, such as soil improvement, farm crops, horticulture, insect control, livestock production, engineering, and economics. About 3,500 farmers annually cooperate by terracing their farms to save the soil. More than 4,000 adults and 6,000 boys have demonstrated the value of hog production on the farm each year with a proportionate number of demonstrations in the other fields.

The home activities include house repairs which make for comfort and convenience. More than 8,700 negro women have conducted demonstrations in home beautification annually. More than 15,500 women have planned food budgets in the last few years and in so doing have learned the essentials of a balanced diet. An adequate water supply, personal hygiene, and proper sanitation are included in the program as well as better education for the children and wholesome recreation for the entire family.

It is through these live-at-home programs that the whole extension policy as promulgated by the State and Federal Government is carried into the homes and farms of the most humble country dwellers.

Alfalfa Cost Records Aid California Agent

THE cost of production records kept on alfalfa in Los Angeles County, Calif., are now being summarized for the third year with about 15 cooperators submitting records for 1933.

"The information gathered has been appreciated this year more than ever before because of the necessity for more economical production and because of the value of these data in connection with marketing agreements", says County Agent M. B. Rounds.

The alfalfa growers of southern California and Arizona, representing a total production of 720,000 tons of alfalfa hay, worked out a marketing agreement using the information obtained in the cost analysis studies. This agreement has been submitted to the Agricultural Adjustment Administration. Because of the concrete data available, it has the support of all the growers and most of the dealers.

Summaries Made

An enterprise analysis study such as this has been found more valuable in California than the keeping of records on the farm as a whole because of the highly specialized character of most of the agriculture in the State. The alfalfa studies were started in Los Angeles County in 1931 with 20 cooperators completing their records. In 1932 the study covered 12 records; and the 1933 summary will be based on the records of 15 cooperators. The project was organized and is carried on by the county agent. From each of his cooperating farmers, he gets a monthly report which is immediately transferred to a monthly accumulation sheet. In doing this, the agent checks on any omissions or discrepancies either with a telephone call or a visit to the farm. An annual inventory is required which is taken by the agent. At the close of the year, the agent has the assistance of a farm-management specialist in summarizing and interpreting the data.

Each cooperating farmer is supplied with a copy of a summary of his own records together with a mimeographed report of the entire group. As soon as these are available, the farmers who have kept records meet to discuss special phases of the study and to receive help in comparing their figures with those of the entire group. This information is also used at general meetings, tours, exhibits, and in general news articles.

The studies for the 2 years which have already been summarized show a net loss. The 1932 records showed a total cash and labor cost of $6.79 per ton, depreciation of $4.04 per ton, or a total cost of cash and depreciation of $10.83 per ton. Returns failed by $1.16 to equal cash and depreciation costs but exceeded by $2.88 the cash and labor costs. The net loss was $3.18 per ton during the year.

Cost of Water

The cost of irrigation water is generally considered an important item in the cost of production, and it is. However, the records of the cooperators show that the cost of water may not have been a major factor in the success or lack of success, as the cost of labor varied widely and on some farms seemed more important.

It is in the field of irrigation that the most valuable results of the study are seen. Among the factors important in determining water costs are pumping-plant efficiency and the amount of water used.

On a 40-acre farm it has been found that each difference of 1 percent in plant efficiency has an average value of about $21.38. When the efficiency drops below 50 percent, it certainly would be found profitable to restore the plant efficiency by repairing or replacing the worn pump parts or by making the necessary pump adjustments.

It has been definitely determined that 4 acre feet of water is ample for the irrigation of alfalfa in the Antelope Valley where the records were taken, and that under no circumstances is more than 5 acre feet justified during the season. The annual decrease in the average use on duty of water is almost ¾ acre foot per year since 1925, when it was found that the average usage on 10 typical ranches was 9¾ acre feet. The 1932 cost of production cooperators averaged 5.4 feet during the season. Considering that the power cost alone per acre foot pumped averages $2.97, it is readily apparent that the decreased consumption of water has created an enormous saving to farmers in the Antelope Valley.

Cost Analysis Studies

That the data from cost analysis studies have been valuable to county agents in translating the results of research experiments into practical farming is shown in the case of the decreasing amounts of irrigation water used by orchardists. The Experiment Station proved in 1920 that there was no such thing as an optimum soil moisture content for plants. The plant obtained water equally well when the water content of the soil was just above the permament wilting percentage as when it was near field capacity. This would save the farmer much irrigation water and avoid the danger of injury to trees from leaving the soil dry too long.

Practical methods of water application were worked out and placed in the hands of extension workers but the educational program progressed very slowly. The theoretical background for the recommended irrigation practices was never questioned. The orchardists would sit and respectfully listen to the presentation but do nothing to save irrigation water in their own orchards.

But, when the farmers themselves began to secure data on the quantities of water used on citrus orchards in Orange County, Calif., in the 1925 enterprise analysis study, the program went forward. From this information the optimum quantity of water for best yields of quality fruit was determined. Comparisons were made also in costs and profits between those orchards using the optimum amounts of water and those using excessive amounts. Other counties began collecting the same type of information on different orchard crops. As a result, the extension workers soon had definite figures as to the dollars and cents value of irrigation practices worked out at the experiment station. These data provided the needed background for pointing out to orchardists the value of water conservation. The water conservation program is beginning to show definite tangible results. It is estimated that the water-saving projects have benefited the farmers in California more than $6,500,000 since the 1925 studies were begun.

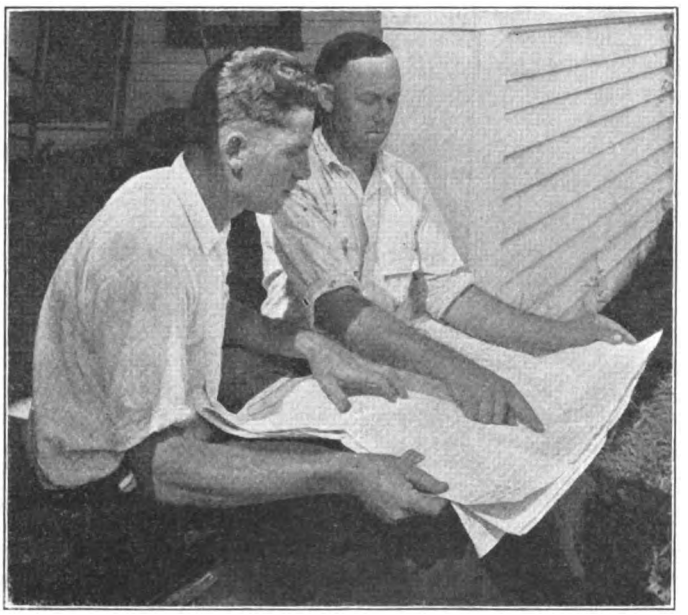
The alfalfa study in Los Angeles County will be continued for 5 years so that seasonal variation may be accounted for. The facts accumulated will establish in the minds of the farmers of the county the most economical practices in growing alfalfa hay under varying conditions, and will show definitely what amounts of water are necessary to grow a good crop of hay.

PENNSYLVANIA has a total of 132 farmers' markets, 62 of which are open-air markets. The latest addition to this system of markets is a community structure costing $15,000 located at Hanover. Stalls are rented to farmers at a very low price and a complete occupancy is expected. For the nonproducing period of the year it is planned to use the building for other purposes. The building is 64 feet by 156 feet and contains 96 stalls.

Using Localized News Stories in Illinois

LONG have extension editors held that the news story is an effective means of spreading new teachings. Never, however, have they had such an opportunity of proving that point as came to them during the wheat-production-adjustment activities.

In Illinois, for instance, 40 special stories arranged so that farm advisers could localize them by filling in their names and other local information were prepared and sent out by F. J. Keilholz, extension editor in Illinois, during the course of the wheat campaign. It was the first extensive trial ever made in that State of the localized news story as a means of spreading new teachings, but it will not be the last.



In spite of the fact that Illinois farmers already had reduced their acreage of all wheat 61 percent since 1919, the State took fifteenth place among all States in the percentage of the wheat acreage signed up in the Agricultural Adjustment Administration campaign. Illinois, with a 55 percent sign-up, led its neighboring States.

By no means is all the credit for the Illinois results claimed for the localized news stories. They were only one factor, but any factor that produced thousands of inches of printed matter in the 850 daily and weekly papers of Illinois is bound to weigh heavily in the outcome of any campaign in that State.

Distribution of the localized stories was made exclusively through the farm advisers serving the 102 counties of the State and was started as soon as it was determined that the Extension Service was to be responsible for the preliminary educational and organizational work of the campaign.

Sources of Information

Every available source was tapped for information upon which to build the stories. Some of the earlier stories were developed from county statistics in the State crop and livestock reports. Others were suggested by material sent out by the Extension Service of the U.S. Department of Agriculture. Some of them were based upon work which the College of Agriculture has been carrying on for a number of years in the interests of adjusting production to demand. There was never any dearth of material, and the supply became even more plentiful as the campaign progressed. Innumerable stories were suggested by trying to anticipate the needs of an imaginary farm adviser at the different stages of the campaign. Stories then were prepared on all phases of the program—the announcement of meeting places, the holding of meetings and what was accomplished, the first signer, the biggest signer, the organization of the county wheat production control association and, finally, the coming of the checks for the benefit payments.

Cooperation and suggestions of subject-matter specialists and administrative officials of the Illinois Extension Service were invaluable in making the series of 40 stories a success.

Once each week the stories were mailed to the farm advisers, two or three stories being sent each time and the mailing being aimed so as to reach the adviser's office by Saturday morning, office day. The advisers then filled in the necessary local facts and figures, typed or mimeographed the stories in their offices and distributed the copy to the papers in their counties.

Editors not only used the stories, but they also eulogized the service. At least one editor took the trouble to express his commendation upon the service to his local farm adviser. For the advisers, of course, the stories were invaluable. They established the adviser as the local authority on the Agricultural Adjustment Administration's wheat campaign; they supplied him with background facts and material which he otherwise might not have had, and they made it possible for him to get out a regular and thorough local news service on the campaign in a way that he could not have done in the rush of all his other work.

Papers Using Stories

How many thousands of inches of wheat-adjustment news were published in Illinois as a result of these stories will never be known. County farm advisers cooperated whole-heartedly in sending in tear sheets from their county papers more or less regularly, but time permitted nothing more than a small check-up here and there. In De Kalb County, Ill., for instance, 26 issues of 9 different papers carried a total of 416 inches of wheat-adjustment news during the period from August 11 to September 7, 1933. This was an average of 16 inches an issue.

In Washington County one paper carried a total of 173 inches of wheat-adjustment news in 10 issues, or an average of more than 17 inches an issue, while another paper in the same county carried 76 inches in 7 issues, or an average of almost 11 inches an issue. Newspapers of Whiteside County during the period from July 28 to October 16 carried 48 wheat-adjustment stories, totaling 322 inches.

These are only a few check-ups and they are scattered, but they are representative and convincing. Even if they had not been made, the worth of the localized news stories in a wheat-adjustment campaign or in any other piece of Extension Service work would have been established. The enthusiasm of editors and farm advisers over the service, the wide-spread use of the material, and the results that were obtained in the campaign were convincing.

As the intensive wheat campaign closed, one thing became true about the then approaching corn-hog campaign in Illinois. Localized news stories were to have an important part in it, and they have!

Iowa Women Appraise Adjustment Program

FARM women of Iowa are divided in their opinion of the most important benefits to be derived from the agricultural adjustment program. The majority place increased farm income first; but many others list such benefits as the opportunity for more leisure time, training in cooperative effort, the development of a long-time national land-use program, and the possibility for developing a better understanding between country and town.

These facts were indicated by a survey conducted among farm women of 10 counties in various parts of the State by leaders in home-economics extension work at Iowa State College. Miss Neale S. Knowles, Mrs. Mary K. Gregg, and Mrs. N. May Larson distributed questionnaires among women attending county or township meetings of farm bureau women. Seven possible benefits were listed, and the women were asked to rate them according to their importance.

Fifty women in the 10 counties listed increased farm income as most important. This item ranked high in most of the answers, according to W. H. Stacy, extension rural sociologist, who compiled the results of the survey.

Twenty-seven women, however, listed "training in cooperative work" as most important. This indicates, said Mr. Stacy, that they recognize the beginning of a program by which farmers may work together for their own interests better than they have in the past.

Land Utilization

Eighteen women listed the beginning of a permanent national land-utilization policy as the most significant benefit to be derived from the farm adjustment program. Closely allied to this is the "soil conservation" factor which was rated high in all lists and first by three women. Many farmers have been forced to "mine" the soil in an attempt to make total production offset lower prices. These farmers are looking for a chance to protect the fertility of their soil.

Better understanding between town and country was listed as most important by 11 women who reported that there already is evidence of greater sympathy and interest between town and country than at any time in Iowa history.

That the agricultural adjustment will check the trend toward more "intense working conditions" on the farm was given by nine women as their reason for placing the opportunity for more leisure time first as a probable benefit of the program.

Nine farm women rated "parity price" as the most desirable benefit of the adjustment program. This term is not generally understood, however, many people confusing it with a mere increase in farm prices, said Mr. Stacy. Increase in farm prices if accomplished by an increase in other prices would not raise the farmers' purchasing power or benefit him financially as far as current expenses are concerned. Parity price, when secured, will make a unit of farm produce buy as much as it would before the war.

"A difference was noted between the different sections of Iowa as well as between individual women", said Mr. Stacy. In Plymouth County, near the heart of the so-called "farm-strike territory" in western Iowa, 11 out of 26 women said that increased farm income would be the most important result. Nine felt that the opportunity for more leisure was most important and six said that the most significant element in the program is the beginning of a long-time utilization plan.

In Muscatine County, in eastern Iowa, where the advantages of town-country cooperation are more in evidence, according to Mr. Stacy, 6 of 14 women gave better understanding between rural and urban people as the most important. Three listed training in cooperation first; 3, the land utilization element; 1, parity prices; and 1, increased farm income. Interest was greatest in soil conservation benefits in Winneshiek and Allamakee Counties in northeastern Iowa where the land is hilly and rough.

"This small, but representative, cross section of Iowa farm women", said Mr. Stacy, "indicated that increased farm income, while of great immediate importance, is only one of the benefits to be derived from the adjustment program. The long-time phases of the program are probably even more important from the social viewpoint in that they may result in a better ordered society and system of agriculture.

"Finest of all is the new understanding between town and country and the assurance that we will not have to continue 'sweat-shop methods' of production on the farm in order to make a living, but will be able to adjust our work program to provide an opportunity for profitable leisure, a higher standard of living, and greater enjoyment of life."

A VOCATIONAL AGRICULTURE TEACHER, A. G. Kirkpatrick, explains the corn-hog contract to a group of farmers attending his evening class in Perkins, Okla. County Agent Word Cromwell, seated at the table, is ready to help make out contracts or assist in any way he can. This is just one example of instruction given in many counties and communities in carrying on the adjustment program. Oklahoma's 100 white vocational agriculture teachers have reached 15,000 farmers through their night classes for farmers. About 250 of these night classes, almost entirely on adjustment work, have been held this season.

The Road to Economic Recovery

(Continued from page 34)

not an increase at all commensurate with the increase in the price of agricultural products.

At first thought you will ask how the wage bill can be increased by an industry without increasing the prices charged. This is the very crux of the recovery program. It was by reducing production and wages in some industries without a corresponding drop in prices, that we destroyed exchangeability. To restore it the process must be reversed. In many industries the declining volume of production in the last 3 years has increased overhead costs per unit of product.

In order to meet this increasing cost, the industrialists have, on the one hand, maintained prices at nearly their former level, and on the other hand, have reduced wage rates and employment. In this way they shifted the burden of reduction to the workers, brought on unemployment and destroyed purchasing power.

To regain exchangeability, it is necessary that the increased direct costs of operation attributable to paying higher wages should be absorbed by profit takers without any increase in prices. This involves spreading overhead and increasing wages so that the increased volume of production can be purchased by workers, or in part by workers and in part by farmers who receive more from the workers for the commodities they supply.

It must be recognized, of course, that there are many industries which fall between the two extremes of price flexibility and price rigidity. In such industries, the regaining of exchangeability requires that only part of the increased costs due to increased wages be absorbed by the industry through a wider spreading of overhead costs, while the remainder of the increased costs is passed on to the consumer. In still other industries in which prices have fallen very greatly over their earlier level, a return to an economic balance would undoubtedly require that the whole of the increased costs be passed on to the consumer. In such cases, the worker would be directly benefited at the expense of the consumer, a condition properly parallel to that in respect to agricultural products.

It will be seen that the most important consideration in all this is that increased payments should be made to workers without a corresponding increase in charges made to the consumer. The reverse of this has taken place during the depression. Less and less money has been paid out in pay rolls, while the prices of industrial products have shown no corresponding decline. The reversal of this process is necessary to recovery.

Because of the importance of this, it would seem that insufficient attention has been given to classifying industries according to the extent to which the increased costs could be properly passed on to the consumer and the extent to which they ought to be absorbed by the industry. To the extent that industry effectively supports the present program, the increased wages paid out will represent new purchasing power, a net gain in the demand for the products of industry and agriculture, and a real step forward toward recovery. To the extent that a lifting of prices out of proportion to increased costs occurs, we will have retarded progress. The balance of gain or loss from the industrial sector is the responsibility now of industry itself.

So far we have covered the agricultural and industrial programs. A third major factor consists of public and civil works. Through these programs, it is intended that a large volume of new purchasing power shall be created. By these expenditures, workers are given increased power to buy. This power to buy means that the money paid out for these purposes will go directly for the purchase of goods. The Public Works program is getting under way. There have been difficult problems of organization. Like any effort of this sort results are slow to appear in the early stages. But a formidable momentum is now apparent.

These, then, are the main features of the recovery program. The complete success of each depends upon the success of the others carried on as parallel drives in the grand strategy. They constitute a reasoned whole which should carry us to success. The failure of any one of these three attacks to attain its objective means the partial failure of the others, and the necessity of beginning anew.

Working with Young People

THE need of arousing the interest in agriculture, homemaking, and community-building activities of young men and women in the age group just above that ordinarily reached by boys' and girls' 4-H club work was realized by extension workers of the Missouri College of Agriculture. Last year they planned a program of activities particularly for young people from 18 years of age to the age when adult extension work is taken up. This program was introduced for the first time in Cass, Holt, Jackson, Nodaway, and Pettis Counties.

Extension workers have observed that interest in 4-H club work usually drops materially in the upper ages and that rural young men and women beyond 20 years of age had not been given adequate consideration in the extension program. In the State at large, the extension interest practically disappears at 20 to reappear again at about 30 for a slow climb to 40 or 45 where it remains constant until 60 or 65. Evidently, this is the period of greatest readjustment in the lives of rural young people; consequently, the regular extension programs have not served well their diversified interests. Many are establishing homes of their own in new communities at this time of life; while others are leaving the parental roof to cast their lot elsewhere; and some are attending college.

In 1933, the movement had 148 members enrolled—72 young men and 76 young women. There were 96 projects carried out, which included in agriculture, beef production, bee keeping, dairy, corn, commercial truck crops, farm accounting, fruit, gardening, hogs, poultry, sheep management, soil erosion, soybeans, tobacco, turkeys, and vetch growing; and in home economics, baking, clothing, food preservation, household accounts, nutrition, more attractive homes, and yard improvement. These activities were more successful when the work of several members was built around the same interest with the agricultural projects fitting into their place in farm management, and the home-economics projects into a home-management scheme, which facilitated group instruction and group discussion.

In addition, regular county-wide or community meetings were held which were attended by all the young men and women enrolled, both married and single. These programs consisted of business, recreational, and social activities in which all took an active part. Picnics and educational tours were features of the summer season.

These programs were conducted by the county extension agents and home demonstration agents under the general guidance of the State club staff and with the assistance of the subject-matter specialists of the Missouri College of Agriculture.

Home Outlook for Accomac County, Va.

THE home outlook for 1934 in Accomac County, Va., was an added feature to the regular crop outlook meetings held annually in the county. These community meetings were held from December 4 to 9, with an average attendance of 469 farm men and women. At each meeting a part of the program was devoted to a report on a recent survey of the family's home furnishing needs and the family food requirements by Nora Miller, home demonstration agent.

Survey Interpreted

The interpretation of this survey given to Accomac County homemakers was somewhat as follows: The homes in the county after 4 years of reduced income showed that the homemakers in their determination to keep up appearances, have been ingenious, but economic schemes are almost exhausted and continued efficient operation of the house is dependent on utensils and serving dishes.

Sheets have been opened in the middle and the selvages sewed together, pillow cases made over, window shades turned upside down, and leaking cooking utensils patched.

Twenty-five members of the homemaking advisory board furnished facts about their equipment on a questionnaire given by the agent during November, on which the following articles were listed: Sheets, pillowcases, blankets or comforts, towels, table cloths, window shades, large cooking utensils, and tableware. The women reported the number of these articles usually kept on hand, number bought in 1932, number bought in 1933, and number needed in 1934, the number of people in the family, and number of beds in the home. The members listed purchases in 1934 which will bring the supply up to the standard of those usually kept.

The average number of sheets usually kept was 4 per bed. The number on hand is 3 per bed and one extra for each 3 beds. In 1933 one sheet was bought for each bed and one extra for each 2 beds. Figures for pillowcases were the same.

Three towels for each person and 3 extra for each 5 people are usually kept. Now there are 2 for each person and 1 extra for each 2 people, and 1 more for each person is needed. The window-shade requirement is 1 for each 4 windows. Each family will need two large cooking utensils such as boilers, kettles, and dishpans, and one coffee pot. Additional dishes needed are 3 cups and 3 plates for each 4 people, and 1 glass for each person; four times as many of the above articles are needed as were bought in 1933.

Winter Coats

The only check made of the family wardrobe was on winter coats. All the women and all the men except one have not bought a coat in the past 2 years and will need one in 1934.

No facts were collected on the needed repairs of screens, walls, woodwork, floors, and stairs, but this need is evident.

Food Requirements

According to a food-requirement study in the county, about nine tenths of the food necessary for the balanced diet can be produced and preserved on the farm. The requirements for one adult for 1 year follows: 76 gallons of whole milk or its equivalent in cheese and buttermilk; 100 pounds of leafy green and yellow vegetables; 90 pounds of tomatoes and citrus fruits; 210 pounds of other vegetables and fruits; 25 pounds of dried fruits; 165 pounds of potatoes and sweetpotatoes; 160 pounds of flour and cereals; 20 pounds of dried peas, beans, and nuts; 15 dozen eggs; 100 pounds of beef, pork, fish, lamb, and poultry; 52 pounds of facts including butter, oils, bacon, and salt pork; and 60 pounds of sweets including sugar, molasses, honey, jams, and jellies. A balanced diet, the women reported, saves doctor and dentist bills.

Gardens

In 1933 some people had year-round gardens, filled their canning budget, and supplemented their canned pantry foods with fresh green vegetables during the fall and winter months. The women in home demonstration groups reported 26,000 quarts of canned goods; the 4-H girls 831 quarts; the total having a cash value of $6,191.25.

The needed repairs and replacements of necessary home equipment, the status of the family wardrobe, and obligations hanging over from depression years will absorb forecasted farm profits in 1934. If most of the food for the family is provided on the farm and the available cash is used wisely for other necessities the Accomac County farm home can enter the new era with few scars of the depression.

"WHERE are 4-H club champions 10 years after?" is the interesting question which Alex D. Cobb, assistant director of extension in Delaware, has answered regarding 10 boys and 4 girls in that State. With only one exception, he found that they were all actively identified with farm and home life. Three of the girls are married. One girl is a teacher of home economics, another a leader in the grange and a successful turkey grower; and another is in partnership with her husband and father in raising purebred cattle and seed corn. All of them are leaders in the local 4-H clubs.

Five of the boys are successful farmers with high standards of production. Six of them are graduates of agricultural colleges, and three of these are teachers of vocational agriculture. When things are to be done in their communities these boys and girls have a part in the work.

COMMUNITY or cooperative canning has been done in scores of Arkansas communities in the 51 counties that have been active in this project. The equipment for this service consists of 386 permanently located centers, 70 sets of "roving" canning equipment, and 4 canners on wheels. All of this equipment is under the supervision and direction of the extension workers in the State. Special training has been given to those who have charge of the canning centers.

ADDISON COUNTY, Vt., farmers hauled over 4,000 tons of "marble dust" or agricultural lime from the quarry of the Rock Products Co. near Middlebury last summer and fall. The landscape around Middlebury is literally dotted with lime piles.

R. O. Randall, county agent of Addison County, who has been very active in promoting the use of this material among the farmers of his county during the year, states that most of it will be used to prepare soils for alfalfa growing.

The "marble dust", according to recently conducted tests by the agronomy department of the Vermont Agricultural College, has a neutralizing value of 98.4 percent, which compares very favorably with that of commercial lime regularly sold on the market.

National 4-H Club Radio Program

Annual Theme: 4-H Club Work Influences the Farm and Home

Fifth Phase—The Contribution 4-H Club Work Has Made to Farming and the Farm Life of the Negroes

Saturday, May 5, 12:30 to 1:30 p.m., Eastern Standard Time

What I Have Learned About Foods and Nutrition Has Improved the Health of Our Family	4-H club Negro girl.
Farm Practices Have Improved on Our Farm Because of 4-H Club Work	4-H club Negro boy.
What We Emphasize in 4-H Club Work	T. M. Campbell, field agent, Negro work, Extension Service, U.S. Department of Agriculture.
The Contribution 4-H Club Work Has Made to Farming and the Farm Life of the Negroes	J. B. Pierce, field agent, Negro work, Extension Service, U.S. Department of Agriculture.
Music We Should Know—Fifth Phase of the 1934 National 4-H Music Hour—Featuring Compositions by Cadman, Nevin, Lieurance, De Koven, and Skilton	United States Marine Band.

A County Agent's Day

County Agent T. C. Kennard of Vinton County, Ohio, gives a glimpse of his day

"HECTIC" is a good word to use in describing the life of a county agent nowadays, and on rare occasions "heckled" might be appropriate. If variety is the spice of life, we surely ought to have plenty of seasoning. All of which merely means that apparently there is no end or limit as to number and variety of things a county agent is asked to do or to know about these days. In the course of one day we have been asked to adjust a sewing machine with a peculiar ailment. Thanks to R. D. Barden's able tutoring a year or two ago, we were able to diagnose the trouble of long standing and secure another satisfied customer.

Among other requests for our assistance were the following:

How to fill out processing tax blanks for hogs, no weights kept, no nothing! Didn't know a hog had so many parts to him. These requests were too numerous to mention.

How's this one? How to make whole-wheat bread without sugar, for a diabetic or something. We didn't know but Miss Garvin did. Thanks Alma, we get the customer.

By letter: "I have a farm in Vinton County with young peach orchard neglected. We want to get farm back to grass and make orchard profitable. Don't want to spend much money on it."

Other requests want us to recommend someone for Civil Works Administration project to serve on this committee, talk to our parent-teachers' association, locate eroded farms for camp superintendent and explain what it is all about to a farmer who has such a farm, suggest and help plan and conduct program for boys' camp, install officers at grange, teach Sunday school class, or what have you.

By letter again: "Please hurry up with those soil samples requested 2 months ago." This from Dodd; supposedly a friend.

By telegram: "Must have annual report at once." This from ———. That's a pal for you.

Oh well, we're not complaining. In fact we're glad for these calls. That is what we have been asking for. We like to have folks feel as this man—"I'll go ask the county agent. He will tell me more about it in 10 minutes than I can get from the other fellow in a week." That's what he said and although we modestly denied it, we didn't argue the matter with him.

Service—that is our job as we see it. Possibly we don't guide this service as we should or could, but it does fit our people and we try to do the job as we see it.

New Motion Pictures

THE sound "movies" available for distribution by the United States Department of Agriculture have been augmented by six additional releases with special musical scores made through the cooperation of the United States Marine Band, the Army Band, and the Navy Band. These pictures, in addition to those already being circulated by the Office of Motion Pictures, make a total of 14 sound subjects available for free distribution.

The pictures scored by the Marine Band Orchestra, under the leadership of Capt. Taylor Branson, are "Forest and Water", a 1-reel picture designed to point out the vital influence that the forest has on the water supply, and "Forest and Health", a 1-reel picture showing how the forest ministers to the spiritual and physical health of mankind. Both of these films are Forest Service releases.

The Army Band, led by Lt. Thomas F. Darcy, has provided an appropriate musical setting for a 1-reel Public Roads picture, "Roads to Wonderland", which shows scenic shots of Mount Hood in Oregon National Forest, Crater Lake in Crater National Park, and Yosemite National Park. A Forest Service picture, the "A. B. C. of Forestry" (1 reel), originally made especially for use in the Civilian Conservation Corps camps, has also been scored by the Army Band. This picture conveys elementary information about the forest and the practices of forestry.

"Highway Beautification" (2 reels) and "Forest and Wealth" (1 reel) have been scored by the Navy Band Orchestra, led by Lt. Charles Benter. The first, a Bureau of Public Roads picture, suggests practical ways for preserving and enhancing the beauty of roadside plant material and otherwise beautifying highways and adding to the safety and comfort of travel by elimination of obstructions. The latter is a Forest Service picture, which depicts a story of the forest's contribution to industry and the comfort and wealth of mankind.

The 35 mm prints of the new sound pictures may be borrowed by application to the Office of Motion Pictures, United States Department of Agriculture, Washington, D.C. No rental is charged, but the borrower must pay transportation. A list of the other available sound films may also be obtained upon request.

Let Us Open the Doors

IN ALL civilized lands today we stand appalled by the tragic nonsense of misery and want in the midst of tremendous world stocks of essential goods. Science has given us control over nature far beyond the wildest imaginings of our grandfathers. But unfortunately those attitudes, religious and economic, which produced such keen scientists and aggressive business men the civilized world over, make it impossible for us to live with the balanced abundance which now would be ours if we were willing to accept it with clean, understanding hearts. ¶ I am deeply concerned in this because I know that the social machines set up by this administration will break down unless they are inspired by men who in their hearts catch a larger vision than the hard-driving profit motives of the past. Our people on the street and on the soil must change their attitude concerning the nature of man and the nature of human society. They must develop the capacity to envision a cooperative objective and be willing to pay the price to attain it. They must have the intelligence and the will power to turn down simple solutions appealing to the short-time selfish motives of a particular class. ¶ If we could rid the general mass of our people of that paralyzing fear which breeds and grows at a bare sustenance level of wages and prices, and which spreads in time to infect the whole of business and society, it is conceivable that we could proceed in time from an economy of denied plenty, with heaping surpluses next door to bitter hunger, to an economy of potential abundance developed to the uttermost and ungrudgingly shared. It is mean and niggardly in a land so wide and rich as this one, and many others, to stem the currents of production, and to deflect the things all men desire into channels so limited, for a privileged few. It is bad management. Perhaps we can evolve in this country an economy that deals in potentialities instead of in denial. Perhaps in time we shall be able to unleash the productive capacities of all our industries, including agriculture, and turn out for the widest distribution imaginable the kind of goods which Americans, and people throughout the world in general, so achingly desire. ¶ The purpose of the New Deal is to revive the feeling of mutual obligation and neighborliness which marked our early pioneer settlements, and to make that spirit effective throughout the modern interdependent community, the Nation as a whole. I wonder if one reason that the people in those simpler societies were more neighborly and less inclined to prey upon one another, was not simply that their fear was of nature rather than of their fellow man. They knew for certain that they did not have to gouge other men in order to live and provide for their own. They were free men, secure. They were not driven by that fear of nameless forces which haunts both farm and city faces throughout this world now. They were not forced to strike out blindly against these remote, anonymous forces; and to be uncompromising, hard and mean in self-defense. I feel that in all civilized countries we are all heartily sick of such meanness. ¶ That an enforced meanness has throughout modern society become a real menace, no one can deny. The breadlines testify to this reality; a million forced sales of farms in this country tell another part of the wretched story; and then you have only begun to take count of all the millions the world over who live in constant and degrading fear that the same thing may happen to them tomorrow. ¶ There can be no final answer to our present difficulties; there can hardly be even a satisfactory tentative answer until we decide which way we want to go. That question should be debated throughout America, and on the highest possible plane. It should be debated in Congress, in public forums, in city and in country schoolhouse meetings in every State. This time, our course must not be decided behind closed doors, either in Washington or on Wall Street. The people must be let in on the problem. This time, let us open the doors and debate our future course throughout the length and breadth of the land.

H A Wallace

Secretary of Agriculture.

A. A. A. PROGRESS REPORTED

A complete and detailed description of what has been done during the last nine months in extending relief to farmers is contained in a 393-page report just published by the Department. This report is entitled

AGRICULTURAL ADJUSTMENT

A Report of Administration of the
Agricultural Adjustment Act
May 1933 to February 1934

A glance at the chapter headings will give some idea of the completeness of this report. Although not all extension workers will be interested in the entire report, a thorough reading of certain sections will be of benefit to everyone. The expense of printing the report has made it necessary to limit the edition. However, the free distribution of the complete report will include all extension workers and teachers of vocational agriculture. Copies may also be purchased from the Superintendent of Documents, Washington, D.C., for 25 cents each.

CHAPTER HEADINGS

EXTENSION SERVICE
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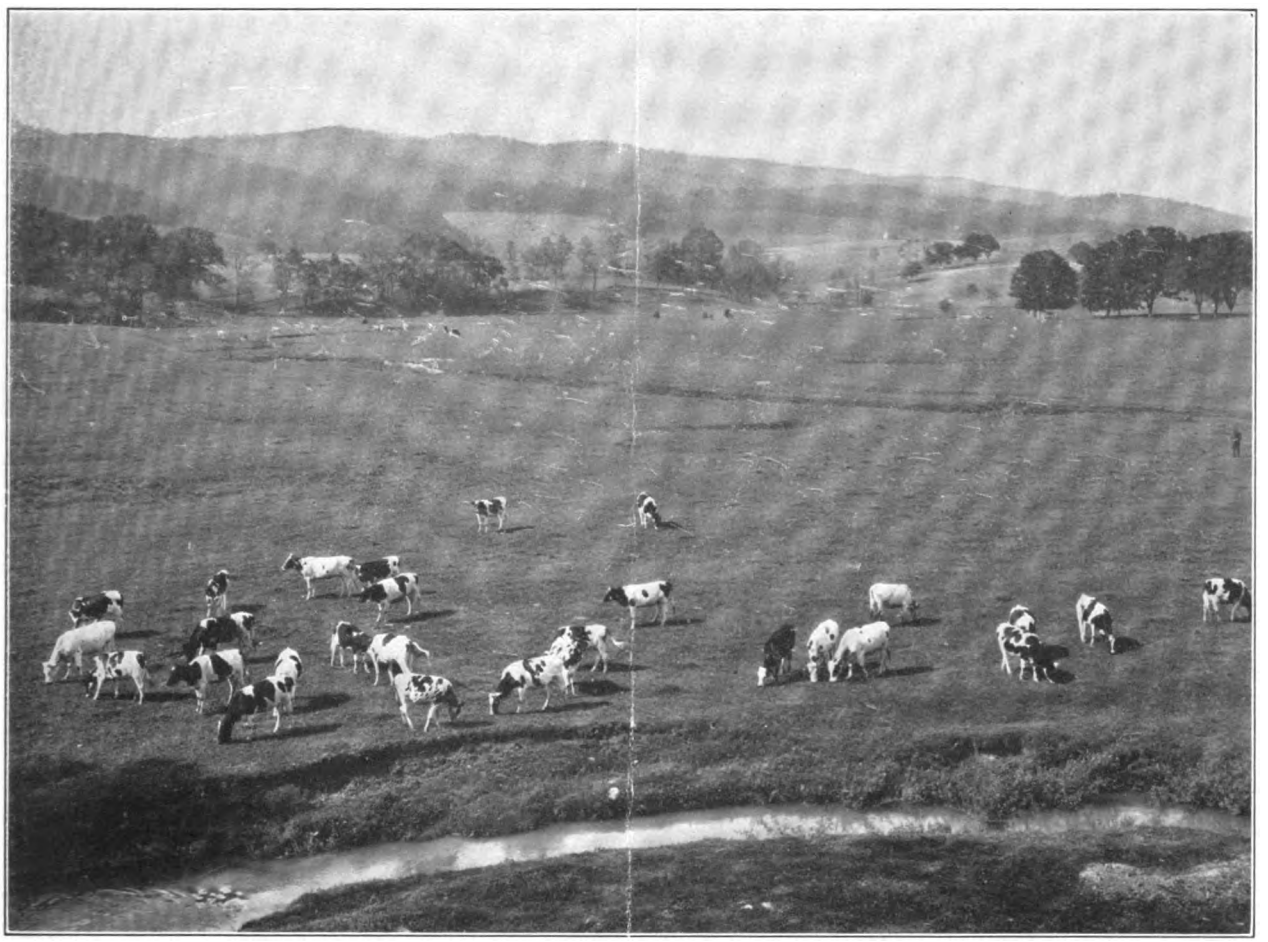

"WIDER USE OF PASTURES AND MEADOWS IN OUR FARMING SYSTEM WILL REDUCE THE PRODUCTION OF CASH CROPS SLOW UP PRODUCTION OF ANIMAL PRODUCTS PER ANIMAL UNIT, CONSERVE THE FERTILITY OF THE SOIL AND FOR AGRICULTURE AS A WHOLE, WILL PRODUCE INCREASED NET RETURNS"

ISSUED MONTHLY BY THE EXTENSION SERVICE
UNITED STATES DEPARTMENT OF AGRICULTURE
WASHINGTON, D.C.

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In This Issue

THE problem of long-time agricultural adjustment is being studied by leaders in agriculture, and by farmers who realize that they must farm together and not against one another. In his comprehensive statement on this subject, H. R. Tolley, Assistant Administrator of the Agricultural Adjustment Administration, says, "First consideration will have to be given to determining the volume of production necessary to maintain our own population on an adequate level of comsumption for food and clothing. Added to this must be the probable volume of farm products that can be sold abroad at remunerative prices. Imports of farm products must also be considered. Account will have to be taken of trends in consumption now under way, of possible future changes in dietary habits, and of the effects of varying levels of business activity and consumer purchasing power."

IS A SHIFT to more pasture and forage crops desirable and practical? J. T. Jardine, Chief, Office of Experiment Stations, discusses the recommendations of the interbureau committee appointed by Secretary Wallace to work on a back-to-grass-and-forage program. The State experiment stations and State extension services can give valuable assistance to farmers who see the general logic in farming less intensively but who may not be able to see the possibility of altering their own farm enterprises.

INTENSIVE soil-saving programs carried on by county extension agents and terracing specialists in Arkansas and Missouri have resulted in protecting thousands of acres of fertile rolling and hill lands from erosion. These men instructed groups of farmers at terracing schools and demonstrations so that they could terrace their own farms and show other farmers how the work should be done.

Contents

MORE than 21,000,000 acres of land formerly cultivated have been practically destroyed for farming by the ravages of erosion. Much of this damage to the soil can be prevented. Two of the new Federal agencies—the Civilian Conservation Corps, under the direction of the Forest Service, and the Soil Erosion Control Service of the Department of the Interior—are engaged in activities designed to help farmers to protect their land from erosion. The article outlines progress they are making in their efforts.

On The Calendar

Washington State 4-H Club Camp, Pullman, Wash., June 11–16.

National 4-H Club Camp, Washington, D.C., June 14–20.

American Association for the Advancement of Science, Berkeley, Calif., June 18–23.

4-H Short Course, Storrs, Conn., July 22–29.

Farm and Home Week, Amherst, Mass., July 24–27.

Farmers' Week, Storrs, Conn., July 30 to August 3.

Tri-State Fair, Amarillo, Tex., September 15–21.

Eastern States Exposition, Springfield, Mass., September 16–22.

FARM records have been responsible for changes made in farming in Knox County, Ohio, where County Agent S. L. Anderson's record in this project is outstanding. When analyses of farm accounts showed members of the Knox County Farm Improvement Club that if they wanted to increase their farm income they must find new sources of income they got busy and changed their farm plans.

WHAT do farmers think of the Agricultural Adjustment program? Director H. J. C. Umberger of Kansas gives us a concise statement based on reports gathered from Kansas farmers, who have been actively engaged in carrying out the program in cooperation with the Kansas Extension Service, and the opinions gathered from newspaper editors of his State.

MUCH credit is due extension workers in Whitman County, Wash., for getting a 97 percent sign-up in the wheat-adjustment campaign in the largest wheat-producing county in the United States. The total benefits for the county in 1933 will amount to approximately $1,600,000 minus local administrative costs of considerably less than one half cent per bushel.

THE EXTENSION SERVICE REVIEW is issued monthly by the EXTENSION SERVICE of the United States Department of Agriculture, Washington, D.C. The matter contained in the REVIEW is published by direction of the Secretary of Agriculture as administrative information required for the proper transaction of the public business. The REVIEW seeks to supply to workers and cooperators of the Department of Agriculture engaged in extension activities, information of especial help to them in the performance of their duties, and is issued to them free by law. Others may obtain copies of the REVIEW from the Superintendent of Documents, Government Printing Office, Washington, D.C., 5 cents a copy, or by subscription at the rate of 50 cents a year, domestic, and 75 cents, foreign. Postage stamps will not be accepted in payment.

C. W. WARBURTON, *Director* C. B. SMITH, *Assistant Director* REUBEN BRIGHAM, *Editor*

Extension Service Review

VOL. 5 WASHINGTON, D.C., APRIL 1934 NO. 4

Back to Grass and Forage

J. T. JARDINE [1]
Chief, Office of Experiment Stations

AN INTERBUREAU committee appointed by Secretary Wallace to work with the Extension Service and the Office of Information on a back-to-grass-and-forage program is urging farmers to give serious consideration to possibilities of shifting to less intensive methods of using the land. Such a change in the Nation's production schedule involves an increase in pasture and roughage acreage at the expense of cultivated crops.

This recommendation is in harmony with the emergency programs of the Agricultural Adjustment Administration to get supplies in balance with demand.

The United States has lost much of its foreign market for agricultural products. A declining rate of increase in the home population indicates that growth of the domestic market cannot be depended on to take up the slack. Every probability is that the domestic and foreign markets combined will not absorb the production of our agricultural plant, if present methods of production continue. Until we can again sell the total output of our acres, there is no reason for farmers to produce to the limit of the land's capacity.

Farmers can reduce their total output by means they are now using—by taking out of surplus crops small plots on several million farms. As time goes on, public agencies can contribute to the same end by facilitating the return to forest, recreation, and wild-life uses of much land that ought not to be farmed.

Another and relatively permanent way to promote an adjustment of supply to demand is for farmers to change to less intensive methods of farming. Not many years ago we plowed up about 40,000,000 acres of grassland to meet an extraordinary demand. We have kept on producing at high speed. It is time we put considerable acreage back to grass and legumes, and, fortunately, farmers in many regions are already moving in that direction.

Wider use of pasture and meadows in our farming system will reduce the production of cash crops, slow up production

J. T. Jardine.

of animal products per animal unit, conserve the fertility of the soil, and, for agriculture as a whole, will produce increased net returns.

Pastures and Roughages

The shift should not, as so many suppose, increase the surplus of livestock products and the surplus of grain usually fed to livestock. At present about 70 percent of our grain acreage produces feed for animals. On the average, such acreage produces more animal subsistence than does an average acre of pasture and about the same as an average acre of roughage. Shifting from grain crops to pasture and roughages, therefore, not only tends to reduce animal feed, but when more pastures and roughages are planted at the expense of grain crops, the surpluses of the latter are also partially removed.

The dairy farmer's gross income may be less if he has his cows on roughage and pasture, but his costs of production should be less also. The same is true of the meat producer. It is net income rather than gross income that counts. Farmers often strive to get the last bushel of grain from the soil, the last pound of milk from the cow, or the last pound of meat from the steer. They should not forget that there is a point of diminishing returns.

It is significant that during a period of relatively high prices, farmers in typically hilly land in the Middle West with one half their land in pasture made more money than those with only one fourth of their land in pasture. Experiments by the Bureau of Dairy Industry indicate that dairy farmers in many regions by feeding less grain and more roughage, may produce less milk and at the same time obtain a greater profit.

Soil Erosion

It is sometimes difficult for the individual farmer to protect his land from soil erosion and the loss of fertility. But if these forces can be checked without sacrificing net income, the effort is doubly worth while. Everyone knows that pasture conserves soil fertility. As a preventive of soil erosion, grass cover is second only to forest cover. Cotton and corn land of gentle slope loses as much as 14 to 17 tons of soil per acre annually. The same land in Bermuda grass, blue grass, or Lespedeza loses only from 0.04 to 0.9 tons of soil per acre annually. When it is necessary to reduce production, it should be done by means that do not squander productivity.

On the individual farm many questions affect the practicability of shifting substantially from cultivated crops to pasture and roughage. Each farmer must examine the problem for himself. State experiment stations and the State extension services are in a position to give invaluable assistance to farmers who see the general logic in farming less intensively but who may not be able to see the

(Continued on page 50)

[1] Mr. Jardine is chairman of the interbureau committee appointed by Secretary Wallace. The other members are Dr. C. L. Holmes, Bureau of Agricultural Economics; R. R. Graves, Bureau of Dairy Industry; Dr. A. J. Pieters, Bureau of Plant Industry; Dr. C. B. Smith, Extension Service; and E. W. Sheets, Bureau of Animal Industry.

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Subsistence Homesteads and Land Utilization

ONE OF THE most ambitious land-utilization projects which has been undertaken by the Subsistence Homesteads Division of the Department of the Interior, is located in Jasper and Putnam Counties, Ga. It is being established for the purpose of demonstrating how farm families living on submarginal land may be aided. Five hundred families in the Cotton Belt will eventually take part in the movement, leaving their present eroded and worn-out cotton farms to locate on subsistence homesteads on good farming lands.

In this project, which is being worked out in cooperation with the University System of the State of Georgia, the homesteaders will not continue to raise cotton. This will further reduce the cotton acreage in the State in line with the present adjustment activity. The farmers who are moved to the homesteads will practice diversified farming on small acreages, and supply first of all food for home consumption. Perhaps some noncompeting crops will be developed as an aid for these families. However, a major part of their cash income is expected to come from some source outside of agricultural activities. It is hoped that small industries will be encouraged to locate nearby, thus partly solving the problem of cash income.

Similar projects are under consideration in Walker County, Ala., and in the northern part of Wisconsin. In the Wisconsin activity farmers are to be given an opportunity to move to better land in the same county. The land taken out of cultivation in this region will be used for forestry and it is expected that this activity will furnish part-time employment for many of the homesteaders.

The Subsistence Homestead Division does not contemplate any increase in the number of farmers. It aims to demonstrate the practicability of a new way of life that implies a combination of industry and agriculture on a part-time basis. The program of activity for the division includes, to date, 25 projects in 14 States.

The Subsistence Homesteads Division advances loans for the purchase of land, for the building of substantial homes, and for the establishing of families on the 3- to 8-acre subsistence homesteads; this money to be returned to the division over a long period of time to enable the development of further projects. The homesteader agrees to repay the loan in 20 to 25 years through a Government-owned corporation formed at the time the project is established.

Back to Grass and Forage

(*Continued from page 49*)

possibility of altering their own farm enterprises. For this reason, most of the Department's educational material on the present program will be cleared through the State directors and editors of extension, with the thought that it will be modified by the State experiment station and extension service specialists, to fit in with local conditions and State extension programs.

One of the knottiest problems that the individual faces is that of labor, for much of the saving accomplished by changing to less intensive farming is the labor cost.

Secretary Wallace points out: "The unemployment situation has caused the children of most farmers to remain on the farm in recent years. * * * The supply of labor available within the farm family is steadily growing. This labor must have employment, and to give it the operator of the farm needs either to enlarge his holding or to cultivate more intensively what he now has. This situation will retard the return of crop land on many farms to pasture and forage production."

And then he adds this significant statement: "But if the Nation decides that returning land to pasture must be emphasized as a national policy, and it turns out to be against the immediate interests of the individual, it is up to the Nation to make it possible for the individual to take the step. That is the solution of the difficulty of the surplus adopted in the Adjustment Act with its system of benefit payments to bring prices closer to parity, and finance farmers through the period of balancing up our national agricultural plant.

"Indeed that system and those payments now make it possible for thousands of farmers to make the switch to pasture and roughage in larger proportions in their farming practice. If that switch seems generally desirable and if conditions of land tenure, taxation, and other legal or social situations seem to block it, the Nation must deal with them."

Changing Farming Practices

Obviously, farmers who have "contracted acres" have the greatest immediate opportunity to change their farming practices to a more permanently satisfactory basis. Joseph F. Cox, Chief of the Replacement Crops Section of the Agricultural Adjustment Administration, refers to the 43 million acres temporarily withdrawn from surplus production as "adjustment acreage." This acreage, he states, larger in total extent than the State of Illinois, and constituting about one sixth of the cultivated land of America, is the battleground on which the first attack in the campaign toward an adjusted agriculture, balanced to meet our market demands, must be fought.

"The only logical adjustment in our production", says Mr. Cox, "is to use these acres as a means of taking the first step toward an agricultural set-up that includes a much greater percentage of pasture and forage and a much smaller percentage of grain crops. A shift to grass is apparently a practical method by which our highly geared production machinery can be slowed down without a serious wrenching throughout the whole structure."

I should like also to cite this cogent statement by Chester C. Davis: "This in fact is the only practicable thing to do with these acres. We cannot get rid of them, and it would not be fair to their owners, nor good national policy, to allow their soil fertility—in fact the very soil itself—to be drained away by letting them lie idle * * *. When our program of adjustment is complete, we shall find that we have shifted from a more intensive to a less intensive type of farming. Farmers will work fewer hours, and yet produce all the market will take of their products."

Since this interbureau committee was formed early in March it has been recommending immediate action. Seed is available to plant some 3,000,000 acres above normal to pasture. There is also enough seed in addition to plant about 1½ million acres above normal to alfalfa and sweetclover. If first seedings were rather thin, it might be possible to get as much as 6,000,000 acres above normal into pasture and roughage. This is only a beginning. Farmers should be encouraged to save seed this season for establishing pastures next spring.

Different regions, of course, require different grasses, different methods of use, and different fertilizer treatment, and so on. There are regional management problems. All these problems are clearly up to the States, with the United States Department of Agriculture furnishing what assistance it can. The Department has prepared a pasture handbook and has numerous publications on grasses and forage which may be had upon request.

The Problem of Long-Time Agricultural Adjustment

H. R. TOLLEY

Assistant Administrator, Agricultural Adjustment Administration

THIS is the first of two articles reviewing the relation of agricultural production adjustment to the general agricultural picture.

I DO NOT have to recount to extension workers and those cooperating with them step by step our drive for agricultural adjustment to date. I take it that you are familiar with what has been done. I do want, however, to try at the outset with broad strokes, to draw the whole picture together. The main fact is that we had to get some 40,000,000 acres of land retired from production, and that we are now in the midst of forced emergency maneuvers to that end.

During the World War some 50,000,000 acres in Europe, not counting Russia, went out of cultivation. The United States brought about 40,000,000 more acres into cultivation and geared up its whole farm plant into a higher production. After the war we kept it up. We kept on farming as if there were still great hungry foreign markets crying for our crops. In reality, such markets were rapidly dwindling. The world owed us money; we would not accept goods in return. With our tariff wall as it was, and still is, the only way we could keep up the appearance of a great foreign custom was to lend those other nations more and more money with which to keep on taking our food and fabrics. This is what we did until about 1928. Finally we got sense enough to quit it. The false front of our foreign markets at once collapsed. We had at last to face the fact that we were farming, at least, 40,000,000 acres too much land.

Production Control

Beginning in May of 1933, with the passage of the Agricultural Adjustment Act, we have attacked our problem barehanded employing a number of new methods, the most important of which is the allotment plan. The allotment idea, very broadly stated, is to get that 40,000,000 or more acres of our national area out of production, inducing each individual farmer to reduce his plantings a certain percentage. The chief means we have thus far employed to obtain such cooperation, is to pay farmers enough Government money to make it worth their while to come in. We are raising this money by processing taxes.

The voluntary allotment method has proved of enormous value. It is enabling us to set up rapidly and democratically the social machinery absolutely necessary to an orderly farm production in this country. At the same time, I think we ought to recognize that our *voluntary* or *induced* production-control campaigns as now practiced, have probably got to grow into something rather different if they are to last. They are an admirable emergency device. They are doing the business, establishing the essential groundwork for an orderly American agriculture, organized from the ground up to fight its own price battles for itself.

What we are getting for the money we are disbursing in adjustment payments now, is a basic adjustment plainly necessary to our national recovery. Those 40,000,000 surplus acres have been jamming with their products the channels of trade. Our farm surplus output played a part in bringing on the general business paralysis which closed every bank in the land last March. We could not go on forever without planning.

Acreage Reduction

Operating largely under the allotment method, we expect by the end of 1934 to have pared *20,000,000 acres*, piece by piece, out of our national corn acreage; 15,000,000 acres out of cotton; 7,500,000 acres out of wheat; and 500,000 acres out of tobacco. Add it up, and it comes to 43,000,000 acres of the United States to be taken out of commercial, competitive production, under the voluntary allotment method, farm by farm, pro rata, by the end of this year.

That is a tremendous amount of land to take out of use. Forty-three million acres is considerably more than the area of Illinois. It is almost one eighth of all the cultivated land in the United States. Now, suppose we have by the end of this year reached our goal, suppose we have 43,000,000 acres taken out of the crops I have named, taken out in fields, strips, and patches all over the country. Displacement is on the basis of wherever those crops happened to be growing when we launched allotment campaigns. If all these campaigns succeed, we shall experience a measurable relief from the pressure and danger of agricultural surpluses. But, we shall still be a long way from making the wisest use of our land.

H. R. Tolley.

Our efforts toward land retirement thus far have been, necessarily, an emergency drive to get out a certain proportion of certain crops throughout the country, regardless of whether any given part of the country ought to be growing more or less of the crop in question. Allotted withdrawals under the present system, tend to proceed, crop by crop, without due regard for correct farm-management interrelations, on farms, and by regions. We have made a good beginning, but in so doing, we have plainly let ourselves in for a much longer and much harder job. That is the way of progress. Our largely successful scramble to take out land in patches, and to organize farmers for controlled production, is stimulating a great deal of new thinking. It is making our farmers think in terms of farming *together*, not *against one another*. It is creating a multitude of new situations which force us all, as never before, to think hard and fast. We can't sit around now as we used to and contemplate the dream of a land in order, wisely used. Every day we are doing something which makes it more imperative that we think ahead of the present stage of agricultural reorganization and set up a permanent land program for the long pull.

We are formulating such a program. From reports in the press and elsewhere, you have probably heard something about it. The reports to date have, generally speaking, been so various as to leave one rather confused. One line of comment, especially chosen by a few old-time correspondents, who want to see the new deal fail, holds that our whole voluntary allotment program has broken down. Consequently, we are said to be dashing into complete compulsion as to farm allotments; and at the same time striding away from the allotment princi-

ple altogether, in the direction of large, outright Government purchases and withdrawals of marginal land.

This is a totally incorrect version. We are, at the insistence of a very large farm sentiment, looking for some way to hold in line the noncooperator; but we are *not* doing this as *dreamers*, with our eyes to the stars; we are trying to be *realists* with our ears to the ground.

Again, we are pushing as fast as we can toward a more selective retirement of bad land; but we certainly do not see this thing of taking out mean, punishing land in large chunks as a complete substitute for the allotment method. Large-scale land purchase and retirement will be a supplement to, not a substitute for, a planned agricultural production.

Flexible Plan

We need to develop and have as our goal a comprehensive plan for agriculture as a whole. Such a plan can not be rigid and fixed but must be flexible enough to meet changes in international and industrial conditions as they arise. It must also provide for as much flexibility and freedom of action, on the part of individual farmers as is consistent with a proper balance between farm production and the demand therefor.

First consideration will have to be given to determining the volume of production necessary to maintain our own population on an adequate level of consumption for food and clothing. Added to this must be the probable volume of farm products that can be sold abroad at remunerative prices. Imports of farm products must also be considered. Account will have to be taken of trends in consumption now under way, of possible future changes in dietary habits, and of the effects of varying levels of business activity and consumer purchasing power.

Appraisal of Resources

Next comes an appraisal of our resources, the distribution of our present agricultural production, and the adaptation of the different regions to the production of the various crops and classes of livestock. This appraisal would determine what lands now used for farming had best be used for something else, and what farm lands had best be devoted to less intensive production than at present. The objective will be to develop a regionalized plan, which will result in the desired volume of production and which at the same time will be flexible enough to permit each individual farmer to follow the system best adapted to his conditions.

Many people have felt that it is the so-called submarginal land which is largely responsible for our surplus problem, and that if it only were taken out or retired from cultivation that the situation would be corrected.

In an attempt to determine how important the production in such areas really is, Dr. F. F. Elliott, of the Planning Division of the Agricultural Adjustment Administration, has made a rough selection of some 25 areas, generally conceded to be the least productive type-of-farming areas in the United States. If all the farm land in these areas were immediately retired completely from production, a change which of course is neither desirable nor feasible, there would be taken out approximately 125,000,000 to 140,000,000 acres, or about 14 percent of our total farm land; which includes about 38,000,000 acres of crop land harvested or roughly 10 percent of that total.

This would reduce corn production about 7 percent, wheat production 11 percent, cotton production 11 percent, and hog production 5 percent.

Retiring Poor Land

Since in each of these poor regions there are to be found smaller or larger areas of good land, it is probable that the effect of retiring the poorer portions of the areas would not exceed 50 percent of the above figures, and might be even less.

While such a reduction would be of some help in relieving the present excess production, it obviously would not go far in correcting the agricultural surplus problem.

The main reasons for buying such marginal land out of production and keeping it out, are social. Such land does add something to the surpluses; but our main concern with it in an interwoven program of land utilization, is to stop bad land from wasting human lives. A great many farms now being operated condemn the people there, and their children, to worse than peasant standards of living. It would be sensible, as well as decent, to give such people a chance to sell and move to where they will have a better chance. Not only that; you want such land out of the new economic picture. A closely allotted production on our better lands would, I think, be much easier to operate, and far more effective, if we did not, as now, have to carry along in the general movement, tragically-handicapped backward, farming people, on marginal and submarginal soil.

Production adjustment is not the only problem which is making us lose sleep in the Agricultural Adjustment Administration. We are trying, also, to hack a new way through the modern jungle of distribution. To this end, the Farm Act places in our hands new weapons; marketing agreements, with licensing provisions, a governmental club behind the door, to beat into line the chiseling 10 percent or so who are likely to defeat any agreement among competitors to fit their operations together and wipe out waste. We have made fair, and in some instances notable, progress toward effective agreements as to the marketing of compact, highly specialized agricultural products. The canning peach agreement and the citrus fruit agreements are cases in point. Milk is something else. The industry is widely diffused, and in some areas at war within itself. At the present level of buying power, the dairy business has been bursting with contending surpluses. Our utmost efforts in writing milk marketing agreements have convinced us that without an ordered production, there can be no orderly marketing. We have learned that unless great care is taken in preparing an agreement it is likely to blow up in your lap.

Once we have managed to reduce our burdensome stocks of the crops that we used to export in quantity, our problem of maintaining an internal balance of spending power between agriculture and industry, our major producing groups, will perhaps become more clear-cut and plain, though not, perhaps, less difficult. For a long-time program of agricultural adjustment, our aim should be the highest possible standard of living for all our people, and for the greatest possible contribution not only of our farms but of all our other land to the national welfare.

FARMERS in Florida who received money in payment for crop reduction in 1933 cannot be classed as hoarders. They took their checks to town and purchased needed supplies for the farm and the farm family. They have paid back taxes, reduced their debts, and purchased clothing, foodstuffs, furniture, tires, fertilizers, implements and seeds. Many buildings and much farm machinery have received long-needed repairs. Merchants in the 14 counties where a survey disclosed the above facts said that farm business has been much better this winter than last.

MORE than 245 private landowners purchased 755,675 spruce and pine trees for forest plantings in New Jersey during the past year. Fifty-four percent of the trees were pine which indicates that the trees are being used for straight reforestation work. A large number of the plantings were made in the agricultural regions of the State.

The County Adjustment Campaigns

County Agents Tell How Wheat, Cotton, and Tobacco Contracts Were Signed in Their Counties

Signing Up The Largest Wheat County

One of the outstanding achievements of the wheat adjustment campaign was the 97 percent sign-up in Whitman County, Wash., the largest wheat-producing county in the United States. The county has an area of 1,275,212 acres (exclusive of towns and cities), of which 965,331 acres are listed as tillable. The 4-year average acreage in wheat was 458,729 acres, producing an average of 11,295,238 bushels of wheat, with an average yield of 24.6 bushels per acre.

Whitman County had only a 4-H club Agent, A. F. Harms, when the wheat program was announced. However, he did excellent work in getting the educational campaign under way. It was not until August 10, 1933, that Carl G. Izett, a highly capable county agent, could be transferred from Clark County to Whitman County. The county was divided into 16 communities and the educational meetings completed. On September 1, R. P. Benson, was assigned to the county as emergency agent to help with the big job.

Wheat benefit payments being issued in Whitman County, Wash. During the morning 1,236 checks totaling $304,000 were handed to wheat-producers in the county.

The organization meetings were begun September 11 and completed September 30 when the county control association was organized and a budget of $24,032 adopted. The sign-up was efficiently carried out by moving the entire staff into each of the community divisions, devoting the morning to the sign-up and the afternoon to the meeting and election of the community committeemen.

The checking of applications began October 1. The office staff had to be increased to 6 checkers, 1 statistician, 1 chief clerk, 3 stenographers, 1 draftsman, 1 file clerk, 2 copyists, and 2 typists. In addition to the county agent and the emergency agent, the 4-H club agent and the three members of the allotment committee were busily occupied with the task. The staff occupied 4 large rooms on the main floor and 2 in the basement of the county courthouse.

The first check-up showed an excess of 437 acres and 809,932 bushels over the official estimate. The second check cut out 164,154 bushels, leaving the figure still too high. Although the State Board of Review accepted the acreage, a 5½ percent cut for all applications was necessary to reconcile figures with the official estimate.

Adjusting the 4-year average to the United States 5-year average showed a total of 10,900,266 bushels. The total adjusted bushels under contract was 10,551,259, or 96.7 percent of the total average bushels. Only 380,000 bushels were reported as noncooperating. Based on the average wheat acres, 440,026 acres were placed under contract and 16,392 reported as noncooperating.

The first shipment of contracts was made December 28 when 2,783 contracts weighing 147 pounds were expressed collect to Washington, D.C. They were followed with 59 on January 10 and 22 more sent later. Only 22 applicants refused to sign contracts while 13 are still being held as doubtful.

The first consignment of 4,224 checks, totaling $1,037,054 in benefit payments, was received January 30. When the second installment of the 1933 payment is made, the total benefits for the county will amount to approximately $1,600,000 minus local administrative costs of considerably less than one half cent per bushel.

County Agent Izett and Emergency Agent Benson, together with a loyal and hard-working staff, did an outstanding piece of work, considering the tremendous number of applications and contracts they were forced to check and the number of wheat growers they had to contact. How well the farmers were convinced of the desirability of the agricultural adjustment program is reflected in the high sign-up and the enthusiastic way they are cooperating in the corn-hog reduction plan.

—W. D. Staats, Extension Editor,
Washington.

Well-Laid Plans Work

The wheat adjustment campaign in Frederick County, Md., resulted in obtaining 1,422 applications, representing approximately 82 percent of the wheat acreage. There were 22 applicants who refused to sign contracts—1,408 contracts having been sent to Washington on November 22. Wheat allotment checks totaling nearly $100,000 were distributed the week before Christmas.

The success of the campaign can be attributed mainly to thorough preliminary work which gained the support of business men, bankers, and civic and farm organizations. The county newspapers were very helpful and cooperative in using material regarding the campaign. A series of articles was used before any material was sent out to farmers. Leading business and professional men were acquainted with the program. A temporary committee of farm leaders was selected and thoroughly acquainted with the provisions of the adjustment plan.

The list of eligible wheat growers was compiled and a letter sent to each con-

County Agent Shoemaker of Frederick County, Md.. like many agents, found it necessary to increase his clerical staff to handle the large volume of work resulting from production adjustment activities.

taining pertinent facts regarding the plan. Twelve educational meetings were well attended. At these meetings the need and method of adjustment of wheat production were explained, applications were distributed, and instructions given in filling out the various documents. No "high-power" salesmanship was attempted. An effort was made to present the plan clearly and convincingly. There were no arguments. Each man was left to make his own decision. The idea was presented that "here is a plan which affords the opportunity for farmers to help themselves." A second series of meetings was held at which community committees were elected. Much of the success of the campaign is due to the splendid type of men elected to these committees. After the final sign-up meetings every eligible producer was contacted by a member of his local committee and given a final opportunity to join with his neighbors in controlling production.

That the program was carefully and forcefully presented to farmers is borne out by the fact that only 14 out of 1,422 applicants refused to sign contracts.

The essential features of the success of the campaign were: A fine spirit of cooperation on the part of producers; thorough preliminary educational work among business men and organization leaders; active cooperation of farm organizations; the release of news through the press, and an efficient and competent office force.

—Henry R. Shoemaker, County Agent,
Frederick County, Md.

Farmers Were Willing

In the beginning I have this confession to make, "I have never entered into any of my duties, as an extension worker, with so much enthusiasm as I did the cotton-reduction campaign."

This was prompted by a feeling that a definite change was taking place, designed to divert our haphazard "hit or miss" system of agriculture to one of controlled production and controlled prices. I think my attitude was no exception to the rule, for on every hand I found people—farmers, business, and professional men—all eager to help with the program. That is what made it easy, yet it was nerve wracking.

Farm people, even though they may be individualistic, are no different from other groups. When they are convinced of the best course they follow it. To convince was our part. It must be done by enrolling all the available assistance. It had to be done at once.

Payne County has 18 townships. Two leading farmers from each township were informed that they were on a temporary cotton-reduction committee and were asked to meet at the county agent's office. Thirty-four of the thirty-six invited were present. It later developed that the two who were absent failed to get the notice. The plan was briefly laid before the committee, together with instructions in filling out contracts. One additional member was later added to the committee in some of the heavier cotton townships. A county committee consisting of two farmers living near the county seat was selected to serve with the county agent to pass finally upon the application for contracts. A representative of each bank of the county met at the call of the county agent, pledged the assistance of the bank, and was made familiar with the plan.

Eighteen meetings were arranged, one in each township. The local committees assisted in giving publicity, and all the newspapers of the county cooperated in a fine way. The object of the meeting was to explain the plan and to take offers. The meetings were so scheduled that the county agent could make one each hour, beginning with the first meeting at 9 a.m., ending with the seventh meeting of the day at 4 p.m.

The same schedule of 7 meetings was followed the second day, and the third day, until the remaining 4 meetings were finished. Thus 2,000 cotton farmers and others interested were contacted in slightly more than 2½ days. From this group, 1,327 contracts were finally approved with a total acreage offered to be taken out of production of 12,309. The total acres planted was 36,810. The total cash payment indicated without option amounted to $121,974. There were some 800 bales of cotton optioned with a total cash payment of $18,794. Most of the offers were signed up at the meetings. One may question the efficiency of such a hurried campaign, but perhaps not in this case when he knows that committees from the various chambers of commerce of the county, previously instructed in filling out the contract form, met the county agent at every meeting and took over the detail work—the committee remaining to finish the job after the agent's departure.

The question may be asked, "How did you get the farmers there on time with such an exact schedule?" We did this by publishing our itinerary, and stating that we would begin on the "dot" and end the same way. They were there almost 100 percent at the beginning of each meeting, perhaps to see if we could really make the schedule. We did, excepting that we were 2 minutes late at one meeting due to mistaking a road.

The honesty and success of the whole program rested upon the local committees and in most instances they were loyal to their trust, to the point of turning down the offer of a brother if they considered it too high.

Yes, the job was done in a great way throughout the Cotton Belt, and why? Simply because the people wanted to do it. They were ready for something to

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Teachers of Vocational Agriculture Aid the Adjustment Program

C. H. LANE

Chief, Agricultural Education Service, Office of Education, Department of the Interior

ONE OF THE major objectives in the program of the teachers of vocational agriculture throughout the cotton and wheat areas of the United States this year has been cooperation with the established agencies for carrying out the provisions of the Agricultural Adjustment Act. This cooperation is being given chiefly in three principal ways. First, a study of problems met by farmers in complying with the crop-control plan of the Agricultural Adjustment Administration is included in the course of instruction given in all-day and part-time schools and in evening classes for adult farmers. Second, agricultural instructors are assisting farmers in their respective communities in solving individual farming problems which arise as a result of the Agricultural Adjustment program, by conferring with them on their own farms while traveling about supervising the project work of vocational pupils. Third, State supervisors of agricultural education and trainers of agricultural teachers in the land-grant colleges cooperate with other State agencies in disseminating information and literature relative to the Agricultural Adjustment program and assist in formulating plans for making the program effective.

In a statement made several months ago, Secretary of Agriculture Wallace declared that the success of the crop-control plan depends on the country people; they must do the job themselves. No one else can do it for them, but they must first be told plainly and honestly what it is all about; and it is in telling farmers "what it is all about" that vocational agriculture teachers have played an effective part.

Shortly after the Agricultural Adjustment Act was passed, the President and the Secretary of Agriculture decided to intrust the educational phase of these production-control campaigns to the Extension Service.

Cooperation of Teachers

Fresh evidence of the sincerity and enthusiasm of teachers in cooperating in the adjustment program is constantly coming to the attention of the agricultural service of the Federal Office of Education. Only recently, for example, the supervisor of agriculture in one of the larger agricultural States wrote: "In some cases, teachers have dismissed classes for as much as a week to help with the corn-hog program. Yesterday I observed a class of 20 junior-senior boys who had completed their work on the corn-hog program. It is amazing how these older boys can grasp the entire situation. The parents of these boys seem to be depending on them to keep them up to the minute on information relative to the corn-hog program. The teacher I visited yesterday has been following the practice of holding one meeting per week since September in order to keep the farmers up to date on the various adjustment programs."

IN SOME STATES and communities, the extension forces have overlooked the assistance that vocational agriculture teachers may render in the crop and livestock production control work. These teachers are anxious to be of service in the various agricultural adjustment campaigns and welcome an opportunity to cooperate with extension forces in the crop-control program. Whenever it is possible therefore, the agricultural extension forces should seek the assistance of vocational agriculture teachers in acquainting farmers with the provisions of the Agricultural Adjustment Act and in helping them to comply with the provisions of the Government's acreage reduction plans. Every effort should be made to strengthen the cooperative relations between the vocational education and the agricultural extension forces in order to assure the success of these plans.

C. W. Warburton

Director of Extension Work.

C. H. Lane.

It seems to me we have every reason to feel encouraged about the way the agricultural teachers have assisted in making effective the first successful campaign ever undertaken to combat the surplus of farm commodities. I have reference, of course, to the cotton campaign. It is a great satisfaction to know that the 2,000 teachers in the cotton-growing areas threw their strength so whole-heartedly into the campaign. I think it is worthy of comment, also, that in no instance did the vocational agriculture teacher presume to assume the responsibility for the success of the acreage-reduction program. On the contrary, he simply offered his services to those who were responsible in giving farmers the information and assistance they needed in connection with the adjustment campaign.

State Supervisors Assist

In order to insure the fullest possible cooperation between teachers of agriculture and county extension agents, the agricultural service of the Federal Office of Education early last fall: Requested State supervisors of agriculture to cooperate with the State directors of extension in formulating a program of relationships between the State and county directors of the Agricultural Adjustment Act; suggested that the State director of extension invite State vocational agriculture officials to State meetings and agricultural teachers to county meetings of farmers called to consider acreage-reduction plans; and requested that State directors of extension send all mimeographed or printed instructions on agricultural adjustment plans to agricultural teachers as well as to county

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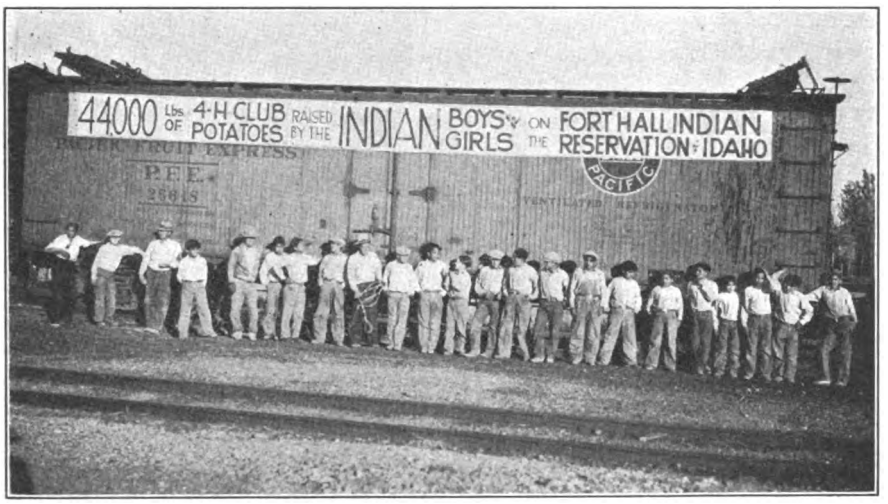
Indian Potato Club Boys Succeed

WHEN 4-H potato club work was presented to the boys and girls of the Fort Hall Indian Reservation it was given a hearty response. A club of 19 members was organized in 1931. Each member was to raise one eighth acre of potatoes from certified seed which the agency would furnish on credit. The club was enrolled as a regular group of the Idaho extension service under the county agent of Bannock County.



Results have been even better than expected. In 1932, the club membership jumped to 32. Whether this popularity came from the hard work of pulling weeds and cultivating the potatoes, from the cash return that came to the members, or from the recreational program of trips, swimming, baseball games, and meetings may never be known. Almost every boy of club age on the reservation joined the club during this year, even though the requirements were made for one fourth acre. Of the 32 members, 31 harvested a crop, exhibited samples at the county fair, and submitted records of their work. Six girls joined the project this year and shared success with the boys.

At maturity all the potatoes were harvested at the same time and brought to the agency where they were graded and packed in clean, new bags for shipment. The seconds were taken for home use during the following winter. When the grading was completed the club had 440 hundred-pound bags (a carload and a half) of fine first-class potatoes. The entire lot was sold and shipped to the Chilocco Indian School and the Sequoyah Orphan Training School in Oklahoma.

In 1933, 35 members enrolled and completed their projects. The potatoes grown were one of the features of the Bannock County Fair. Four ribbons were won, two of them blue, at the annual "Spud Day" show, where there was great competition as the best potato growers in the county and State exhibit there.

The achievements of this Fort Hall Indian Potato Club could not help being impressive to those who have been familiar with the accomplishments of clubs in other communities where the organization is somewhat older. The efforts of the Indian youth to take advantage of an offered opportunity to become a more independent person and to improve the home life by making it more self-sustaining have not been exceeded by any other group. Their club work represents an effort on the part of boys and girls of very limited means; it indicates an eagerness to participate in a worthy enterprise, and a willingness to go farther as the opportunity offers expansion. It is helping them to help themselves.

OKLAHOMA has under consideration a project of erosion control which covers 128,000 acres of the Stillwater creek watershed. Various methods will be used in this control test including terracing, check dams, storage basins, grass, trees, and contour farming. A 5-year agreement with the landowners will facilitate carrying on of the project and assure access to the areas under study, the agreement to go with the farm in case of sale.

WASHINGTON State reports the largest 4-H club enrollment in the history of the State with 10,079 members actively engaged in project work. Club girls canned 29,000 quarts of fruits and vegetables and 9,000 jars of jams and jellies. They prepared 50,000 different dishes in meal-preparation clubs and baked 15,000 loaves of bread. Club boys fattened and slaughtered more than 30,000 pounds of pork for home use, while club home gardens supplied thousands of dollars worth of vegetables. The total returns for 4-H activities in the State are estimated at $64,945.

Teachers of Vocational Agriculture Aid the Adjustment Program

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agricultural agents. And right here let me say, that there has been the finest sort of cooperation on the part of the Agricultural Adjustment Administration at Washington in furnishing State supervisors, agricultural teacher trainers, and teachers with subject matter material for use in all-day and part-time classes for farm boys and night classes for adult farmers.

Early in the Agricultural Adjustment campaign teachers were advised to cooperate with county agricultural agents in holding meetings of farmers to explain plans and contracts covering the control programs for particular commodities; in assisting farmers in filling out contract blanks; in working with county committees in visiting farmers in the community; and in assisting in any other possible way.

In order that farmers may secure maximum benefits from the Agricultural Adjustment Act, efficient use must be made of land retired from ordinary crop production. An unusually large number of agricultural teachers, therefore, have held night classes to explain the regulations governing the use of retired land, what it may and may not be used for, what farmers should grow on it, and the advantages of using land for permissible crops; and to discuss production problems from the standpoint of production costs, quality products, and proper distribution. Practical problems—tariffs, taxation, marketing, transportation, credit, cooperation, and "live-at-home" plans—are discussed with farmers in these evening classes, now being held in more than 2,000 centers in the United States.

Terracing—A Problem of Land Utilization

THE long-time program of land utilization calls for conservation of the soil. This is no new thing to extension agents. Some methods which have proved their worth through the years in convincing farmers of the soil-erosion problem are explained in the following article.

G. E. Tanner — Lloyd Dhonau. — John A. Hemphill.

Arkansas Uses Intensive Campaign

MORE than a half million acres of cultivated land have been terraced in the last decade as the result of soil-saving programs of Arkansas county agents.

Terracing in the extension program until recent years was more generally in the nature of personal service. Many county agents in Arkansas realized that if the fertility of Arkansas' thousands of acres of rolling and hill lands was to be saved, they needed to have an intensive program rather than just personally servicing a number of farmers or even depending on demonstrations for the spread of practices. The value of soil saving with terraces had been established generally, and the point had been reached where a broader program was needed.

The plan adopted in those areas where soil and water conservation was a major problem briefly consisted of training key groups, or local leaders, from each community. In some counties 4-H club boys made up the teams, while in others the farmers themselves were the local leaders.

One of the most intensive community terracing campaigns attempted in the State was in Van Buren County 2 years ago under the leadership and supervision of G. E. Tanner, county agent. In this work, Mr. Tanner had the whole-hearted cooperation and assistance of A. V. Presley, a vocational agriculture teacher. In this concerted drive for soil conservation, 1,600 acres of land was terraced.

In organizing the campaign 4-H club boys and future farmers were called into the drive. These boys, who pledged themselves to do everything possible to make the campaign a success, enlisted the support of their parents. Four meetings were held where men and boys with terracing experience, farm levels, and acres to be terraced were listed and schedules were made out. A foreman was selected for each squad of terracers. No land was laid out without the direction of a man or boy who had at least 2 years' experience. Many a morning during the campaign found squads at sunrise in the fields running terrace lines. The campaign closed with a community supper and program at the community high school. "No evidence of hard times was apparent—the table actually groaned under the weight of good things to eat", writes Mr. Tanner.

Van Buren County is almost 100 years old and is situated in the north-central portion of Arkansas in the foothills of the Ozarks. Mr. Tanner has been carrying on an intensive educational program in terracing which has been one of his major projects in the county. His adult and 4-H club terracing teams have won State championships at the State's annual Farmers' Week held in Fayetteville by the College of Agriculture, University of Arkansas. One of his methods is the holding of 2-day terracing schools. The first day is spent in instructing the group in setting up a farm level and running terrace lines. The second day is devoted to building a terrace drag and building at least one terrace. In 1933, 130 men and boys received training in terracing. Mr. Tanner says "A terracing campaign cannot be put on successfully without several years of preparatory work in training groups."

Bradley County, which is a typical upland county in the southeastern part of Arkansas, now has about 75 percent of its cultivated land protected from erosion by terraces. This is the result of the work of three county agents, the work going back about 12 years.

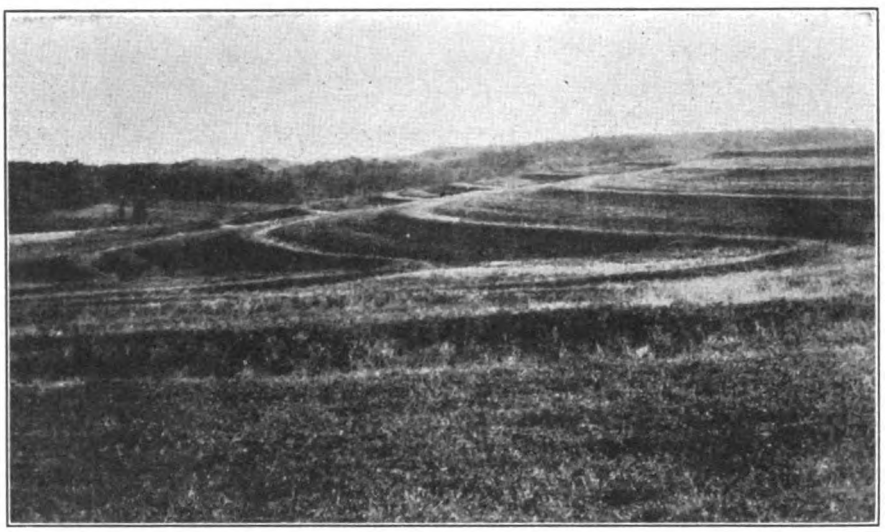
John A. Hemphill, who has been county agent of Bradley County for the last 3 years, reports that terracing has progressed rapidly in his county since 1923. Prior to that, very few farms had been terraced. The farmers of his county, he says, have never been taught that the county agent was supposed to lay off their terraces and build them, but rather they have been taught that the county agent gives instructions. Local leaders who have been trained at demonstrations and schools during the last few years are now training others in terracing. Many farmers call at Mr. Hemphill's office to borrow a level and rod and inquire what farmer in their community can give instructions. Mr. Hemphill says the few remaining farms that have not been protected are being terraced as rapidly as possible during the winter months. There are a number who are now waiting their turns at the instruments for this winter. Mr. Hemphill, before transfer to Bradley County, was county agent of White County where he made soil-erosion control one of his major objectives. In his 3 years of work in White County more than 30,000 acres of cultivated land were terraced as the result of his soil-saving program.

Approximately 3,000 acres of land have been terraced in Columbia County situated in the southwestern part of the State, in the last 2 years. The immediate terracing work was started in September 1931, when Lloyd Dhonau became county agent in Columbia County. At that time Mr. Dhonau held a terracing school where leaders from each township in the county were trained in order that they might carry on the program in their various communities. Fifty men were taught the use of the farm level and rod, the principles of terracing, and how to run terrace lines. To date there are 35 farm levels in the county and 175 farmers who can run terrace lines.

These three counties are examples of the various methods employed by county agents in areas of the State where terracing is a major consideration.

Selecting Missouri Demonstrators

"My 20 years' experience as an extension agent has taught me that the essential requirement of a successful demonstration is a farmer cooperator who will really carry out the idea and instruction given", declares County Agent T. F. Lueker of Cole County, Mo. He found that most central Missouri farmers agreed that soil erosion is a most serious problem but not all were willing to put forth money and effort required to check this erosion with a system of good strong terraces.



Terraces on the Erhart farm.

The agent had observed the farming practices of J. O. Erhart and son for 12 years and was thoroughly familiar with Mr. Erhart's methods before selecting him as a terracing demonstrator. That he was a good choice is shown by the results obtained. A half day was spent by the county agent and the specialist in getting the Erharts going. Only 2 years have passed since they made their start, yet they now have a system of first-class terraces on 66 of their 100 acres of cultivated land. These terraces the State extension specialist, G. E. Martin, pronounced as good as any in Missouri. The results have not been confined to the Erhart farm for last year new terraces were built on more than 100 acres of Cole County farms.

Farmer Erhart tells the following story of his terracing experience:

"We farm hill-land in central Missouri that has an average slope of about 8 percent on union silt soil and which is medium in fertility.

"The crops on our cultivated land were small grain and legumes. We did not raise corn or any row crops, as the soil washed so badly. To keep down erosion and to save our soil as much as possible, we mended gullies and washes as best we could. We finally decided that it was more work to mend all these washes and gullies than it would be to build terraces, as we were not saving the soil and holding it on the field. We then became interested in terracing.

"In the fall of 1931, we attended 'Terracing Day' at the Missouri College of Agriculture. Lectures and demonstrations were given. After this meeting we knew terraces were what we wanted and that it would be better to put work we had been doing on gullies and washes in on terraces and then have something that would be permanent.

"A few days after getting back home we asked T. F. Lueker, our county agent, to have G. E. Martin, terracing specialist, come to our farm and help us start our terracing work.

"After the splendid help we were given we have been able to survey our own lines and construct terraces. All our terraces are in good working order. Our 2-year-old terraces show plainly an increased benefit over our terraces only 1 year old.

"We will complete our terracing as soon as we have time and the land is free from crops. With our land terraced we can raise corn, if we desire, with little loss of soil, by running rows on contour lines practically parallel with terraces.

"Terraces are saving our soil, holding moisture, better than unterraced land and gives us a contour line to follow in farming. They also give us a chance to use better methods of farming."

Explaining Production Credit

County agricultural agents, district supervisors, State directors, and others in the extension family are finding Film Strip No. 1, Applying for Production Credit, helpful in explaining the new production-credit system to farmers.

Dealing with how to apply for production credit and how the local production-credit associations fit into the new farm-credit set-up, the new film strip helps you in telling farmers about different kinds of production loans, the interest rate charged, the purchase of stock in the association, maturities for different loans, and the kind of security required. You can get this strip of 34 frames for 28 cents from Dewey & Dewey, 5716 Thirty-fifth Avenue, Kenosha, Wis. The Farm Credit Administration, Washington, D.C., will gladly send you lecture notes and other supplementary material.

CHINCH BUGS became so numerous in southeastern Kansas in 1932 that wheat, oats, and barley were badly damaged. To remedy the situation, a campaign was inaugurated to protect the 1933 crop. The work was begun late in 1932 with 142 bug-burning demonstrations attended by 526 local leaders from 10 counties. As a result, 2,917 farmers put this control measure into practice. Very few chinch bugs were in evidence in the early spring in wheat, oats, and barley. State and county road officials cooperated in burning roadsides and in some places those working on relief funds assisted.

As an example of the value of the campaign, a cooperator in Harvey County stated that the chinch bugs cost him $500 in 1932; the bugs destroyed $200 worth of corn forcing him to purchase $200 worth of corn for cattle feed, and the land on which the crop was destroyed cost him $100 in rent. This farmer headed a burning party in his community with the result that he has suffered no damage during 1933 from the chinch bugs.

ILLINOIS farmers have organized 800 associations to cooperate with the various Farm Credit Administration loan branches. Farmers in the State expect to make every use of the farm credit organization to further their agricultural activity. Special attention for loans to cooperatives is being given by the organization, says C. H. James, manager of one of the large cooperatives in the State.

Improvement Clubs Change Farm Practices

"IT IS THE most basic thing we do in extension work." That is the answer with which S. L. Anderson met the query, "What do you think of the farm account work you have been doing in Knox County these last 6 years?"

There was an excellent reason for asking this question of County Agent Anderson. In Ohio, a State that for years has advocated farm record keeping, Anderson's record in this project is very outstanding.

He first became interested in urging proper keeping of farm accounts in 1927 when, through the assistance of 6 teachers of vocational agriculture, he induced 33 farmers to enroll themselves in the Knox County Farm Improvement Club. Today 23 of them still keep records. To this list a hundred more names have been added.

To become a member of the club a farmer must meet, or agree to meet, three requirements. He must be a farm operator—owner, tenant, or partner; he must agree to keep a complete system of farm accounts, using the method approved by the Ohio Agricultural Extension Service; and he must agree to make at least one improvement a year on his farm or in his home.

The Knox County, Ohio, Farm Improvement Club holds its spring summary meeting.

Results

Anderson sums up briefly the results of this work:

"Farm account keepers have been the leaders in Knox County in finding new sources of cash income. Formerly, in the years before our club was organized, the average farmer in the county fed beef cattle and hogs, and of course, raised the usual corn, wheat, and clover crops. Now you will find a change has come over Knox County agriculture. Hogs and beef cattle no longer hold the predominant place in the farming system. To the corn, wheat, and clover crops have been added others.

"Now the shift is clearly in the direction of dairying and poultry; and potatoes, truck crops, and small fruits are becoming important sources of farm income. These changes were first made on the farms of account keepers."

Anderson named improvements that have come about largely as the result of the third requirement. Swank Brothers, of Fredericktown, put up a storage house for potatoes, after finding that local buyers almost invariably paid more for potatoes delivered to them in the winter than for potatoes delivered in the fall. Walter Lemley, of Fredericktown, stopped buying his chicks in June. He found, also, from his records, that the poultry business doesn't pay unless the chicks are hatched in March or early April. C. E. McLarium, of Howard, took out old fences and made his fields larger and better fitted for using his modern machinery.

These are just a few of the sort of changes that have come about. Each farmer admits that his eyes were opened to the need for them by the summary of his accounts made each year by Guy W. Miller, extension specialist in farm management at the university.

Miller reserves a week each spring which he devotes to the Knox County Farm Improvement Club. He brings to the county the summaries of the hundred or more accounts sent him by Anderson, compares the methods of the 20 who earned the best labor income with the methods of the 20 who were least successful, and strikes an average. Each farmer then may compare his methods and the results they bring with those of his neighbor. In the summaries, no names are mentioned.

These summaries are studied by the group, and plans are laid for making the individual adjustment thought necessary.

One of the unexpected benefits of the record keeping is the aid rendered by the records in filling out applications and contract forms for wheat, corn, and hogs for the Agricultural Adjustment Administration.

"The time required for gathering the data from a set of farm account books for filling in a corn-hog contract form is not more than 5 minutes", Anderson declares. "Other farmers often spend a week, and a half dozen trips to town before they have at hand the necessary data, and then it isn't always accurate."

Here is the form of organization set down in writing by Anderson in 1927. He still clings to it.

"Local clubs are organized in each community where there is a vocational agriculture department in the high school. Each club operates as an individual unit and formulates its own program, but cooperates with the other clubs in executing the county program set up by the executive committee."

Some of the extra activities of the clubs include basket-ball games between clubs, tours of farms by the local groups, and an annual social meeting, recently a fish fry, which attracts 200 to 300 people each year.

WETZEL COUNTY, W. VA., held the first camp canning school in the State this past fall. In order to facilitate the organization and distribution of the information throughout the county the camp school idea was developed. Seventy-two women attended the 3-day canning demonstration. Methods of drying and canning fruits, vegetables, and meats were demonstrated and practiced. Drying racks were made, and each woman had one to take home from the camp. As all districts in the county were represented the information was widely spread.

Feature Pictures Aid Iowa Campaign

ON A RECENT trip to Iowa, the editor of the Review was much impressed with the feature pictures used in the daily papers giving interesting angles of the local corn-hog campaign. Tracing this matter to its source, he found the pictures originated with L. R. Combs, extension editor in Iowa and obtained the following account for readers of the Review:

Shirley Lincoln Jr. (right) 19-year-old club leader, is probably the youngest member of a township corn-hog committee in Iowa. He and his father are helping with the sign-up campaign in their township, Pacific Junction, Mills County. Bruce Kilpatrick, county agent, is watching as the two men fill out sample contracts.

SPOT NEWS and feature pictures distributed in mat form to daily newspapers have been effective in attracting attention to the corn-hog program in Iowa.

These mats have been distributed through the press service, or through the regular daily service from the college, which goes to approximately 50 papers in the State. The daily papers' use of these mats has been highly gratifying, in some cases exceeding even our fondest hopes.

Among the pictures which I have taken in my rambles over the State are the following: A picture of two of the oldest corn-hog producers in Iowa, but who are not "too old to learn new tricks"; a picture of a father and son, both of whom were serving on a township corn-hog committee, the son, a 4-H club boy not yet of age; and several pictures of farmers signing corn-hog contracts in the first instructional meetings held for county committees. Pictures were also taken of 2 or 3 county chairmen filling out work sheets at the State training school held in Ames early in January. Various other news and feature pictures were taken either for local dailies or for distribution to the news services.

Two of Iowa's oldest corn-hog producers who are not "too old to learn new tricks" signing corn-hog adjustment contracts. Left to right are: Adam Keil, Ladora, who is 69 years old and still operating 200 acres; County Agent D. H. Zentmire of Iowa County; and Louis Feller of Victor, 74, who rents his farm to his son on a share lease.

An arrangement was made with an engraving firm in Des Moines whereby a spot-news picture could be sent to them for the making of mats. They would make these mats the day the picture was received and turn them over immediately to one or both of the press services as directed.

In taking pictures I used a camera with an f 4.5 lens. This is faster than the average and capable of taking a picture with excellent detail. The camera is equipped with a ground glass finder and uses either film pack or plate holders. Pictures are 3¼ by 4¼ inches, a size which is not expensive yet large enough to make good newspaper engravings. A lighting apparatus consisting of a long drop cord which could be plugged into an ordinary light socket, a 3-way socket for floodlight bulbs, and reflectors completed the outfit. This made it possible to take pictures under ideal conditions wherever a standard voltage light current was available.

Five pictures were distributed in mat form during January and early February. Several pictures were taken for individual use of the large dailies. One of the mats distributed was a 3-column layout showing the different steps in the Iowa corn-hog program such as a preliminary educational meeting, a State training school on administrative rulings, a county training school, farmers signing contracts, and one picture posed by a local farmer showing the producer receiving a check at some future date. Clippings of this picture showed that we obtained around 60- to 70-percent usage in the 50 dailies.

AN OPPORTUNITY for financing 4-H club projects is offered by the production credit associations which are being organized in Arkansas.

The Production Credit Corporation of St. Louis has announced that it will approve production credit associations in its district making loans on personal notes and without collateral when such notes have been signed by the club member and father, or by the club member and local leader.

To be eligible for credit, it is necessary for the club to have a definite organization plan, periodic instructions in the care and management of the project, insurance, and an adequate marketing program.

THE KOLOA (Hawaii) Junior Farm Extension Club, which is the name by which the young men's clubs are known in the Hawaiian Islands, has 35 charter members. These are all American citizens of Japanese ancestry who are working on the Koloa plantation. Their program for the past year included demonstration work with a speaker at each of the monthly meetings. In addition to their strictly educational work, this group carried on an athletic program, which included baseball series among the various plantation units. The most interesting feature was a fishing contest organized by the club for the purpose of raising funds to finance the various projects.

THE Department of the Interior has announced plans for the establishment of subsistence homestead projects at Rochester, Monroe County, N.Y., and at Austin, Minn. Secretary Ickes said that the Subsistence Homesteads Division, under M. L. Wilson, will organize corporations at each of these points to handle the management. At Rochester there will be 33 plots of about 1½ acres each, with low-cost modern houses. At Austin, 50 homesteads of 3 to 5 acres will be established. At each of the points arrangements have been made for the families to obtain part-time work in shops in the nearby towns. At the present time 37 projects of this kind have been approved in 20 States.

Federal Agencies for Soil Conservation

NEW emergency organizations set up in Washington have given a great impetus to the soil-conservation movement. The set-up and purpose of two of these organizations now working in the field are as follows:

Department of the Interior

THE SOIL Erosion Service, Department of the Interior, is a new bureau, set up under a public works appropriation of $10,000,000 for the purpose of demonstrating the practical application of erosion-control measures on large watershed areas of 100,000 to 200,000 acres.

At the end of about 6 months, 10 major demonstrations have been established and are now in full operation, with 15 new projects being organized as rapidly as possible for installation work within the next 30 days. Each large demonstration is placed in a geographical region to represent a broad land condition where soil erosion is a serious problem. The following projects have been selected, by States: Pennsylvania, Ohio, West Virginia, Virginia, North Carolina, South Carolina, Georgia, Alabama, Mississippi, Louisiana, Texas, Arkansas, Oklahoma, Kansas, Missouri, Iowa, Illinois, Wisconsin, Nebraska, Washington, California, New Mexico, and Arizona.

The program is of national scope and character, to demonstrate how the remaining good farming land of the country can be preserved from serious erosion wastage, and, at the same time, how flood hazards may be materially minimized on the respective watersheds. All work is carried on in close cooperation with all interested agricultural agencies. "In our efforts, without exception, capable county agents of the Extension Service have given valuable aid and we are depending on their continued help in the future. We want them to know our work, visit our projects, and make use of our service in any helpful way," says Director H. H. Bennett.

The largest project that has been undertaken is that of the Navajo Indian Reservation in Arizona and New Mexico. This area comprises about 15 million acres of ground, and it presents an extremely serious erosion problem of vital importance to the region as a grazing section, in addition to that of preventing rapid accumulation of silt in Boulder Dam reservoir. As a matter of fact, the control of erosion in that section will determine whether or not it can continue as a habitation for people. Forty or fifty men will be stationed on this Reservation to work out practical measures for solving the important erosion problem.

A staff of 15 or 20 technically trained men will be employed on each of the major watershed areas. These men will include agronomists, foresters, engineers, range specialists, authorities on wild life, soil specialists, extension agents, and other specialists who can make a contribution to the comprehensive land-use program proposed for these areas. The plan of work involves the study of each individual farm by this corps of trained men, in order that there may be set up on each farm within the area the best land-use program that it is possible to devise on the basis of soil adaptation.

It is proposed to install on each farm, then, a well-rounded, well-balanced, stabilized farm program from which the farmer will be able to earn greater returns for himself and his family through a proper cropping system set up on the basis of proper land use, and all supported by a program for controlling erosion wastage of the productive topsoil. Steep lands will be taken out of cultivation and put back into forests; less steep land that cannot be handled in cultivation without serious erosion loss, will be put into permanent grass; and the gently sloping lands will be utilized in cultivated crops under a system of strip cropping and contour farming.

It is proposed by the Soil Erosion Service to supply seeds for areas to be taken out of cultivation and put into permanent pasture, or for planting strips in connection with cultivated crops. When seeds, nursery stock, or engineering equipment are furnished, the farmer signs a written agreement to permit the installation of proposed practical erosion-control measures and to continuously protect and maintain the installations on his land for a period of 5 years. A very large percentage of the farmers in all of the watershed areas have signified their cooperative interest in carrying through the program outlined for them.

An interesting development in Wisconsin, where the farmers have signified their desire to cooperate in the farm program, is the additional feature of hearty cooperation in the establishment of wild life in the timbered areas. These woodlands are almost invariably too steep to clear for cultivation, in fact, much of the steep land that is now in cultivation should be put back into timber. Farmers are interested in the plan of protecting game in these areas in order that they may be able to obtain some revenue from the sale of hunting privileges.

Emergency Conservation Work

Under the erosion-control project on private lands the Civilian Conservation Corps, working under the direction of the Forest Service of the Department of Agriculture, at the beginning of 1934 had constructed more than 238,000 check dams in gullies with about 504,000 acres benefited.

More applications for erosion-control work on private farms were received than can be handled. Many county agents rendered effective aid in locating badly eroded farms and in helping farmers to understand the purpose of the proposed conservation work. As far as possible, farms scattered over the county were chosen to serve as demonstrations to other farmers in the neighborhoods. The owner of each farm chosen signed an agreement to protect and maintain all improvements made for 5 years. The region of greatest activity is the central Mississippi watershed, including the lower Ohio River States of Ohio, Indiana, Illinois, and Kentucky, western Tennessee, and northern Mississippi. Other centers of erosion work are Wisconsin, Minnesota, Iowa, Missouri, Oklahoma, and Texas.

Gullies are being healed on these farms in a 4-point program, (1) by building temporary check dams, (2) grading the banks to a slope of repose, (3) planting trees, grasses, and vines, and (4) protection from fire, livestock, or other injury. Tree planting started about the middle of February in the South and will continue into May in the North, with about 40,000,000 black locust trees available for planting in this way. Grasses and legumes, such as Lespedeza, are being used as an immediate ground cover until the trees get started, and in Texas and Oklahoma as the main cover crop. The surveying of terrace lines for farmers has recently been approved and started. The farmer must first agree to construct the terraces.

About 250 camps have been working on the soil-erosion-control project. During the winter, the camps averaged in the neighborhood of 180 men. Assistant Forester Fred Morrell, of the Forest Service, has charge of the work in which the Bureau of Agricultural Engineering is closely cooperating in all engineering features, and likewise the various State forestry departments in supervising the field work in their respective areas. Each camp has a superintendent trained as a forester or engineer and a corps of 5 to 10 technically trained foremen to supervise the crews of men while at work on their job.

The County Adjustment Campaigns

(Continued from page 54)

happen. They are not satisfied with the results, but are ready to try it again.

—Lloyd Godley, county agent, Payne County, Okla.

Cooperation and Organization Valuable

G. C. Wright.

Montgomery County, Tenn., located in the heart of the dark tobacco district, was the first county in the State to secure its quota of 90 percent of the tobacco growers. There were 1,600 farmers who signed the tobacco-production adjustment contract within 3 weeks, with 18,000 acres offered for contract and 4,500 acres to be taken out of production with an estimated yield of 700 pounds per acre.

The success of this compaign was made possible through careful planning. Three farmers from each civil district, who had already demonstrated qualities of leadership, were invited to attend a meeting at the courthouse. At this meeting the tobacco-production adjustment contract was explained by the State marketing specialist, who has charge of the tobacco sign-up for the State. There are 22 civil districts in Montgomery County and when the roll was called, it showed that each district was represented 100 percent. This indicated keen interest from the beginning. The contract was clearly explained and plans for the campaign were outlined. It was agreed that any farmer who would not sign a contract could not serve as a committeeman for his district. Arrangements were made to hold 70 meetings in the various communities, with speakers to assist in signing contracts selected.

The importance of extension work was demonstrated. The county had already been organized and trained leaders developed in a majority of the communities. Without this leadership the campaign could not have been a success, because it was no small task to find men who could intelligently explain the contract to farmers, while they themselves had only heard it explained once.

Meetings were held at 10 a.m., 2 p.m., and 7 p.m. daily at any place in the community where farmers had been accustomed to meeting. Schools, churches, and lodges were the usual places of meeting. At these meetings, a majority of the farmers signed and a few districts signed 100 percent. Then it was necessary to have a farm-to-farm canvass, and this was done by the local committee of three leaders. At the close of the campaign a county-wide meeting was held at Clarksville, the county seat, and 500 farmers attended this meeting.

The job was not completed with the signing of contracts. It was then necessary to secure supporting evidence of the pounds of tobacco that had been sold by these farmers. This fact was explained to the local warehouse managers and they kindly agreed to lend their books to the county agent. The records were tabulated in his office with the aid of Civil Works Administration workers. This was an accommodation to the farmers and expedited the completion of the contracts.

It was an inspiration to see how the farmers responded to the efforts of the Federal Government to aid them in securing a better price for their products. It reminded one of the World War days when we had the thrift stamp, liberty loan, and Red Cross drives. For the past 2 years the farmer has sold his tobacco at below the cost of production. Possibly this was a spirit born of desperation which is characterized in the immortal lines of the poet who said, "Theirs not to ask the reason why, Theirs but to do and die."

—G. C. Wright, county agent, Montgomery County, Tenn.

Appreciation

"I WANT to express my appreciation of the splendid work done by county agents in the distribution of checks for rental and benefit payments", writes R. W. Fuchs, the Department disbursing clerk. "The huge task that devolved upon the disbursing organization in making these payments could not have been accomplished successfully without the wholehearted cooperation of these men, who carried out their difficult instructions promptly and efficiently. In any undertaking of such magnitude, errors are bound to occur, and a considerable number of checks had to be returned to this office for correction. I appreciate the alertness of the county agents in detecting these discrepancies, their promptness in bringing them to our attention, and their patience with our unavoidable delays in making the necessary corrections, while they were besieged by payees to whom these delays were probably inexplicable. If it were possible, I would like to convey my thanks to each member of this fine organization individually."

Office System Speeds Work

J. D. McVean.

In organizing for the wheat campaign in Kent County, Md., it was felt that the preparation and provision of an adequate filing system would aid the work. Such a system would assure definite and ready identification of all persons, papers, and forms which would be used during the program.

Farm locations were marked on a map of the county by means of consecutive numbers and by election districts. The names of the landlord and the respective farm operator were listed with their addresses and the corresponding farm numbers. This rural directory was planned to serve as a check list at headquarters and as a guide for the community committeemen as they canvassed their respective communities. It is felt that this system will be of further service when the inspections for compliance are made. It has been suggested that the value of this numbering could be increased by painting the number on the farm gate just as houses are numbered on city streets.

An alphabetical card index of farm operators, their addresses, the number of their election district, and their farm number was prepared, as was also a like list of landlords. This card index of operators proved of great value and was a great timesaver throughout the campaign. When applications or contracts had to be signed, or inquiry was made regarding wheat papers, the clerks using the card index could quickly determine the operator's name and the number of the file jacket containing material pertaining to the particular farm. It was found that file jackets were more easily located by number than by name, though both were placed on the jacket. The farm numbers were found valuable in the identification of maps, certificates, applications, and other forms.

Successful educational meetings were held throughout the county with the aid of able appointed committeemen. With a budget of less than 1 cent per bushel of the allotment, the campaign resulted in the signing of 84 percent of the operators and 92 percent of the wheat acreage in the county. Four hundred and eighty-three contracts were accepted.

—J. D. McVean, County Agent, Kent County, Md.

Introducing the Farm and Garden Radio Reporter

THE TRUE history of the Massachusetts farm and garden radio programs, which won the admiration of the broadcasting station and the Department of Agriculture radio service, as told by J. C. Baker, assistant extension editor for Massachusetts, who prepares the material for these programs.

FOR MORE than 2 years, the daily farm radio programs of the Massachusetts State College were impersonal discussions of subject matter. They were written at the college by the radio writer and mailed to the cooperating radio stations, which numbered 4 at the beginning and 8 at the present time. Considering the power of the stations (none over 1,000 watts) and the size and character of their listening audience, the response to those programs was commendable.

Perhaps it was the monotony of turning out a daily 2,100 words, or perhaps it was a genuine desire for improvement which caused rather careful scrutiny of the programs a few months ago. After this study, the conclusion was reached that the programs lacked the element of personality. Accordingly, a character called the "farm and garden reporter" was created as the authority for the program. The new program was called "Farm and Garden Chats"—a change from "Farm Flashes for Massachusetts."

The station announcer opens the program by announcing "the daily program of Farm and Garden Chats, which come to us in the form of a letter from the farm and garden reporter. Here's what the reporter has to say today."

Then the reporter proceeds to tell of a conversation or an interview with some specialist on the State agricultural college staff, or of a magazine article he read, or a bulletin recently published. Perhaps he has visited a successful dairyman or fruit grower; he reports, in the first person, his experiences and the things he saw. He tells of the way his friends, real and fictitious, have managed their indoor gardens in winter, and plans they are making for their garden planting in the spring. In brief, the farm and garden reporter is an individual who has an opportunity to accumulate a great deal of information on farming and gardening, and he reports to his listeners the things that he sees and hears.

This type of program allows greater latitude of subjects than the former impersonal discussion. If the reporter is impressed by an article in the Country Gentleman, or Consumers' Guide, or the Jersey Bulletin, or any other publication which he sees, he tells about it, giving credit to the publication. Most of the subject matter is obtained through interviews with the specialists on the State college staff, but other sources are not disregarded. It developed long ago that an interview was a better way of getting information than asking a staff member to prepare a paper for the radio program. The paper usually was late and then had to be rewritten to make it sound conversational.

The programs are divided on the basis of subject matter. Monday is devoted to fruit growing; Tuesday, poultry raising; Wednesday, vegetable gardening; Thursday, dairying; Friday, homeground improvement; and Saturday, miscellaneous. With such an arrangement, some of the specialists are called on practically every week. Were it not for their cooperation, it would be a physical impossibility for one man to assemble six 15-minute programs of information every week.

A schedule is worked out with the specialist concerned for each day of the week over a period of several months. The schedule is followed in a general way, and it has been found an important factor in guiding the subject-matter content of the programs. But it has been found impracticable—wellnigh impossible, in fact—to follow it to the day. Accordingly, the topics and dates are shifted around somewhat when it seems advisable.

At the close of each program, listeners are invited to send requests to the farm and garden reporter, and they have been coming in at a rate of about half a dozen a day, in addition to the requests for bulletins, which usually are addressed to the extension service of the State college. The radio stations using the program have been unanimous in the opinion that the letters from the farm and garden reporter have more listeners than the former type of impersonal programs.

In Massachusetts, there are only 25,000 farmers, as compared with the millions of persons engaged in other industries. So it is not surprising that we find our most popular programs are those dealing with flowers, lawns, vegetable gardens, and small fruits. Another thing we try to keep in mind in preparing the agricultural programs is that most of the listeners are consumers rather than producers. This has barred discussions of such topics as spray residue, diseases carried in milk, and anything else which might suggest to the consumer that there could be anything wrong with the food products he buys.

National 4-H Club Radio Program

Annual Theme: 4-H Club Work Influences the Farm and Home

Sixth Phase—Satisfactions in Rural Life Emphasized in 4-H Club Work

Saturday, June 2, 12:30 to 1:30 p.m., Eastern Standard Time

Why I Have Decided to Be a Farmer	4-H club boy from Tennessee.
4-H Club Work Develops Self-Reliance	Boys' club leader from Tennessee.
The 4-H Club Girl has Many Interests	4-H club girl from Indiana.
4-H Club Work Helped Me to Get a Start	A farmer from Indiana who was once a club boy.
Satisfactions in Rural Life	C. B. Smith, United States Department of Agriculture.
Music We Should Know—Sixth Phase of the 1934 National 4-H Music Hour—Featuring Compositions by Sousa, Sodermann, Speaks, Schumann, Gounod, Greig, and Friml.	United States Marine Band.

THE Radio Garden Club of the New Jersey Agricultural Extension Service, now in its third year of continuous broadcasting, has begun a new series of broadcasts in cooperation with the Federated Garden Clubs of New Jersey over WOR at Newark, N.J. The Brooklyn Botanic Garden and the Federation of Garden Clubs of Bergen County will also contribute regularly to the program.

Kansas and the Adjustment Program

DIRECTOR UMBERGER of Kansas was besieged with questions as to the attitude of Kansas farmers toward the Agricultural Adjustment program. To obtain a good picture of these attitudes, he wrote a letter questionnaire to 49 Kansas newspapermen. After summarizing all of these, then talking them over with Agricultural Adjustment Administration officials and field workers, he gives us the following summary.

The majority of farmers in Kansas are generally agreed upon three fundamental facts about the present agricultural situation:

1. That they do really have a surplus of agricultural products.

2. That the Government is in earnest about putting into operation plans to insure for the American farmer a reasonable return for his efforts, resulting in an improved standard of living for himself and members of his family.

3. That the Agricultural Adjustment program of production control is fundamentally sound, and is at least the best proposal in sight at present for accomplishing that end.

Farmers generally look upon the immediate benefit payments as relief for the present situation only and not as a permanent solution of their problem.

Farmers look upon the present Agricultural Adjustment program as a promise for a more intelligent control of agricultural production. They have become vitally interested in the proposals as set forth by the National Administration in the hope and ever-strengthening belief that there will be forthcoming a broader and more comprehensive plan for the farming industry—a plan in which agricultural production, living standards of the farm home, consumption of farm products, and the utilization of agricultural resources will be coordinated. As a result, they visualize the present plan as being the foundation for a Nation-wide movement in which they will concentrate their farming efforts in the development of only those areas that will, through intelligent management, return an adequate income, thus resulting in improved economic and social standards on the average American farm.

The attitude of a strong majority of farmers toward the production-control program is most favorable. A very substantial element favors going even further with the program to the point of compulsory control. This sentiment is growing stronger as the program proceeds, and the cooperating farmers have a better opportunity of observing nullifying influences of their adjoining neighbors who refuse to cooperate and who even increase their production. It is now apparent to them, that if the program fails, it will do so because of the failure of others to cooperate.

Farmers are of the opinion that the program promises them a more favorable outlook for their industry, and as a result will point to greater security for the average farm business. Farmers who have signed up and who plan to sign up are fairly optimistic about their future.

Adjustment benefits received by farmers are almost universally being spent wisely, not for luxuries that they cannot afford. Reports from farmers, field workers, editors, and others list the expenditure of benefit payments to date in the following order: Taxes, debts and interest, and imperative family needs.

Business men in rural towns react favorably to the program. The majority of them believe that it is the initial step toward a more unified and prosperous agriculture. The immediate adjustment payments have reacted favorably upon business, and business men recognize that improvement in agricultural returns will be immediately reflected in their own business.

Sixty days ago the rural town business man looked at the program as a temporary wildcat relief scheme, but there now seems to be an undercurrent of opinion which results in the expression that prices of farm products will never be so high that they will give farmers big margins of profit. But the progressive and unified program will tend to bring about a stabilization and more equal market condition, which will avoid the extreme lows. All of which is looked on, of course, by the conservative man as an ideal condition. Generally his information regarding codes and other matters has caused him to believe that some program of this sort is essential, and he believes it has been of value as an emergency measure and is willing to see it adopted as a permanent program, if it can be paid by a processing tax. They look upon it more favorably than at first.

These statements are based on reports gathered from farmers who have been actively engaged in carrying out the program in cooperation with the Kansas State College Extension Service and the opinions gathered from newspaper editors of Kansas.

MORE than 5,000 men in Illinois carried the campaign for the adjustment of corn and hogs to farmers in the State. Meetings for the training of these committeemen were held throughout the State, and these men in turn have aided the farmers in cooperating with the Government in the adjustment of production and in obtaining the benefits offered.

Brigham Detailed to Adjustment Administration

REUBEN BRIGHAM, of the Office of Cooperative Extension Work, will relinquish for the present his responsibility for the work of the visual instruction and editorial section, including the editing of the EXTENSION SERVICE REVIEW. Upon the request of the Agricultural Adjustment Administration, he has been detailed to head up the new regional contact section established in the A.A.A. Division of Information. As chief of this section, Mr. Brigham will have charge of commodity informational campaigns conducted through the weekly newspapers and farm journals with the cooperation of State extension editors and responsibility for maintaining contacts with rural organizations that will keep them constantly informed about the activities of the A.A.A. Mr. Brigham has been editor of the EXTENSION SERVICE REVIEW since its establishment in May 1930. Lester A. Schlup, who has been associated with Mr. Brigham in administering the work of the visual instruction and editorial section, has been designated as acting editor of the REVIEW. Policies of the REVIEW that have prevailed during the last 4 years will be continued.

C. W. Warburton

Director of Extension Work.

Agriculture and Industry Are Interdependent

THE FACTOR of national income is the solid core which runs through the welfare of agriculture. As factory pay rolls in the cities increase, city people will have more money to spend for agricultural products. This prosperity of the cities, upon which agriculture relies so greatly, is not a thing apart. It is dependent upon the purchasing power of the entire country. With the loss of export markets which resulted from the World War, and with the accumulation of immense surpluses of basic farm products such as cotton, wheat, hogs, and tobacco, prices fell to the lowest levels on record. The effects of loss of farm purchasing power gradually spread to the rest of the country. When factories began to close or cut down their labor forces and unemployment increased by millions, the farmers in adjacent territory were affected. Their markets suffered. Unemployed people, or people working only part time, had less money with which to buy farm products. Prices of farm products went down.

The Agricultural Adjustment Act was devised to restore the purchasing power of the producers of basic farm crops. This has been sought through reducing the immense surpluses that have beaten down prices. Adjustment of production to the realities of world demand is sought as a means to restore a balanced situation, and to bring buying power of the basic farm products back to the level of 1909 to 1914. We know what conditions were when the act was signed 11 months ago. Wheat prices were weighed down under a 386-million-bushel carry-over. The world carry-over of American cotton amounted to 1 year's total crop. The export market for pork and lard had virtually disappeared as a result of foreign tariffs and import quotas.

Plans for Adjustment

The Agricultural Adjustment Administration employed its powers in a series of emergency measures of great scope to correct these situations. We reduced a potential 17,500,000-bale crop of cotton to 13,177,000 bales. We signed up half a million wheat farmers to make an 8-million acre reduction in this year's planting. We tackled the tobacco problem with separate plans for producers of six types of tobacco. We paid out up to March 1 over 220 million dollars for benefit payments and relief purchases and up to that date we had collected 216 million dollars in processing taxes. As a result, it is apparent that American agriculture has experienced a considerable recovery. Total farm income from crops in 1933, including rental and benefit payments, increased 55 percent or more than a billion dollars over that of 1932. The rise was from $2,113,000,000 to $3,271,000,000. This does not include livestock or dairying, where quick adjustments were not possible.

Favorable effects of increased farm buying power have been reflected in improving business and industrial conditions. Only a little while after the rise in agricultural prices began last year, signs of general business improvement appeared. In fact, long before the cotton farmers of the South received any rental payments, increasing mill activity and employment of New England textile workers anticipated the results of the cotton program.

Recovery Evident

The evidence of recovery now is clear throughout the Nation. Growing employment has meant more money to spend for products of the farm. One indication of that is the trend in sales of groceries. January wholesale grocery trade in the country increased 29½ percent over that of a year ago. This wholesale trade along with hardware showed one of the biggest yearly gains ever known. Recovery works that way. The money that goes to agriculture in the West and South is not hoarded. It is spent for necessities. It goes into the channels of trade. It stimulates business and adds to employment. The same thing is true of the recovery expenditures for public works and civil works employment, and of increased industrial pay rolls under N.R.A. codes. The economic condition of the big eastern cities is linked closely with the national recovery. The more money the people in these cities have, the more they will spend for products of our farms.

I think it is of the greatest importance that the Nation should not again invite the dangers of a prostrate agriculture. The time has passed when segments of industry and agriculture can ignore their interdependence. We can face the future with hope and confidence, so long as the whole country keeps on the upgrade. We should look upon our agriculture as a part of the economic fabric of the Nation. Its welfare is linked to the economic welfare of the people employed in the mills and factories of our great cities. And the roots of their prosperity in turn are watered and fed by the entire Nation.

Administrator, Agricultural Adjustment Act.

PERTINENT PASTURE PUBLICATIONS

A Pasture Handbook
M.P. 194

Clovers

Sweet Clover in Corn Belt Farming, F.B. 1653
Alsike Clover, F.B. 1151
Red Clover Seed Production, L. 93
Red Clover Failure, L. 98
Red Clover Culture, F.B. 1339

Alfalfa

Growing Alfalfa, F.B. 1722

Lespedeza

Lespedeza, L. 100

Grasses

Timothy, F.B. 990
Huron Timothy, L. 99
Sudan Grass, F.B. 1126
Reed Canary Grass, F.B. 1602
Important Cultivated Grasses, F.B. 1254
Cultivated Grasses of Secondary Importance, F.B. 1433

Soybeans

Soybeans—Culture and Varieties, F.B. 1520
Soybean Hay and Seed Production, F.B. 1605
Soybean Utilization, F.B. 1617

Cowpeas

Cowpeas—Culture and Varieties, F.B. 1148
Cowpea Utilization, F.B. 1153

Miscellaneous

Winter Legumes for Green Manure in the Cotton Belt, F.B. 1663
Green Manuring, F.B. 1250
Raising Sheep on Temporary Pastures, F.B. 1181
Controlling Small Gullies by Bluegrass Sod, L. 82

FACTS FOR BACK-TO-GRASS AND FORAGE CAMPAIGN

A substantial increase in grass and forage acreage is being advocated by the U.S. Department of Agriculture and many of the State agricultural colleges as a means of putting the national farm plant on a more permanently satisfactory basis. This is explained in the article by J. T. Jardine on page 49 of this issue. Extension agents and other educational workers are urged to bring to the attention of farmers facts showing that this shift to less intensive methods of farming is desirable from the vantage point of public policy and increased returns for agriculture as a whole. The informational material listed will help supply basic facts, which may be adapted to fit local conditions as needed, and to supplement State publications. Extension agents may procure supplies of this material from the Extension Service of the United States Department of Agriculture. Orders should be sent through the office of the State extension director.

EXTENSION SERVICE,
UNITED STATES DEPARTMENT OF AGRICULTURE
WASHINGTON, D.C.

U.S. GOVERNMENT PRINTING OFFICE: 1934

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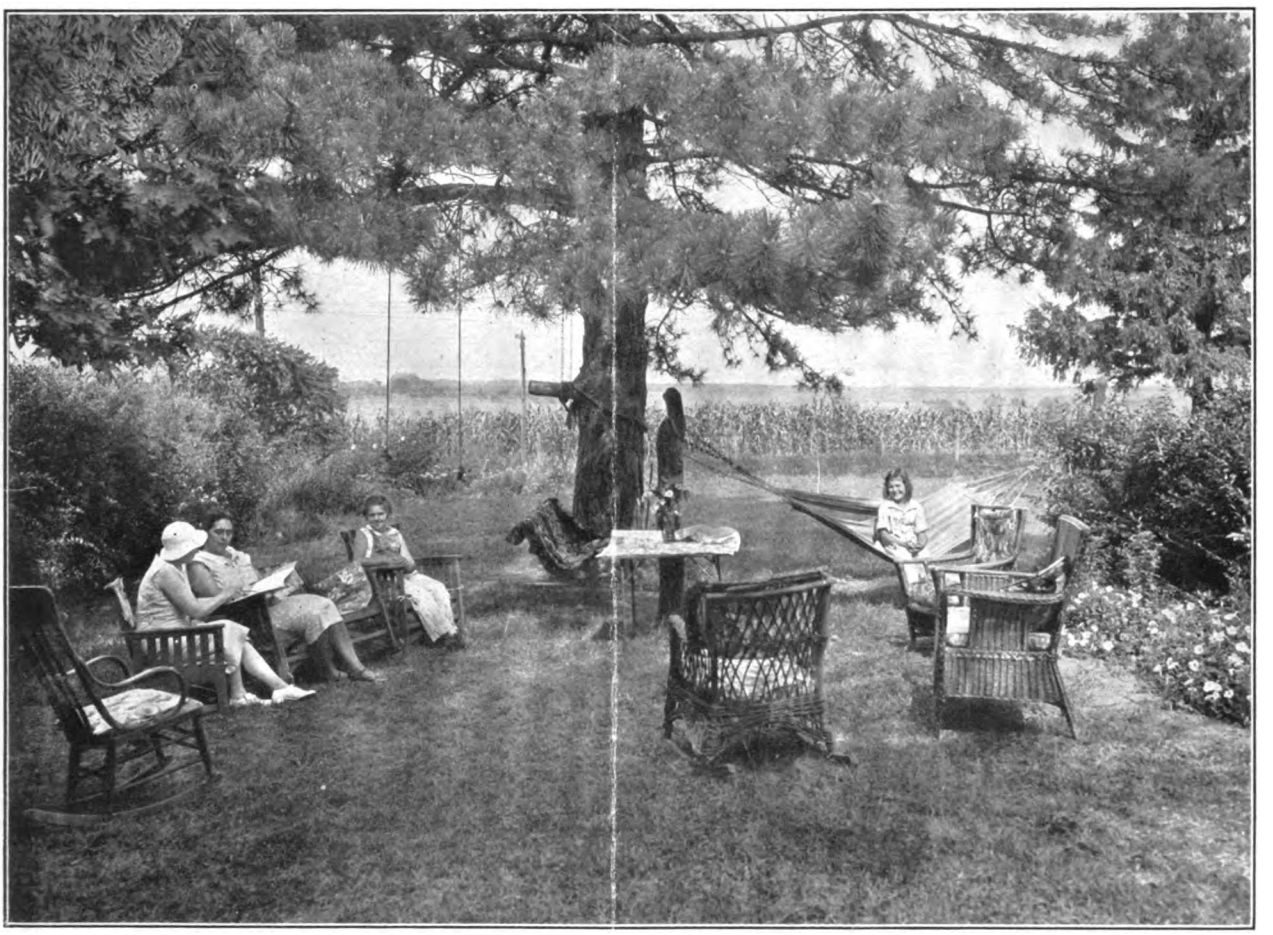

OUTDOOR LIVING ROOMS ADD TO THE COMFORT AND ENJOYMENT OF ALL MEMBERS OF THE RURAL FAMILY

ISSUED MONTHLY BY THE EXTENSION SERVICE
UNITED STATES DEPARTMENT OF AGRICULTURE
WASHINGTON, D.C.

FOR SALE BY THE SUPERINTENDENT OF DOCUMENTS, WASHINGTON, D.C. - - - - SEE PAGE 2 OF COVER FOR PRICES

In This Issue

WHAT were the objects of the Nation-wide survey of farm houses which was conducted during the last few months? Dr. Louise Stanley, Chief of the Bureau of Home Economics, tells of the cooperation of her Bureau, the Extension Service, the Bureau of Agricultural Engineering, and the Office of the Secretary of Agriculture, in making the survey by means of a house-to-house canvass in approximately 10 percent of the counties of the Nation. The information on the needs of farm homes obtained by interviewing more than 600,000 persons should be of considerable help to extension workers in planning their work for the future.

GROUPS of rural women in New York are having the happy experience of adding to the pleasure and comfort of their families by making improvements in their living rooms.

"ALL ASPECTS of our land problem, those which deal with farming and those which deal with a new pattern of American living, will have somehow to be drawn together and correlated. How can we plan for long-time production until we know far more definitely how many people we are trying to feed?" says H. R. Tolley, Assistant Administrator, Agricultural Adjustment Administration, in the final installment of his review of the relation of agricultural production adjustment to the general agricultural picture.

IN SEVERAL counties in Oklahoma cotton growers are improving the quality of their crops by standardizing in single community varieties and growing and saving clean seed through 1-year variety gins. These growers believe that one way to eliminate the price-depressing effect of a crop surplus is to put more of that crop into the high-quality class which does not have to compete with the bulk of the crop.

A SURVEY study recently made of the annual income of 46 farm families, located in six counties of South Carolina, showed that the average family numbered 4.5 persons, the average income was $554.45; and the range of income for the 46 families was from $92.50 for a family of 6 to $1,987.39 for a family of 9 persons.

Contents

On The Calendar

Association of Agricultural College Editors, St. Paul, Minn., July 24–27.

American Association for the Advancement of Science, Berkeley, Calif., June 18–23.

American Home Economics Association, New York, N.Y., June 25–29.

4-H Short Course, Storrs, Conn., July 22–29.

Farm and Home Week, Amherst, Mass., July 24–27.

Annual 4-H Short Course, Raleigh, N.C., July 25–30.

Farmers' Week, Storrs, Conn., July 30 to August 3.

Tri-State Fair, Amarillo, Tex., September 15–21.

Eastern States Exposition, Springfield, Mass., September 16–22.

National Grange Convention, Hartford, Conn., November 14–23.

NOT ONLY did the plan carried out by the Texas Relief Commission and State extension workers furnish a source of food for the needy, but it gave work to more than 10,000 unemployed men and women, and formed an outlet for cattle growers which netted them an average of about $5 per head above the market price at a time when the price was exceptionally low. All arrangements for the slaughter, cold storage, and the canning of more than 3,343 tons of beef were made by the extension workers cooperating with the relief commission.

TO PROVIDE properly for the needs and capacities of children, home demonstration agents are showing farm women how to make simple physical changes in the home and to supply better but inexpensive play materials. Agents in California, Massachusetts, Montana, Illinois, Minnesota, Kansas, and Oklahoma tell about the child development activities being carried on in their States.

THE EXTENSION SERVICE REVIEW is issued monthly by the EXTENSION SERVICE of the United States Department of Agriculture, Washington, D.C. The matter contained in the REVIEW is published by direction of the Secretary of Agriculture as administrative information required for the proper transaction of the public business. The REVIEW seeks to supply to workers and cooperators of the Department of Agriculture engaged in extension activities, information of especial help to them in the performance of their duties, and is issued to them free by law. Others may obtain copies of the REVIEW from the Superintendent of Documents, Government Printing Office, Washington, D.C., 5 cents a copy, or by subscription at the rate of 50 cents a year, domestic, and 75 cents, foreign. Postage stamps will not be accepted in payment.

C. W. WARBURTON, *Director* C. B. SMITH, *Assistant Director* L. A. SCHLUP, *Acting Editor*

Extension Service Review

VOL. 5 WASHINGTON, D.C., MAY 1934 NO. 5

A Look at the Farm House

Account of the Farm Housing Survey

LOUISE STANLEY
Chief, Bureau of Home Economics

FOR THE PAST few months, from early in December 1933, until May 1, 1934, the Extension Service has been cooperating with the Bureau of Home Economics, the Bureau of Agricultural Engineering, and the Office of the Secretary of Agriculture, in a Nation-wide survey of farm houses, as a project of the Civil Works Administration. The objects of this survey were to measure the potential demand for improving housing facilities on farms, to determine the costs of providing such facilities, to develop plans for their installation with standard specifications adapted to needs of typical sections, and to develop plans for financing their provision as a preliminary step in developing a public works program for improvement of farm houses and their equipment.

The immediate results of the survey have provided an insight into the needs of farm homes which the Extension Service will find of inestimable help in planning its work for the future. It is hoped that the findings of the survey will form the basis of a national program of construction of far-reaching economic effect, but irrespective of such potential results, the Extension Service will be able immediately to utilize the experience and data in creating better rural homes. In fact, in many localities the survey has already produced an interest in home improvement through focusing attention upon outstanding needs.

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The survey was conducted by means of a house-to-house canvass in selected counties of 46 States by enumerators paid by the Civil Works Administration. The counties were selected for study with the purpose of representing typical farming areas within each State. Approximately 10 percent of the counties of the Nation were studied, and more than 600,000 persons were interviewed. The enumerators, who were all women, numbering 11 to each county, gathered the data on a schedule covering information about the construction and size of the house; space requirements; water supply and sewage disposal; light and heat; refrigeration, laundry, and cooking facilities; landscaping of the house; the repairs, alterations or new installations needed; the relative importance of such repairs and improvements in the mind of the occupant; the possibility of new construction; and acceptable modes of financing. These results were tabulated and summarized in each county and the county summaries were summarized by the States. Practically all the field work was finished by February 15, 1934, and by the first week of March, five State summaries were received by the Bureau of Home Economics.

In each county there was a man employee of the Civil Works Administration whose qualifications were those of an architect, an engineer, or a contractor of experience. After the enumerators had made their visits, he selected from the schedules they had gathered about 100 homes of different types to visit with a supplementary schedule. This schedule covered in greater detail the repairs and improvements and new installations needed, with a few questions covering other farm buildings, fences, and the lumber available on the farm. These data were used by the engineer as a basis for an estimate of the total repairs, improvements, and replacements needed in the county. Through interviewing local contractors, builders, dealers, and the farmers themselves, the engineer worked up on a unit basis the probable cost of such contruction and projected it upon the whole county, thus arriving at a practical estimate of the total cost of repairs, replacements, and new installations needed in that county.

The national project has been administered from the Bureau of Home Economics in Washington, through the services of a large staff of clerks, architects, engineers, home-economics specialists,

(Continued on page 66)

Knowledge Essential to Home Improvement

Many people think that home improvements are not possible without money, but this idea is only partially true. Extension workers report every year thousands upon thousands of home improvements made by farm families where the successful combination was knowledge and diligence rather than money.

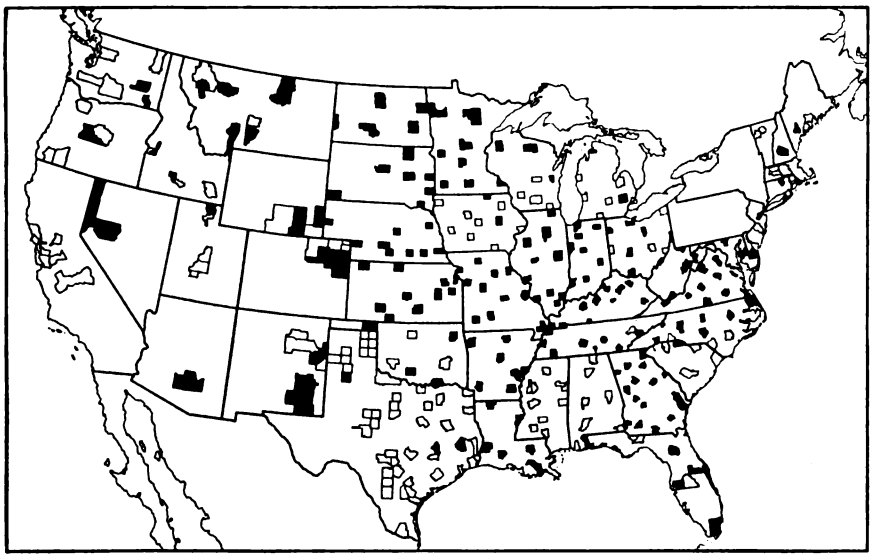
The enumerators who went from house to house to procure the information for the Civil Works Administration rural housing survey stated emphatically that lack of knowledge was of equal importance with lack of money. The mobilization of all the forces within our counties to bring knowledge to bear on the home-improvement problems that affect the welfare of the rural family is, indeed, a challenge to all of us. This year we may have only a few demonstration homes, tours, exhibits, and meetings on home improvement, but we should look forward to 1935 with a far-reaching program on home improvement that will help farm people to install the improvements they need.

C. W. Warburton

Director of Extension Work.

and statisticians. In each State the program is under the direction of a State home-economics extension worker appointed by the State director of extension. She was allotted a paid supervisor to work under her direction, and she has had at her command the advice of the various experts on the State staff. Three women clerks were furnished each State office by the Civil Works Administration.

In certain centers throughout the country groups of architects were brought together to design types of farm houses to be constructed at different cost levels and suitable to the peculiar conditions of various agricultural regions. At several of these centers and in Washington investigations of the standardization of home equipment and storage requirements are being carried on under the direction of qualified experts.



Map showing distribution of counties in which farm housing surveys were conducted. Counties in black were completely surveyed, and counties outlined partially surveyed.

The national summary of the Farm Housing Survey and of the supplementary surveys is centralized in the Bureau of Home Economics in Washington. Preliminary releases to the press are made as soon as summaries are available from the various counties. At the same time, the possibilities of financing needed construction of farm houses are being investigated under the direction of the economic advisor to the Secretary of Agriculture. It is hoped that a practical plan of financing will develop from this study, supported by the weight of the need as indicated in the returns of the farm-housing survey, whereby the farmer, without obligating himself beyond his capacity to pay, can improve his living conditions and at the same time furnish a market for the trades and professions related to such construction.

Home demonstration agents and home managament specialists are already at work helping rural home makers to use the resources at hand in meeting the deterioration of a long period of economic distress. It is possible that individual States will inaugurate construction programs as part of the emergency relief program of rural rehabilitation. If such programs are inaugurated, the extension workers are eager and ready to apply the information they have gathered in the farm-housing survey on a more extensive scale than the present resources of the Government allow.

Farm Homes Grow in Beauty

A glimpse of five of the many thousands of farm homes which are growing in beauty from coast to coast and from Canada to the Gulf of Mexico. The improvement of their homes is one thing farm women are doing with the help of home demonstration agents.

Relief Supports Live-at-Home Program

LAWRENCE WESTBROOK
In Charge, Rural Rehabilitation Program, Federal Emergency Relief Administration

Lawrence Westbrook.

THE Extension Service started the "cow, sow, and hen" program. We of the Federal Emergency Relief are administering the funds by which that program can be made an actuality for every farm family regardless of its financial status.

The county agent can make a farmer want a cow, sow, and hen, but he cannot always ferret out the means by which the want may be fulfilled.

We talked reduction of cotton acreage for a century. We got it only when the Federal Government stepped in and made it more profitable for the individual farmer to reduce than not to reduce. We have talked cow, sow, and hen, but there are still a million farms in the South alone, that are without a cow. The share-crop system has kept the cropper too poor to buy livestock, or too closely tied down to cash crops to be able to provide feed and pasture on which to maintain it.

The Federal Emergency Relief Program is undertaking to place livestock with every qualified farmer regardless of his financial status, on terms such as he will be able to meet. The farmer's need is the primary standard. And not only will livestock for sustenance be provided, but also workstock, where necessary, and where it cannot be obtained by the farmer in any other way than through the relief agency. Along with livestock and workstock, supplies enough will be provided to carry the needy farmer until his own land begins to supply him. If his house needs repairs, that also will be considered where the needy farmer is willing to do such part of the labor as is within his ability.

Families Must Qualify

The farm family receiving such aid must first qualify as willing and able to use it as a means of becoming economically independent. Where not considered capable of this, they will have to receive relief, if any, as a direct grant of supplies or through work projects.

The county agent and the home demonstration agent will be asked to act as advisers to the county rehabilitation committee, and to help shape a program for each rehabilitation family. Whatever trained personnel is necessary will be employed by the county administrator to make the direct contacts.

First comes the matter of obtaining land for farm families now drifting about, squatting in shacks without land to work, or in rural towns and villages, perhaps doubled up with several other families in a single small house. Land will be obtained by whatever means it can, in most cases without expenditure of cash. Deals will be made in accord with Agricultural Adjustment Administration contracts by which the needy tenant will pay his rent by repairing houses and fences, improving the land, or doing a specified amount of field labor.

The family that already has land may be without livestock or essential equipment, and such families will also be aided. Some landlords and tenants have abused the relief agencies by obtaining help for tenants who were not entitled to it. Strict precautions are being taken against such abuses. Administrators are required to check not only the applicant's needs, but also the possibilities of his obtaining his requirements, or a part of them, through the Federal production credit agencies. The extent of his probable income, including cash crop benefit payments, is also checked, and steps taken to assure that it will be applied to settlement of the account with the relief administration program. Payment of this account may be made "in kind" or cash, or in labor on work projects.

THE rural relief program is of vital interest to many thousands of farm families that have lacked the opportunity necessary to lift themselves from the destitute class. The program has been designed to aid these families to become self-supporting. Extension agents will be expected to cooperate closely with the workers employed to carry out the rural rehabilitation plans and to give direction to the educational activities necessary to make this new movement a success. In doing this, extension agents will be provided with an opportunity for helping many farm men and women who have hitherto been difficult to reach and influence. The educational work that extension agents can do in support of rural rehabilitation efforts will be invaluable in giving greater permanency to the results achieved.

C. W. Warburton

Director of Extension Work.

Business Basis

The program is being changed wherever possible from a charity basis to a business basis—business which is of the benevolent type, directed first of all to the family's rehabilitation, but nevertheless expecting repayment for every dollar of capital stock and supplies.

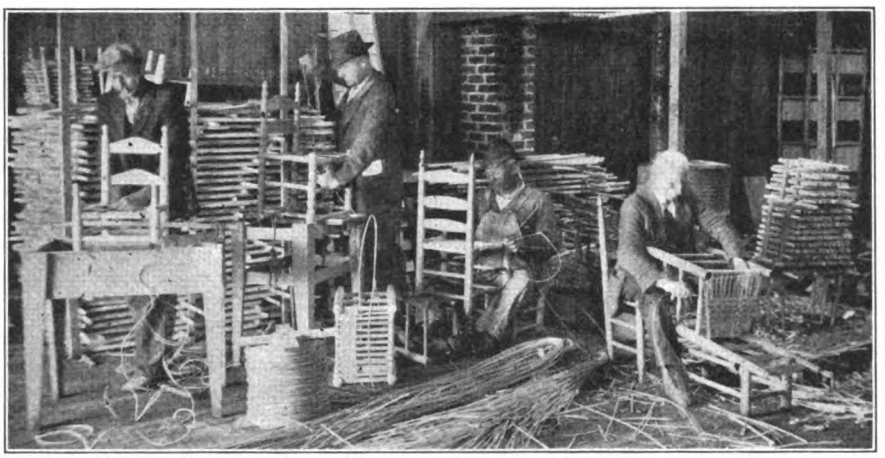
Every case in which the family is made actually self-sustaining, or more nearly so than at present, is that much relief for Uncle Sam, the great reliever. Every time a family is rehabilitated it stops one of the holes through which the taxpayer has seen his money dribbling. And unless hundreds of thousands of families, both in the city and in the country, are taught to take care of themselves, tax money will continue to be pumped in hundreds of millions annually into these leaky vessels.

Note, for instance, the tire makers who have been replaced by the drum process and the "merry-go-round" which make better tires and more of them with greatly reduced labor. The bottle-blowing machine, the dial telephone, the "canned" music in the movies, have shifted jobs from man to machine and will never give them back. Lumber mills, oil fields, mines, and textile plants have been shut down or have limited their operations in a way that has thrown workers for good and all into the

class of the "stranded." These former workers have been stranded high and dry, left helpless on the sands by the retreating tide of employment. Millions of them will remain a charge on governmental or private charity unless floated to new independence with the rural projects which we are undertaking to provide.

Food and Clothing

Our first thought is to see that destitute families are supplied with food and clothing, but if we stop there, we have built only the foundation. Our plans will enable people to do more than merely exist. Work projects necessary under the relief program are being directed toward bringing shade trees to streets and lawns, to creating community parks, to building community clubhouses which reflect the native architecture and set a model for homes of the same type. Our first settlers usually had an architectural type all their own, dictated by the native material and by the climatic conditions. Buildings can be made beautiful in those styles at less cost than it would take to make them ugly in the imitation of imported styles.



One of the chief objectives of the Rural Relief Administration is to help build industries like this one at Zebulon, N.C., where seven families with a capital of only $175 have made themselves self-sustaining, through combining chair-making with their farming operations.

The Director of the Extension Service and his aids have sat in with us at Washington to pattern this program. The State extension service directors have been asked to serve on their State rehabilitation committees. County agents and home demonstration agents are counted upon to guide their local committees. But with all that, an undertaking so far-flung cannot reach its objective unless it is backed by a public which realizes that the relief problem will continue to drain its pocketbook, until the destitute are made self-sustaining. Each community must swing into action with a host of volunteers, as it did in the Liberty Loan drive.

The road is that pointed out by Henry W. Grady. He stated that the way to manliness and sturdiness of character is when every farmer shall eat bread from his own fields and meat from his own pastures, disturbed by no creditor and enslaved by no debt.

In addition to the 600,000 or 700,000 destitute families on relief rolls in rural areas and also on farms who must be assisted to stand alone, there are hundreds of thousands of unemployed persons in the cities of the country who have had farming experience and who are making every effort to get back to the land which they left, being convinced that they cannot find sufficient employment in cities to get them even the meager security that they formerly enjoyed in the country. Obviously, the addition of this vast number of potential agricultural producers, if uncontrolled and unguided, would merely add to the distress of those who are already on farms, and who are unable to make a living even under existing conditions. Without general guidance and general planning many thousands of these people will go back to the farms and will become engaged in agricultural pursuits. Under the program proposed by the Rural Rehabilitation Division of the Federal Emergency Relief Administration such of the city unemployed as move to the country will be encouraged to engage in the trades which they have learned in the cities or to learn new ones adaptable to the community in which they move.

Work and Recreation

A community clubhouse or work center for work and recreation would be built out of relief administration funds with the community or other political subdivision or agency taking care of one half of the cost of materials and furnishings, and in this house would be provided tools and facilities for carrying on old farm and home trades and crafts. In it might be made mattresses, harness, chaps, quilts, canned goods, cured meats, and dozens of other commodities needed in the neighborhood. In addition, repairs could be made to furniture, farm machinery, and the like. All would be taken care of more cheaply than is now the case in the cities, and in the long pull many would probably remain as small farmer-artisans to enrich the life of their community and to make their own independent way. The plan is believed practical from all standpoints for a year or two. It has great possibilities of merging with the already large movement toward small farm and home manufacture and thereby to stimulate a significant trend in rural life.

We can vision, through this program, a nation that is stronger and happier. It lies the other side of a wide Jordan. Across that Jordan we are confident of building a bridge, but our confidence is largely based on knowledge that we have with us the experience and ability acquired by the Extension Service during long years of driving toward the same cherished goal.

COMMUNITY gardens and canning in Massachusetts under the direction of the extension workers were valued at $231,500 during the past year. In the 15 communities reporting out of 25 which carried on gardening and canning, $25,000 was invested in the gardening effort and the total return was $137,275, showing a profit of over $112,000 for the season's work. In addition to the fresh vegetables which gardeners obtained, 530,000 pounds of roots and cabbage were stored and 138,500 no. 3 cans were filled. In these 15 communities there were 3,786 family plots and 166 acres in area plots.

THE Department of Agricultural Economics of the College of Agriculture, University of Illinois, has completed a survey of farm-management projects. Even during the last 4 years certain of the better-managed farms of the State have shown a $10 per acre advantage over farms in the same locality of similar size, fertility, and cropping. M. L. Mosher of the Agricultural Economics Department says, "Most of this advantage is the result of better balanced farming rather than any spectacular piece of work on the part of the cooperators."

Highlights of Progress

Significant Statements from Some State Extension Directors

Program Must Include Social and Economic Problems

OUR present situation points very insistently and clearly to the need for greater emphasis on a program of adult education directed at underlying economic and social conditions. The need for developing this aspect of the extension program has been apparent for the last decade. Emphasis on production has overshadowed attention to improvement in marketing and distribution. Sociology and political economy have become a part of the extension service of the land-grant colleges in only a few States. Adult education that has as its objective better government and improvement in social conditions, more satisfying recreational activities, and happier family life, is quite as fundamental as better crops and livestock. The Extension Service in the next 20 years faces the challenge of expanding to include in its educational activities these broader economic and social problems.—Director H. J. Baker, New Jersey.

Arkansas Lessens Credit Needs

Arkansas made a crop in 1933 on about half the amount of production credit obtained the year before. Then the crop was practically all owed for debts incurred in its production while last year only about 27 percent of the value of the crop was owed for debts incurred in its production.

This reduction in the borrowings for production purposes was partly due to an intensive drive on the live-at-home campaign, which encouraged the production of home supplies. Another factor was the cotton plow-up campaign which not only brought money to the farmers of the State but released additional land which was utilized for food and feed crops for home use.—Assistant Director T. Roy Reid, Arkansas.

Illinois Program Speeded Up

Work which the Extension Service in Illinois has been doing for years in the interests of balanced, stabilized farming and a more satisfying farm home life was broadened into new and more extensive fields last year with the coming of the Agricultural Adjustment Act.

Emergency agricultural measures made necessary by the economic crisis have not changed or displaced our extension goals. They have only accelerated the rate of progress toward the point in view. Illinois farmers, for instance, have been adjusting their cropping systems for years as shown by the fact that the acreage of legumes has been steadily increasing and the acreage of grains, such as corn and wheat, have been decreasing.

Many producers, however, have been too hard pressed for tax and interest money to adjust their acreages as extensively as they would have liked to. Now the Agricultural Adjustment Administration has come forward with an offer of substantial financial backing to Illinois farmers who will cut their wheat acreage 15 percent, their corn acreage 20 percent, and their production of hogs for the market 25 percent.

Between 1,860,000 and 2,715,000 acres of Illinois land will be released for legumes and other replacement crops if Illinois farmers cooperate to the limit in the wheat and corn-hog adjustment programs. If put into legumes, this acreage would go far toward bringing to reality the Extension Service's long continued teaching that 1 acre out of every 4 should be planted to legumes. This is one example of how emergency measures of the Agricultural Adjustment Administration will bring closer the goals toward which the Extension Service has been working for years.—Director H. W. Mumford, Illinois.

Tennessee Plans for the Future

In Tennessee 12 counties which had not had county agents in recent years appropriated funds during January for the employment of these agents. This brought the total number of agents in the State up to 87, leaving only 8 counties of the 95 without the services of county agents. It is the largest number of agents in the history of Tennessee extension work.

The retirement of a million and a half acres from production, as a result of production-control campaigns in cotton, will alter the business of farming in the State. The farmer will have fewer acres to plow, to cultivate, and to plant; all of which means that money and labor will be saved in addition to the benefit payments which he will receive. This will give him more time to devote to the growing of higher quality cash crops. It will also give him an opportunity to more satisfactorily arrange his farm production. He may produce more adequate supplies of feedstuffs for home use and he may produce the greater portion of the food that will be consumed on the farm.

In adapting farming operations to these changed conditions there are four major factors that should receive first attention. First, there is the production of feed and food for home consumption; second, the growing of increased acres of soil improvement crops; third, the increased attention to the production of higher quality products; and, fourth, to give more intensive devotion of time and talents to the building of a more satisfying rural life.—Director C. A. Keffer, Tennessee.

Idaho Reaches More People

It is a conservative statement to assert that the Extension Service has reached more people in Idaho and has, in all probability, had more effect upon economic conditions of the farm enterprise than at any other time in the history of extension work in the State.—Director E. J. Iddings, Idaho.

An Opportunity for Mississippi

The 1934–35 cotton acreage reduction program offers the best opportunity the State has ever had to develop a planned and sound system of farming. Farmers in the State who have already made definite study of planning a part of their farm activity have proved the value of such a program. These farms have convincingly shown that by planning and working toward this type of farm, families on the land can obtain a living from it and achieve as full a measure of well-being and security as any other class of people.—Director L. A. Olson, Mississippi.

Nebraska and the Wheat Adjustment

It is not so much how the work was done, as it is the results that were accomplished in the 1933 wheat campaign. When the farmers of the State cut their wheat production 13 percent below the 3-year average and 17 percent below the 5-year average in the face of a rise in wheat prices, it is something to boast about.

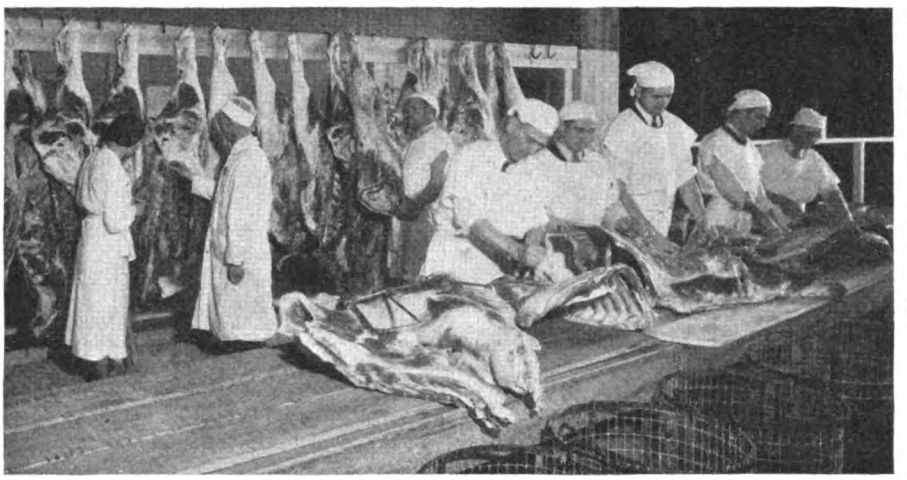
The credit for the success of the wheat campaign in Nebraska should go to about 2,000 farmers who served on the local and county committees, and to the agricultural agents who helped them out.

Figures for the past 5 years on the wheat production of the State show that the farmers have been making a reduction in the acreage seeded to wheat and that they have been considerably helped

(*Continued on page 72*)

Texas Cans Meat for Relief

MORE than 3,343 tons of beef were canned through the efforts and cooperation of the Texas Relief Commission and the State extension workers. The project grew out of home canning demonstrations and the exceedingly great need for relief among the poor and unemployed. For a number of years the county agricultural and home demonstration agents have been actively engaged in a live-at-home program. This live-at-home demonstration work has been carried to every part of the State, and it necessarily involved the canning of more and better foodstuffs for home use. Some idea of the extent of this work may be gained from the fact that in 1932 more than 100,000,000 cans of food were prepared for home use, as compared with the previous year's record of 55,000,000 containers stored.



More than 1,000 men, taken from relief rolls in Texas, were trained in cutting meat.

When the depression came along and there was a need of relief for the unemployed, the extension workers and the relief commission evolved a plan which worked benefits in three ways: First it furnished a source of food for the needy; second, it gave over 10,000 unemployed men and women work; third, it formed an outlet for cattle growers which netted them an average of about $5 per head above the market price, at a time when the price was exceptionally low.

Through the organization of the county farm agents, under the direction of G. W. Barnes and A. I. Smith, animal husbandry specialists, cattle were purchased and assembled at 19 points for slaughter and canning. A method was devised whereby the cattle came in just fast enough to keep the canneries working at capacity. Roy W. Snyder, extension meat specialist, supervised the training of more than 1,000 men, taken from the relief rolls of the county, in cutting meat "the Texas A. & M. Way." This method is more efficient and economical when the meat is to be canned.

About 10,000 men and women were employed, for a large part women, from the relief rolls. Supervisors for the canning, usually ex-home demonstration agents, were under the direction of Mildred Horton, State home demonstration agent, Lola Blair, extension nutritionist, and nine district agents. Home demonstration agents had charge of equipping and operating the canneries. They made use of equipment which the women were using in the canning of food for home use. In this way, they avoided the complications and expense of commercial equipment. This simplified the training of women for this work and guaranteed successful operation.

After the work was completed, this plan had furnished excellent training in the practical and successful method of canning meat. Many of the women continued the work in their own homes after the relief work was completed.

Once the canneries were opened and operating, from 3 to 5 shifts were used during the 24-hour day. The work was so planned and arranged that the equipment was always ready and in use.

Under the plan 21,320 beef animals were slaughtered, dressing out 6,686,145 pounds of beef which went into 3,673,592 no. 2 cans. All arrangements for slaughter, cold storage, and canning were made by the extension workers cooperating with the relief commission. The commission furnished money for the purchase of cattle and the operation of the canning centers.

The canneries used home equipment and operated from 3 to 5 shifts a day.

C. Z. Crain, commodities distributor for the relief commission, estimates that the cost of canning operations was 9 cents a pound without labor and 13 cents per pound including labor. This rather high labor cost is partially due to the fact that the first week or 10 days were required to properly train the workers for efficient operation.

Not only did the project have a material value in giving relief to the needy, but it had an advantage of improving the mental attitude of the workers. The training which the men and women received was an educational value which cannot be measured in terms of dollars and cents. The 10,000 workers engaged in this activity were left with the knowledge and experience that doubtless means a great deal more than the cash which they received for their labor.

The beef was packed and shipped to centers for distribution among families on relief rolls.

The Problem of Long-Time Agricultural Adjustment

H. R. TOLLEY
Assistant Administrator, Agricultural Adjustment Administration

THIS is the second of two articles reviewing the relation of agricultural production adjustment to the general agricultural picture.

ALL aspects of our land problem, those which deal with farming and those which deal with a new pattern of American living, will have somehow to be drawn together and correlated. How can we plan for a long-time production until we know far more definitely how many people we are trying to feed? Are we going to be more world-minded or more nationalistic? Are we going to lower tariffs, accept goods in some measure from abroad, and thus make it posible for our farms to produce in some measure for the world again? Or are we going to follow the cramped, suspicious, nationalistic trend now everywhere prevailing; keep up tariffs; regiment our farms and industries more and more to tense, denying limits of production; and strain every nerve and fiber of our being in a closely regulated effort to "live at home"? There is no painless path out of our troubles. We must weigh the pain and risks of nationalism against the pain and risks of renewed international dealing; set up marks that will stand for generations; and strike our course accordingly. Until we know where we are headed as a Nation, we cannot know how to plan for the long pull.

Trade Abroad Necessary

Secretary Wallace makes no secret of his own belief that farmers would do well to insist on lower tariffs. He thinks that the pain of a completely regimented nationalism would be perhaps unendurable to agriculture, which under nationalism would suffer a permanent contraction far greater than would industry. He does not, from his knowledge of the American farmer, picture him as happy plowing limited licensed fields, with his Governmental permit to do so tacked up on a post. I, myself, feel that as the rigors of a constricted agriculture appear more plainly our farmers will be perhaps more willing to think about tearing down the tariff walls around protected industries and certain agricultural specialties, and blowing off some of the pressure of surpluses by reciprocal trade abroad. The pain of a tightly-drawn nationalism upon our agriculture would be real, and, strangely enough, American business men, with shipping or international banking interests, are apparently also beginning to feel the strain. It may be that as to tariffs we are in for a general change of heart, and that America may in time plan to farm, in some part, for the world again. But until that shows plainer signs of happening, the only sensible thing for our agriculture is to lay its plans on the basis of domestic consumption, plus the actual surviving dribble of exports; and adjust these plans upward, if circumstances demand.

Plans based principally on domestic consumption must in themselves, as I want now to show you, be kept rather widely elastic. The figures I am going to put before you, and the comments, are again largely the work of Dr. F. F. Elliott, of the Planning Division of the Agricultural Adjustment Administration. They are tentative figures, the first result of our initial approach to this question of consumption standards and long-time plans for our agriculture.

Consumption of Food

Probably, as logical approach as any is to start with the level of consumption of food in the United States during the prosperous period of 1925–29, and determine the acreage of land required to supply that food. With this level of consumption, approximately 287,000,000 acres of crop land at average yields would be required to supply the food of our present population of about 125,000,000 people.

Of this acreage the equivalent of 280,000,000 acres were actually grown in the United States in that period. The additional 7,000,000 acres represent the acreage necessary to produce our net imports of sugar and vegetables and other minor food products. In addition to these products, we, of course, import practically our entire consumption of coffee, tea, spices, and bananas.

If we make our estimates in terms of the level of food consumption obtaining during the depression period, 1932–33, we find that approximately the same acreages would be required . There, however, is this very important difference—the prices which the farmers received for their products during the depression period were very, very much lower than during the other period—a consequence which is of great importance to the Nation as well as to the farmer.

In 1932 and 1933, the food products of approximately 14,000,000 average acres went into export trade and 10,000,000 acres into the piling up of excess stocks in this country. In contrast, the products of 32,000,000 were exported in the prosperous period, 1925–29, and products of only 2,000,000 acres went into excess stocks. It also should be noted that the products going into export channels during the earlier period brought a much higher price.

Up to this point we have been talking in terms of actual levels of consumption. Let us now turn to a consideration of the acreage that would be used to feed our population, if we followed some diets which have recently been suggested by the research workers in nutrition in the Federal Bureau of Home Economics.

Balanced Diets

They have recently set up and described four scientifically balanced diets at different levels of nutritive content and cost. The first diet is a restricted diet for emergency use. This diet provides about 2,675 calories per capita per day, and is made up largely of the cheaper foods such as wheat flour, corn meal, and other cereals, dried beans and peas, with reduced quantities of fresh fruits and vegetables, milk and other dairy products. As suggested by the name, the quantities of food allowed are close to the minimum and are not recommended for use over extended periods.

The next two diets are the adequate diet at minimum cost and the adequate diet at moderate cost. These two diets provide about 3,000 calories per day and have a vitamin content of 50 to 100 percent greater than the restricted diet. They also provide for a much smaller consumption of cereal products and a corresponding increase in the consumption of dairy products, vegetables, and lean meat. As indicated by the name, the adequate diet at moderate cost is further removed from the restricted diet than the adequate diet at minimum cost. It provides for a more liberal consumption of milk, meat, and certain of the vegetables and fruits.

The fourth diet which is termed, "a liberal diet", provides about the same number of calories as the other diets. It, however, provides for an even smaller

use of cereal products and an increased, very liberal use, of lean meat, eggs, milk, tomatoes, vegetables, and fruits.

If we calculate the acreage necessary to supply our present population with the products called for in these diets, we find that the adequate diet at moderate cost would require approximately 280,000,000 acres, or almost exactly the same acreage as required by our 1932–33 level. The restricted diet would require only 162,000,000 acres, and the adequate diet at minimum cost 224,000,000 acres. The liberal diet, on the other hand, with its emphasis upon meat and dairy products, would require 335,000,000 acres in crop land and also some increase in range and pasture area above the amount we now have.

Acreage Required

Although the adequate diet at moderate cost would require almost the same acreage in food crops as was necessary to supply our requirements at the levels of consumption for 1925–29 or 1932–33, the distribution of the acreage among the various crops is decidedly different. For example, the per capita consumption of cereals such as wheat flour, corn meal, rice, and the like called for in the diet are approximately one third less than our actual consumption, 1925–29. The consumption of sugar called for is approximately one half of our present consumption. If this particular diet were followed, and we lost all our exports, it would be necessary to reduce our wheat acreage 8,000,000 to 10,000,000 acres, and our other cereals, used directly for food, a proportional amount. On the other hand, such a shift would require an increase of more than a million acres in our truck crops, and somewhat less than 4,000,000 acres in fruit crops. Likewise it would necessitate a reduction of about 15 to 20 percent in our slaughter of beef cattle and an increase of approximately 80 percent, or 18,000,000 head of dairy cows. The slaughter of hogs would be reduced approximately 12 percent, or 7,000,000 head.

Changes in Production

Should the liberal diet be followed these changes would be still more radical. Cereal acreages, for direct food consumption, would be further reduced; beef cattle slaughter would be increased 40 percent above the 1925–29 level; hog slaughter 40 percent above; and dairy cow number 80 percent above. It is apparent, therefore, that if either the adequate diet at moderate cost or the liberal diet were followed, very pronounced changes in our present agricultural production would be necessary.

To fill in the complete picture, we also need to consider the nonfood crops, especially cotton, flaxseed, tobacco, and oils for soap and industrial use. Thus to the total of 287,000,000 acres required for domestic consumption of food products at the 1925–29 level of consumption, we need to add 39,000,000 acres of nonfood crops to obtain the total crop acreage needed for domestic use of both food and nonfood products. In contrast with the 39,000,000 acres of nonfood products for domestic consumption in 1925–29, only 30,000,000 acres were used for the same purpose in 1932–33.

In the period (1925–29) the food and nonfood products from approximately 61,000,000 acres were exported and 3,000,000 acres accumulated as excess stocks in the United States. Of this acreage approximately 34,000,000 acres represented food crops, and 30,000,000 acres, nonfood crops.

These calculations do not take into account wool and hides. Inasmuch as hides are a byproduct of animal production, and wool largely a range and pasture product, changes in production of either would not directly cause a substantial increase in crop acreage.

To summarize: During 1928–32 we harvested approximately 360,000,000 acres of land in crops in the United States. Assuming that we continue to import sugar, flaxseed, and other products as in the past, of this 360,000,000 acres there would be required approximately 280,000,000 acres to produce enough food crops to maintain our present population at a level of food consumption equivalent, either to that enjoyed in the relatively prosperous period, 1925–29, or the "adequate diet at moderate costs" suggested by the home economists.

Nonfood Products

To supply our domestic consumption of nonfood products under analogous conditions, an additional 25 to 30 million acres would be needed. This leaves 50 to 55 million acres of harvested crop land of average productivity to go into exports, into accumulated stocks, to be devoted to the replacement of products we now import, or to be retired from production. To this 50 to 55 million acres of harvested crop land must be added the acreage of crop land which is left unharvested because of price, weather, or other cause, and acreage in idle and in fallow land. In 1929 approximately 10,000,000 acres were left unharvested because of crop failure and another 40,000,000 acres were let lie idle or were in fallow.

Thus the Agricultural Adjustment Administration is faced with a twofold problem. We must first attempt to see that the production of the various crops for domestic use are distributed on the 305 to 310 million acres necessary for that purpose, in such a way as to maintain a proper balance among them. We must, in the second place, attempt to allot and control production on the 50 to 100 million acres of the remaining crop land, which usually goes into export or is allowed to remain idle or fallow, in such a manner as to obtain a maximum advantage or income from export trade, without, at the same time, piling up excess stocks of American products to depress our domestic prices.

In closing I should like to say a little something about our probable order of march on the new trails. Will it continue, in the oldtime pioneer manner, a voluntary march, a march in which no one has to join if he doesn't want to; a march, indeed under which the laws and tenets of the land now permit those who don't want to come along to stay right where they are and snipe, economically, at the organized marchers? Or will we, in terms of a new social and economic pioneering, call voluntarily and insistently for a new sort of social discipline; an order of march wherein everyone has to join, or at least refrain from sniping, if a large majority decide that the time has come to march all together, as one?

Highlights of Progress

(*Continued from page 69*)

during a number of these years by drought which further cut down the yields per acre.

The fact that Nebraska farmers who signed contracts agreed to take 370,000 acres out of wheat production shows very materially the feeling of the Nebraska farmers and may be considered an indicator of their willingness to cooperate with the Adjustment Administration.—Director W. H. Brokaw, Nebraska.

Extension Lays the Cornerstone

Taken as a whole, 1933 was outstanding in its accomplishments under trying conditions. The record of the year surpasses that of any other in terms of people reached and service rendered, in addition to the extra burden caused by the vast amount of farm relief work undertaken. When the new day for agriculture and industry comes, a clear-thinking farm population will be one of the cornerstones of the structure. The extension men and women are definitely helping to lay the foundation and establish this order.—Director J. H. Skinner, Indiana.

Group Leadership

The center table, moved to the wall and combined with a mirror and flowers, has made a decorative feature in this room.

LIVING-ROOM rearrangement as carried on in New York State has satisfied a need felt by the homemakers—the need of more comfortable living conditions for the family at little or no expense. The work is carried on entirely by means of group leadership.

Any woman in the unit who is interested and needs help may join the group. The number of members varies from 4 to more than 15. In very large units the members are divided into two groups.

The group selects the house of one of its members for the demonstration under the specialist. There must be a good variety of furniture and small furnishings in the living room so that the woman may gain a broader experience and get more ideas for future use. She may thus learn how comfortable and attractive a well-arranged living room may be. The hostess must desire a change in her living room and must be open-minded and willing to cooperate.

At the demonstration it is important to point out that the room is to be arranged to fit the comfort and habits of the family using it. To this end the hostess has the privilege of explaining the family's wishes or of vetoing any suggestion that will not work. After these points are determined, the whole group dismantles the room, placing the furniture in the center of the room, and carrying into another room all small furnishings such as clocks, rugs, table covers, lamps, pictures, and ash trays. The rearrangement begins by replacing the furniture. The members of the group make many suggestions and each one is tried until the group decides which arrangement best fits the purpose of the family and also fulfills the artistic requirements. Next the lamps are placed where the group decides they will be the most useful and add beauty to the furniture. The pictures are the third objects worked with and only as many as are needed are hung on the walls. They are placed in position after the group has determined the color, shape, and size best fitted for the spaces in which they will be hung. Lastly, all the remaining objects are placed where the group decides they will add the most comfort, be of the greatest service, and improve the appearance of the room as a whole.

When the women see the homelike, comfortable, and attractive appearance of the completed room and realize that it is the result of their own group judgment, their confidence in their ability to carry on the project is keen.

After this one demonstration, the group has a tour of the other units in the county where houses improved under the direction of the specialist are open for their inspection. As each house has a different arrangement they find that they are able to add to their store of ideas.

The women in each unit then arrange at least six living rooms in their community. They have these rooms finished within a month or 6 weeks after the demonstration, at the end of which time the specialist returns and again meets the group in the several houses they have worked upon. She offers constructive criticism on what the women have done and gives them any further help they may request or need. These leaders are then ready to help their friends and neighbors, as the opportunity arises or requests are made.

The living-room rearrangement meetings have shown the homemaker the possibilities of what she already had on hand and how it can be used to the best advantage. The family now has a better appreciation for what may have seemed to them just old furniture and of which they were often ashamed.

The spirit of neighborliness has increased as members of different communities have worked together at informal meetings.

Florence E. Wright and Charlotte W. Brenan are the housing specialists conducting this project. As a result of their 2 years' effort 27 counties out of 37 have had the project in many of their units. It is still very popular and probably will be carried on for sometime.

Designed for living. Rearrangement brought comfort and beauty here.

Home Demonstration News in the Press

Agent Secures Press Cooperation

NEWSPAPERS in Rochester, N.Y., give a great deal of space to home demonstration work. The weekly schedule appears each week in the same place in the woman's section. Special stories are often played up in the daily papers, and the rotogravure section every now and then carries home demonstration pictures. When the agent, Georgia Watkins, was asked how it was done, she thought a moment, then said:

"Well, it seems to me that in securing the cooperation of the press, the first thing to do is to learn to write a good article. Then know your newspapers; get acquainted with the editor of features for women, the city editor, and the photographer, if there is one. It is always very important to keep faith with the paper, to do what you say you will do at all costs, and do not play favorites; give the same story, written up differently, to each paper. Be alert to recognize news material, especially that of timely interest and wide appeal. For instance, the papers were all glad to send reporters and photographers to get a story of a very old quilt shown during achievement week. In such events as the fall fashion show we use different models for each picture and devote our time to helping the newspaper representatives get what they want and early enough to make the rotogravure section. I know the closing times and dates of all our papers, of course."

The Roanoke Beacon, a progressive weekly in Plymouth, Washington County, N.C., dedicated one of its weekly issues to Miss Eugenia Patterson, home demonstration agent, and her work in the county.

A Weekly Column

"Caught Over the County" is the title under which the home demonstration agent in Menard County, Tex., ran a weekly column of newsy items on home-demonstration work.

Maybe there is nothing in a name, but this agent married one of the Menard County ranchmen and now is a home demonstrator herself.

The interesting way she handled this problem of home demonstration news is shown on the following sample "Caught Over the County" column.

Preparation for a bigger and more efficient canning season is being made by Menard County people and merchants. Last week a carload of 46,000 tin cans was received by Luckenbach hardware stores and other merchants of Junction and Eden. More than a carload was sold last year in Menard County alone. A new style of can is being introduced this season in Menard. It will be used chiefly for vegetables to prevent darkening and discoloring. It is called the C enamel can and is designed especially for corn. A standard enamel can is also on the market to be used for colored foods, but this is the first season that merchants have handled the C enamel can. Merchants are also showing new model cookers and sealers.

. . .

Mrs. George Ford of Saline is showing her friends two new curved walks and a stepping stone path that cost only the labor of the men around the place. The walks are made of big, flat rocks and have artistic curves to the front and back gate.

. . .

Miss Viola Dodd, bedroom demonstrator for Saline Girls Club has just built a new clothes closet with dimensions of 2½ by 6 feet. The closet is built on the back porch and opens into the bedroom, not affecting the size of the room.

. . .

Well-made American cheese has been the object of all county demonstration clubs, but Palmer seems to be leading in extension of the work. Mrs. Irby McWilliams, as chairman of the cheese expansion committee, says that they plan to reach every family in their own community with information as to how to make excellent cheese and give some of the surrounding communities the recipes also. The clubs plan to reach every family in the county that has not had a chance to make this excellent live-at-home product at a minimum expense during a plentiful milk season. Cheese can be safely made as long as the weather is mildly cool, but in warm weather it doesn't cure so well.

Local Talent Chautauqua

THE idea "clicked" and 3,200 of the county's 6,069 men, women, and children attended the 3-day Chautauqua. It was something new in the way of local entertainment. The idea came to Bob Clarkson, formerly county agent of Teton County, Mont., when someone suggested a home-talent play for presentation in rural communities of the county.

Teton County is almost twice the size of the State of Rhode Island, just about as big as Delaware, and right in the lap of the Rocky Mountains which form the county's western boundary. The 1930 census listed 6,069 as the total population; 1,220 is the number given to Choteau, the county seat.

Bob Clarkson believes that country people like entertainment and recreation just like other folks. Every summer he has held recreational meetings in the various communities of the county, which now have a firm foothold in the county.

Once the idea of a "Choteauqua" was conceived it was not a difficult matter to obtain the backing of the home demonstration council, the Lions Club, the County Recreational Association, the Farmers' Union, and Choteau Women's Club. From that point on, it was a matter of organizing the available talent and arranging the program.

Two local women, especially interested in young people's work, agreed to manage a junior Chautauqua during the mornings. This was followed by afternoon and night performances on each of the 3 days. The program for the second afternoon and evening will give some idea of the talent displayed, which included community singing; address by Dr. Alfred Atkinson, president of Montana State College; fiddlers' contest; vocal and instrumental solos; and the Virginia jubilee, a minstrel show. There was only one importation on the program, Dr. Atkinson; the others were all from Teton County.

A committee made up of one representative from each of the cooperating groups, appointed one member to be in charge of ticket sales and advertising. The season tickets were 25 cents for the 3 afternoon performances and 50 cents for the 3 night shows. After all expenses were deducted a nest egg of $100 is there to start next year's "Choteauqua."

Will there be another "Choteauqua"? Bob Clarkson says, "There never was a greater need for wholesome recreation. Economic conditions are such that people do not have the money to buy their fun, and here is a way they can create their own entertainment and their own recreation. I believe the home-talent Chautauqua idea has taken such hold here that it would be difficult to replace it with commercial entertainment."

The Farm Home and the Child

Home Adjustments to Facilitate Better Training Made in Many Counties

California

Each agent was encouraged to base the child-development program for her county or parents' group on whatever subject-matter foundation she was most secure. Where nutrition or children's clothing, home furnishing, yard planning, or home management was used as a basis for the child-development program, the agent used the method demonstration while the group provided the practical problems for discussion.

In Merced County the child-development and parent-education project was planned to fit the homes in the county to the needs of a child. This was carried on in two ways—first, by weaving the child-development phase in with the regular demonstration for the month; second, by having some special features and discussions on meeting the needs of the child through better equipment.

The nutrition project offered the subject of "Yeast breads", which included a study of wheat germ as a source of vitamin B for children. The home-furnishing project presented the problem of window treatment, bringing out such points as placing the windows low enough for the child to look out, and using washable inexpensive draperies.

The special features were an institute in which the morning was devoted to the child-development and parent-education program, conducted by the specialist, and the special problems of eating behavior in the afternoon. Another meeting in May was devoted to play equipment. In November, a discussion on equipping the home for the child was given in each home demonstration group. This meeting was held in the home of a demonstrator who had equipped a room for her children. After the discussion, the women were taken to see this room and observed how the mother had added equipment to the child's room which would help the child do things for himself.

Massachusetts

Approximately 350 mothers in Franklin County scored their homes in relation to their children's welfare in order that they might find to what extent their home was adequate and what opportunities there were for improvement.

Montana

Mrs. Florence Elliott of Valley County uses toys at each home demonstration meeting. A kit of well-selected toys is carried around to all the meetings. The toys are given to the children whose mothers are at the meeting to play with while the demonstration or talk is in progress. The value of toys is well demonstrated by the interest and enthusiasm exhibited by the youngsters who eagerly watch for "Mrs. Elliott's toy box." The primary reason for this toy kit was to keep the children busy and quiet during the meeting. It has offered splendid opportunities, however, for real education regarding toys.

Parents are providing equipment for their children that will encourage initiative.

Illinois

Last year more than 438 homes in 11 Illinois counties made some adjustment in their home equipment so that it better fits the needs of a child. Some of the changes made were fixing a playroom; providing small table and chair for eating; making space for play corner in the dining room; lowering hooks for clothing; arranging shelves for toys and books; providing individual towels, glasses, and footstools; buying an old washstand for the boys to keep their toys in; and making a toilet chair for a 2-year old.

Minnesota

In Nicollet County, the specialist is attempting a group composed of mothers and fathers. At the organization meeting she offered to lead a group where both men and women signed the enrollment blank. In one community an enrollment blank was sent in to the county office with the names of 8 women and 12 men. Two meetings have been held with this group, and each time several other men and women have also attended—the last time 20 women and 17 men. So far, the specialist has not attempted formal discussion, feeling that the group needed to be helped to feel comfortable together, as they are all farm people and unaccustomed to planned discussion. Much interest has been shown.

Kansas

One unit in Montgomery County put up a very fine booth on equipping the home for the child and showed it at the Montgomery County Fair and the Farm Bureau Fair. It was viewed by at least 10,000 people.

Oklahoma

The State Library Commission has cooperated by providing a "Child development library" for each county enrolled in this project. Some city libraries made special provision for lending books to farm women without asking the customary charge to out-of-city borrowers.

For 2 years the two State fair associations (Tulsa and Oklahoma City) have cooperated by providing for child-development exhibits and for premiums for them at these two State fairs. These have been educational exhibits and have interested large numbers of fair visitors.

The number of homes making at least 6 adjustments in furniture to meet the needs of children was almost twice as many last year as in the previous year, with 638 homes reporting such changes in 1933 and 340 in 1932.

COUNTY agricultural agents, home demonstration agents, and other interested persons will have the opportunity to obtain a number of graduate courses which have been especially adapted for their use. Cornell University is offering these courses between July 9 and August 17, 1934. Special attention will be given to the problems of extension workers and leaders. The courses will cover the following subject matter: Parent groups in extension, household management, household art, oral expression, and extension organization, administration, policy, and county program building for agriculture.

County Zoning Helps Land Use

IN THE FALL OF 1932 the extension workers of Wisconsin met the problem of land utilization squarely with a well-planned and carefully balanced system of county zoning.

Many county budgets in the State were "unbalanced", taxes were delinquent, taxes were high, and county funds were low. Farmers had moved to cut-over land or broken new ground, some of which was undoubtedly unfit for farming activities. Farmers on the best land have had to scrape to pay taxes these past few years, and these farmers on land or broken new ground, some of make the payment.

Study and discussion of the problems led to a classification of land according to its best use. Maps were prepared of various sections, showing soil types, contour, and many other factors which might influence the use of such land. Facts which heretofore had been ignored or dismissed with blind faith in the old theory that the "plow follows the ax" were suddenly brought into a new light.

Cities have been zoned, why not zone the use of agricultural land. This is the suggestion which finally led to a conclusion, believed to be a logical solution to the problems.

The enactments of rural land-zoning ordinances by the county boards of Oneida and Vilas Counties are largely the result of joint efforts on the part of the extension service, the conservation commission, and other State agencies working with local people. These ordinances, authorized by State law, enable the counties to control the settlement and use of lands outside the villages and cities.

That this problem of control of land uses is considered vital to the future of these counties is reflected in the fact that 16 other counties were considering the enactment of similar zoning ordinances at the end of 1933.

Zoning in all of these counties will involve the classification of land by land-use districts. Such a classification will make it possible for counties to prohibit land clearing and year-long residence in those "use" districts where such settlement would result in exorbitant taxes on other taxpayers. The State law provides for home rule by requiring the approval of each town board concerned before the ordinance becomes effective.

To promote a better understanding of the zoning plan a member of the extension service of the Wisconsin College of Agriculture has taken part in the meetings which have been held in every township where zoning has been under consideration during 1933. This procedure has enabled taxpayers to more intelligently advise their town officers as well as giving them a voice in the matter of providing additional roads, schools, and other facilities in the newly established farming sections. Because of this home rule feature the zoning ordinances have been endorsed in every county where they have been under discussion in township meetings.

Much of the land which has been judged unfit for farming purposes is being reforested. Nine Civilian Conservation Corps camps, engaged in erosion-control work, have been active in this work. Some of the land has been set aside to be used as State recreational parks.

What Home Demonstration Agents Do

Just a few incidents in the daily life of the home demonstration agent as she goes about her business of advising and helping farm women with their home problems. Here she is giving advice over the telephone, helping a farm woman plant shrubs for screen plantings, holding a home-management meeting, and assisting farm women in selecting cooking utensils.

One-Variety Cotton Communities

ONE WAY to eliminate the price-depressing effect of a crop surplus is to lift more of that crop into the high-quality class, which does not have to compete with the bulk of the crop. That is an agricultural adjustment that fits neatly into the national program.

In Pottawatomie, Custer, Okfuskee, and Haskell Counties, Okla., cotton growers are making that adjustment in cotton by standardizing on single-community varieties, growing and saving clean seed through 1-variety gins, and collecting premiums for staple of acceptable, uniform length and character. Pawnee County has just organized a 1-variety community.

Back of the work in Oklahoma is the Oklahoma Cotton Council, in which the State Extension Service and the Experiment Station staff, the Oklahoma Crop Improvement Association, and, of course, county agents, are active. In a number of places vocational agriculture teachers also have aided.

The Oklahoma Cotton Council grew from a conference called in 1931 by D. P. Trent, then director of the Oklahoma Extension Service. One of its earliest projects was the 1-variety community. This program called for about 5,000 acres blocked by 100 to 150 farmers pledged to grow one variety, gin at one gin, and buy cooperatively 3,000 to 5,000 bushels of seed.

Staple length of cotton ginned to Dec. 1, 1933, by percentages

Staple length	Oklahoma	All single variety gins	Shawnee	McLoud	Stigler	Weatherford	Weleetka
Under ⅞ inch	5.4	0.2		1.0			
⅞ to 1 1/16 inch	30.0	4.6	1.2	5.8	5.9	6.5	3.9
1 1/16 to 1 3/16 inch	49.1	54.6	36.5	25.2	66.2	67.5	71.6
1 inch and over	15.5	40.6	62.3	67.9	27.9	25.0	24.5

The report of grade and staple investigational work carried on cooperatively by the Oklahoma Experiment station, the Department of Agriculture, and ginners of the State tells the story for 1933.

Pottawatomie County, heart of the central Oklahoma cotton area, quickly undertook the 1-variety plan. County Agent James Lawrence held 40 community meetings attended by 1,760 people. A Shawnee bank financed the purchase of 8,000 bushels of seed. Three special seed-production plots were started. The multiplication of this seed has given 35,000 bushels of No. 1 seed, the best and largest supply the county has ever had.

"This year we had 653 farmers supporting this project with 13,600 acres after the plow-up campaign", County Agent Lawrence said. "This acreage was divided into three gin units. These, up to November 20, had ginned a total of 3,250 bales of 1-variety cotton, with 500 to 600 bales going outside."

"In spite of handicaps of a bad cotton year", Mr. Lawrence said, "1-variety producers received $2 to $3 a bale premium over custom-run cotton sold on the same market. A few members lost interest and will drop out, but present indications are that we will gain 4 new ones to every 1 lost."

L. W. Osborn, Oklahoma extension agronomist; County Agent Phil Rogers, and Harry Chambers, vocational agriculture teacher, helped organize the Weatherford community in Custer County with 4,441 acres signed up. Beginning late last year, growers pooled their cotton and netted at least $2.50 a bale over the local price.

At Weleetka, Okfuskee County, County Agent W. B. Gernert had the support of merchants and cotton buyers in the 1-variety program. One-variety cotton brought a premium price. The news of good cotton prices spread. Much cotton came in from tributary territory; but only the 1-variety cotton received the premium. The lesson of that is expected to spread, too.

Three years of work were culminated in Pawnee County in the recent signing of 6,000 acres to be planted to one variety, County Agent A. R. Garlington reported. The Pawnee Chamber of Commerce cooperated by furnishing pure seed on a return-two-for-one-basis to 4-H club and vocational agriculture students. The accumulated seed was sold to adults.

At a Pawnee community meeting, Mr. Garlington reported 16 to 40 farmers were growing Oklahoma Triumph 44. No two grew any other one variety. All voted for the "Early Triumph", as they call it. So it was throughout the campaign. "This speaks, of course, for two things—the experimental work conducted by the A. & M. College and the preliminary work done in introducing and popularizing this variety", said County Agent Garlington.

"Perhaps the greatest need in forwarding cotton improvement through the single-variety community", Mr. Osborn said, "is the work of a man who can devote his full time to that program."

A News Clipping From Minnesota

Sherburn, Minn., January 31: It takes more than a good fire next door to overcome the interest Martin County farmers show in the Federal Government's corn-hog production control program.

Gathered to listen to County Agent A. S. Karr explain the plan, the farmers were interrupted by a fire which destroyed an adjoining cafe and pool hall.

Some suggested that the meeting adjourn, but one farmer shouted: "That fire can't get through a brick wall. Let's go ahead. This corn and hog thing looks good to us."

Not a farmer left until Karr finished his talk.

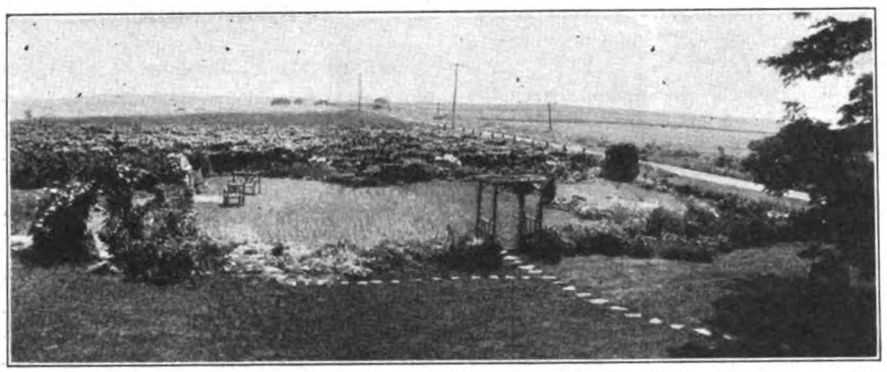
ILLINOIS boys' and girls' 4-H clubs have definitely planned as a part of their 1934 activity the "dressing up" of certain highways. They have a program of planting which is the result of their home-beautification projects. Road intersections will be made pleasing to the eye by the planting of trees and shrubs. The cooperation of the State highway department has been obtained, and it is believed that this improvement will encourage tourist trade.

NEW YORK State extension workers are aiding the farmers in holding three meetings with the idea of explaining farm-debt adjustment. In 35 States, 1,200 counties have now made plans for such debt adjustment. This is an attempt to bring about an agreement between the creditor and the debtor. Individual attention is given to all cases and consideration is given where most deserved.

THERE were 8,672 boys and girls enrolled in 985 local 4-H clubs during 1933 in South Dakota. Training was given to 103 judging teams and 212 demonstration teams. More than 4,085 exhibits were made at local and State fairs and shows.

Landscape Improvement in New York

DURING the past few years many New York farmers and their families have found time to put some energy into improving their home grounds. For some, it did not pay to plant all of their usual crops, and this gave an opportunity for other work. They wisely decided that they could benefit by spending this extra time improving the appearance and value of their properties by landscape planting.



This garden was awarded first prize in the State competition for 1933. Eighteen months before this picture was taken this space was a part of an old rhubarb and berry patch. The only cash outlay on this garden was about $20 which the housewife had received for exhibits at State and county fairs. No part of this sum was expended for labor, as all work was done by the contestant with a little assistance from her family.

The interest shown led to the development of landscape contests in several counties. The first contest was in Monroe County in 1930, which met with such success that the following year two more counties decided on similar plans. In 1932, 6 more counties joined, and last year 2 others followed suit A year ago the State federation of farm and home bureaus, the 4-H clubs, and the American Agriculturalist united to help make this a State-wide project. More than 500 farm homes have been improved in these counties, and the work is now spreading to other counties.

A few of the contestants spent a moderate amount of cash but most of them spent very little or nothing. On some places the lawn needed attention. If there was too much shade for a good lawn a few of the poorest trees were removed; or, if the lawn was uneven some soil was brought in from a field to level it. The purchase of a few pounds of good grass seed was the only expenditure. Many placed ornamental shrubs on the property, but they were not properly located. During the next planting season they were taken up, some of them divided, and transplanted to more desirable locations. In some places, good native plants were obtained from nearby woodlots. Many of these could be used in border and screen plantings at no cost to the owners except their own time. For those who expressed a preference for nursery-grown stock, suggestions were made as to suitable varieties.

New Film Strips

SIX new film strips as listed below have been completed by the Office of Cooperative Extension Work in cooperation with the Farm Credit Administration, and the Bureaus of Agricultural Economics, Agricultural Engineering, Animal Industry, Chemistry and Soils, and Home Economics. They may be purchased at the prices indicated from Dewey & Dewey, 7603 Twenty-sixth Avenue, Kenosha, Wis., after first obtaining authorization from the United States Department of Agriculture. Blanks for this purpose will be supplied upon request to the Office of Cooperative Extension Work.

Series 207, Poultry in the Live-at-Home Program. Illustrates simple and inexpensive poultry-husbandry practices and encourages the use of eggs and poultry meat in the diet. The series was prepared especially for use in the Southern States by extension workers and others introducing poultry in the live-at-home program. 34 frames. 28 cents.

Series 210. Farm Fire Losses—A Challenge to Farmers. Illustrates the seriousness of annual losses from fires on farms, the main causes of fires, and recommended practices for their control. 47 frames. 28 cents.

Series 316, Controlling Parasites of Chickens. Illustrates sanitary methods of chicken-parasite control developed by scientists of the Department of Agriculture. 24 frames. 21 cents.

Series 318, Gully Control and Terracing Experiments, Erosion Experiment Farm, Bethany, Mo. Supplements Farmers' Bulletin 1669, Farm Terracing, and illustrates gully-control and terracing experiments on the Erosion Experiment Farm, Bethany, Mo. 47 frames. 28 cents.

Series 320, Making Hooked Rugs. Illustrates the basic information on the making of hooked rugs, including photographs of equipment, materials, types of design, methods of procedure, and ways of finishing the rug. 53 frames. 35 cents.

Farm Credit Administration Series 1, Applying For Production Credit. This series was prepared for staff members of the Farm Credit Administration, extension workers, teachers of vocational agriculture, and others, and illustrates how farmers can obtain production credit from a local production credit association. 34 frames. 28 cents.

Revised Series

The following series have been revised:

Series 116, Beautifying the Farmstead. Supplements F. B. 1087, Beautifying the Farmstead and illustrates some of the more important things to be observed in planting home grounds on the farm. The series was prepared in cooperation with the Bureau of Plant Industry. 61 frames. 35 cents.

Series 303, Demand Outlook Charts, 1933–34. Illustrates selected charts with brief titles prepared by the outlook committee of the Bureau of Agricultural Economics. The explanatory notes should be supplemented with the agricultural outlook reports issued by the Bureau and by the States for the current year. 43 frames. 28 cents.

Series 306, Dairy Outlook Charts, 1933–34. Supplements the 1934 outlook report on dairying. 52 frames. 35 cents.

Series 317, Economic Facts for the Farm Home. Supplements Miscellaneous Extension Publication No. 7 on the same subject. The publication, which may be used as a syllabus, and the film strip are intended to help farm families to a better understanding of the present economic situation and how best to make needed adjustments to meet this situation. 78 frames. 42 cents.

Georgia Woodlands

Before and after trees were planted in Hart County, Ga., demonstrations were started here in 1929 and 1930 with 60 acres reforested. The seedlings set in 1929 average 10 feet in height and slash pine growing 200 miles north of its natural range in Hart County put on 50 inches of growth in 1933. Forty-four farmers continued the good work this year by planting 113,000 additional pine seedlings during the week of March 5, 1934. These were set at the rate of 850 per acre.

GEORGIA has an average of 33 acres of woodland for every farm in the State, a total of 8,372,937 acres of timber which, according to the last census figures, returned $8,862,000 to Georgia farmers for farm-cut timber.

Georgia has developed a reforestation project. All production adjustment contracts have recommended reforestation as one of the uses of the retired acres.

Information obtained from a questionnaire sent to the county extension agents during August 1933 showed that there were 1,637,800 acres which should be reforested. More than 14,500 acres have been planted to slash pine (Pinus caribaea) and 190 acres to loblolly pine (Pinus taeda). The State forestry nursery has sold, for this year's planting, 160,000 slash, 90,000 longleaf, 40,000 loblolly pines, and 6,000 black locust seedlings. As about 850 seedlings are planted to the acre this means that Georgia will have a grand total of about 16,000 acres that have been artificially reforested between 1925 and 1934.

The importance of tree growth on the land has been given a new meaning during the last few years. Trees control soil moisture, prevent erosion on steep slopes, and have a money value as a farm crop. The floods which have taken such a heavy toll of life and land during recent years have gone far in bringing the attention of the public to the importance of trees as a measure of flood protection and control.

The protection offered to the birds which annually kill as many insects as some of our most efficient sprays, is no small part of the value of the farm woods. Without this natural protection from harmful insect pests it is hard to tell just what the annual loss would be or how successful man could be in combating such odds.

Now that the Government has offered to rent acres taken out of the production of cotton, tobacco, and corn this plan of reforestation offers a new opportunity. Trees are the best possible means of controlling erosion on the steep slopes. With farming once more headed for more prosperous times and a great many of the needed repairs now receiving attention, the making of fence posts shows another value of the farm forest or woodland.

Even though the direct cash return may seem slow, farm woodlands have more than just the timber value. They may be planted for windbreaks, shade for livestock and poultry, for the control of soil erosion, and they play an important part in a plan of proper land utilization.

Virginia's Canning Budgets

NEARLY 7,000 Virginia women made and carried through a canning budget last year. The influence of these canning budgets is seen in the increased number of cans of tomatoes, other vegetables, and meats put up and the decreased amount of jam, jellies, and pickles. Here's how the Virginia canning budget has looked for the last 3 years.

Foods canned	1931, 2,381 budgets	1932, 3,786 budgets	1933, 6,991 budgets
	Percent	*Percent*	*Percent*
Fruits	38	37	24
Tomatoes	10	15	30
Other vegetables	18	25	35
Pickles and relishes	33	21	7
Meat	1	2	4

Of course, relief gardening has had much to do with the increased amount of canning done last year, but is not entirely responsible for the increase of 389 percent from 1932 to 1933, with more than a million jars of food preserved. In addition, 237,593 pounds of fruits and 238,383 pounds of vegetables were dried.

ARKANSAS farm women added $8,450 to the family income through the operation of six home demonstration club markets. The markets were organized in towns too small to support a regular curb market, usually towns of from 4,000 to 10,000 population. Regulations were established to assure a definite quality and quantity of produce.

IN LINE with the present agricultural adjustment, Ohio has organized a "Use more butter committee." The members of the committee are those people interested in the problem of dairy surpluses. The committee will attempt to reach every farm home in the State with a pledge that more dairy products will be used on the farm table.

CAMP GILBERT, the 4-H leadership training camp of the Massachusetts Extension Service, is accomplishing its purpose. There are 77 percent of the 1933 campers who are taking an active part in the leadership of 4-H clubs, granges, scouts, and other organizations. Those in 4-H club work made up 69 percent of the total. When a questionnaire card was sent to the 1933 campers, 90 percent, or 108 out of 119, of them made reply.

From the 1933 group, 58 were in high school, 16 were in college or other schools, and 35 were working or staying at home. Active club members total 22, club leaders total 55, assistant club leaders 21, and 8 of them are leading other activities.

GRACE DeLONG, home demonstration leader for the North Dakota Extension Service, reports a total of 519 homemakers' clubs with an enrollment of 8,683. Fifty-one new clubs were organized and 819 new members enrolled during 1933.

A Farm Income Study

A SURVEY study has been made in South Carolina covering the source, amounts, and use of the annual income of 46 farm families, located in 6 counties of the State. The survey was started in 1932, at the suggestion of the State home demonstration staff.

Three agencies cooperated in the project, the United States Department of Agriculture through its home economists, the South Carolina Experiment Station through the home economists, and the Extension Service through the State home demonstration agent. The home economist of the Department of Agriculture entered into the formulation of plans and furnished the account forms used. The State home economist conducted the survey, making from two to six supervisory visits to each of the counties. She kept monthly and yearly tabulations and was in touch with the cooperating women through frequent letters. The home demonstration agent selected the counties and the women to undertake the work. Through the county home demonstration agents she collected the monthly account sheets and turned them over to the State economist.

The purpose of the study was to measure the adequacy of rural family income and living and to determine the relationship of success of income to its adequacy, the customs in regard to saving, the methods of planning expenditures, if any, and the quality and character of the living furnished by the farm.

The results shown by the home economist of the experiment station in her report are as follows:

The size of the average family was 4.5 persons and the average income was $554.45 per family or $121.45 per person. The range of income in the 46 families was from $92.50 for a family of 6 to $1,987.39 for a family of 9 persons.

The sources of incomes when analyzed showed that 25 percent of the cash was mainly the result of efforts on the part of the homekeeper, 23 percent of the income was directly from the farm, 44 percent was derived from other sources, and the remainder from the sale of investments or from money borrowed.

The income reported from the homekeeper was gained largely through club market sales. The women contended that their care and work were the chief factors in the production and sale of these commodities. Revenue from this source resulting from the efforts of the homekeeper, constituted almost all of the available cash income in some of the homes.

The fact that less than one fourth of the total amount spent by these farm families for food, clothing, shelter, and the other basic needs came from the business of farming, calls attention to the low profits and price of farm products.

Cash Income

The average cash income reported for family needs was small; nevertheless, the total average expenditure for the group was well within the total average cash income. Purchases for the family needs were not made unless the cash was available for the contemplated outlay. Debts for the current expenses of the home were rarely incurred. The unpaid obligations reported had to do mainly with the business of farming.

It was found that 76 percent of the food consumed was produced on the farm, the remaining 24 percent being purchased. These percentages are based on the value of the food consumed, that produced on the farm, and that purchased with cash. The average value of food produced on the farm, per family per year, and used on the 46 family tables was $274.98. Cash food purchases amounted to $98.93 for the average family.

The cost of clothing in the average family was 14.4 percent of the average cash income.

Twenty-five families, or 54 percent of the total, reported savings or investments, monthly, in the form of life insurance.

No accurate check was kept of the kind and amount of food consumed in the early part of the survey. Therefore, it is not possible to estimate the energy or nutritive adequacy of the diets for the year under consideration.

National 4-H Club Radio Program

Annual Theme: 4-H Club Work Influences the Farm and Home

Seventh Phase—Sons and Daughters Work in Partnership with Parents

Saturday, July 7, 12:30 to 1:30 p.m., Eastern Standard Time

In Business With My Father	4-H club boy from Virginia.
How My 4-H Club Work Helped with the Family Budget	4-H club girl from New Hampshire.
Most Successful Club Work Dependent Upon Cooperation of Parents	Local 4-H club leader or parent of club members from New Hampshire.
Interesting 4-H Club Happenings	Florence L. Hall, U.S. Department of Agriculture.
Music We Should Know—Seventh Phase of the 1934 National 4-H Music Hour—Featuring compositions by Hadley, Rimski-Korsakov, Albeniz, Offenbach, Mascagni, and Di Capua	United States Marine Band.

New Radio Program Established

A new monthly radio feature to be known as the "Home Demonstration Radio Hour" has been established by the United States Department of Agriculture in cooperation with State agricultural colleges, and the National Broadcasting Co. This program is being broadcast from 12:30 to 1:30 p.m., eastern standard time, on the first Wednesday of each month over a network of 48 radio stations. The first program of the new series was broadcast on June 6.

The Home Demonstration Radio Hour has been designed to acquaint farm women with the opportunities that home demonstration work gives them.

Important phases of the work being carried on with farm women will be presented by county extension workers, farm women, Federal and State extension officials, home-economics specialists, prominent educators, and other persons having a message for farm women.

Among the themes that will be developed during the monthly radio programs are: Home improvements that the family can make; safeguarding health in home and community; maintaining living standards on small incomes; work and recreation for the farm homemaker; satisfactions in farm life, and the like.

A musical program consisting of compositions suitable to the character of the broadcasts will be included in the Home Demonstration Radio Hour. The music will be played by the Homesteader's Orchestra of the National Broadcasting Co.

Mrs. Roosevelt on Home Demonstration Work

THE Extension Service centering in rural homes is of tremendous value in helping people to live happily and justly. For a while, we put all of our emphasis on making money, but now we are putting much more emphasis on how to use our time. We must have money to keep going but after that achievement we still have the tremendous problem of living satisfactorily to ourselves. It is this problem which such home demonstration leaders as Martha Van Rensselaer of New York have sought to aid in solving. In honoring Miss Van Rensselaer, I would like to pay tribute as well to those other agents and leaders of home demonstration work throughout the United States who are carrying on the same ideals.

Eleanor Roosevelt

From the statement made by Mrs. Roosevelt at the dedication of Martha Van Rensselaer Hall Ithaca, N.Y., February 15, 1934

AIDS IN HOME IMPROVEMENT

IMPROVEMENTS in homes are portrayed and discussed in illustrative material and bulletins prepared by the Bureau of Home Economics and the Extension Service. The following list gives some of the available material which extension workers may find valuable in their home-improvement work:

FILM STRIPS

The Farm Water Supply. *No. 104 at 28 cents.*

Making Hooked Rugs. *No. 320 at 35 cents.*

Beautifying the Farmstead. *No. 116 at 35 cents.*

Plumbing for Farm Homes. *No. 189 at 28 cents.*

First Aid in Window Curtaining. *No. 209 at 35 cents.*

Come into the Kitchen. *No. 238 at 35 cents.*

Livable Living Rooms. *No. 285 at 35 cents.*

Farm Sanitation. *No. 105 at 28 cents.*

Good Equipment Saves Time and Energy. *No. 274 at 35 cents.*

Good Posture for Health and Beauty. *No. 252 at 35 cents.*

Consider the Children in the Home. *No. 315 at 35 cents.*

BULLETINS

Slip Covers. *Leaflet 76.*

Farm Plumbing. *F.B. 1426.*

Window Curtaining. *F.B. 1633.*

Convenient Kitchens. *F.B. 1513.*

Farmstead Water Supply. *F.B. 1448.*

Beautifying the Farmstead. *F.B. 1087.*

House Cleaning Made Easier. *F.B. 1180.*

Quality Guides in Buying Sheets and Pillowcases. *Leaflet 103.*

PORTFOLIOS

Each portfolio is made up of several mounted pictures laced together, and is available as a loan for short periods from the Bureau of Home Economics.

A New Deal for Old Furniture.

Built-in Storage Spaces.

Rug Designs.

Rug Equipment and Materials.

Making Hooked Rugs.

Extension agents may procure supplies of this material from the Extension Service of the United States Department of Agriculture. Orders should be sent through the office of the State extension director.

EXTENSION SERVICE
United States Department of Agriculture
Washington, D.C.

U. S. GOVERNMENT PRINTING OFFICE: 1934

Extension Service Review

VOL. 5, NO. 6 JUNE 1934

THE SMITH-LEVER ACT OF 1914, WHICH CREATED THE NATIONAL EXTENSION SYSTEM OF RURAL EDUCATION, BEARS THE NAMES OF REPRESENTATIVE A. FRANK LEVER OF SOUTH CAROLINA (LEFT), AND SENATOR HOKE SMITH OF GEORGIA (RIGHT)

ISSUED MONTHLY BY THE EXTENSION SERVICE
UNITED STATES DEPARTMENT OF AGRICULTURE
WASHINGTON, D.C.

FOR SALE BY THE SUPERINTENDENT OF DOCUMENTS, WASHINGTON, D.C. - - - - SEE PAGE 2 OF COVER FOR PRICES

In This Issue

THE illogical statement has frequently been made that agricultural science tends to stimulate production and consequently less research is needed in view of large surpluses now existing of agricultural commodities. In his article, Secretary Wallace explains clearly why there is no conflict between efficient agricultural production and the objectives of the agricultural adjustment program.

JANE S. MCKIMMON, State home demonstration leader of North Carolina, one of those who has been active in extension work for 20 years and more, gives a comprehensive statement of some of the fine things farm women have done as a result of demonstrations in their homes.

THE training of project leaders has brought much satisfaction to farm women of Nebraska. Mary Ellen Brown, State home demonstration leader of Nebraska, says that in this development, women have found that they have initiated executive ability and latent talents of which neither they nor their families had dreamed and they have gained satisfaction in increased self-confidence and poise.

WHAT has been accomplished by cooperative extension work during the 20 years that it has been a national educational force in the lives of farming people? Nine directors of extension, who have been carrying on the work these two decades, give us what they consider to be the greatest achievements.

A HIGH type of leadership among rural women has been developed in Iowa as a result of home demonstration work. Neale S. Knowles, State home demonstration leader in Iowa, tells us what agents are doing to carry on their work more efficiently as a part of the adult-education program.

Contents

FROM A supply of milk so small that only a few farmers had enough to supply their own tables to an income of $221,000 from the sale of cream is only one of the changes that have taken place in Rockcastle County, Ky., since 1914. County Agent Robert F. Spence then rode "Kentucky Bird" along the creeks and branches to see men who had never heard of crop rotation or legumes. Now thousands of acres of grasses and legumes grow there.

On The Calendar

Association of Agricultural College Editors, St. Paul, Minn., July 24–27.

4-H Short Course, Storrs, Conn., July 22–29.

Farm and Home Week, Amherst, Mass., July 24–27.

Annual 4-H Short Course, Raleigh, N.C., July 25–30.

Farmers' Week, Storrs, Conn., July 30 to August 3.

Tri-State Fair, Amarillo, Tex., September 15–21.

Eastern States Exposition, Springfield, Mass., September 16–22.

National Grange Convention, Hartford, Conn., November 14–23.

THAT extension work has stood the test of time is evident from the confidence farmers have shown in the advice of extension agents over a period of 20 years. Dr. C. B. Smith, assistant director of the Extension Service, discusses some of the outstanding accomplishments of extension workers in helping farmers and homemakers to make their farming operations efficient and in improving their homes.

CHESTER C. DAVIS, Administrator, Agricultural Adjustment Act, in discussing the weather, the farmers, and the Nation's food, calls our attention to the fact that agricultural adjustment payments are based on past average production and, hence, the amount of the payments is not diminished by a crop failure. He indicates that the A.A.A. program is the greatest farm crop insurance operation ever undertaken anywhere in the world.

JUNE 30 of this year marks the end of the first 20 years of cooperative extension work on a national basis. This issue of the EXTENSION SERVICE REVIEW is an anniversary number dedicated to the unselfish, untiring efforts of extension workers in the interest of improving farming and farm life during this 20-year period.

THE EXTENSION SERVICE REVIEW is issued monthly by the EXTENSION SERVICE of the United States Department of Agriculture, Washington, D.C. The matter contained in the REVIEW is published by direction of the Secretary of Agriculture as administrative information required for the proper transaction of the public business. The REVIEW seeks to supply to workers and cooperators of the Department of Agriculture engaged in extension activities, information of especial help to them in the performance of their duties, and is issued to them free by law. Others may obtain copies of the REVIEW from the Superintendent of Documents, Government Printing Office, Washington, D.C., 5 cents a copy, or by subscription at the rate of 50 cents a year, domestic, and 75 cents, foreign. Postage stamps will not be accepted in payment.

C. W. WARBURTON, *Director* C. B. SMITH, *Assistant Director* L. A. SCHLUP, *Acting Editor*

Extension Service Review

VOL. 5 WASHINGTON, D.C., JUNE 1934 NO. 6

Research and Adjustment March Together

HENRY A. WALLACE
Secretary of Agriculture

THERE is supposed to be a conflict between agricultural science and the need to adjust agricultural production. Agricultural science enables farmers to increase crop yields per acre, and increase the output of meat and milk per unit of feed consumed. As the users of agricultural improvements increase in number, output increases until prices fall. How can all this be reconciled with the need to make supply and demand balance?

This is an old puzzle, often solved. Again and again, people bring it forward as if the solution were unknown. With an air of drawing attention to an unperceived anomaly a newspaper writer recently declared himself amazed that the technical branches of the United States Department of Agriculture should operate at full blast to perfect crop and livestock production, while the Adjustment Administration labored simultaneously to cut down the production of cotton, wheat, corn, hogs, tobacco, and other products. Here, he said, we have futility on a scale worthy of a Greek tragedy.

What would happen were farmers to abandon science, or even to use it with greatly decreased efficiency? They would have to continue plowing, sowing, and reaping. But they would use poor machinery, poor technique, and poor seed. They would allow pests and diseases to ravage their crops and would harvest inefficiently what remained. By so doing they would certainly reduce the output. But they would do so at a cost ruinous to themselves. They would increase their unit costs of production out of all proportion to any conceivable gain in prices.

Efficiency Not Enough

From its start the United States Department of Agriculture, the State experiment stations, and State extension services have promoted efficiency on the farm. Efficiency in the old sense of the word, however, is not enough. As farmers well know, profits cannot be obtained just by improving plants and livestock, by fighting diseases and pests, or by reducing the wastes of marketing. Ordinary technical efficiency reduces only the cost of production. Low cost production may mean loss to the farmer if it is excessive production. Under present conditions it is necessary also to adjust the output to a changed world market.

H. A. Wallace.

Action taken under the Agricultural Adjustment Act of 1933 enables farmers to plan their production. It seeks to transform blind competition into broad-visioned cooperation, and to correct the result of previous mistakes. In the meantime scientists continue their research in various problems of farm production. These two kinds of departmental activity must march together.

More Science Needed

Agriculture needs not less science in its production, but more science in its economic life. It is possible to have a full science, embracing the distribution as well as the production of wealth.

In the last year our farmers have taken their first steps toward matching efficiency in production with efficiency in economic adjustment. As they proceed along this path, they will realize that the more they have of the one type of efficiency, the easier they will find it to achieve the other. The reason is plain. Efficient production is more dependable, and therefore more easily controlled than inefficient production. By emphasizing economic and technical problems equally, and by indicating their interdependence, the Department advances upon a logical path, in which its various activities are wholly consistent one with another.

Economic Machinery Required

We might just as well command the sun to stand still as to say that science should take a holiday. Science has turned scarcity into plenty. Merely because it has served us well is no reason why we should charge science with the responsibility for our failure to apportion production to need and to distribute the fruits of plenty equitably. That failure we must charge squarely to organized society and to Government. We need economic machinery corresponding in its precision, in its power, and in its delicacy of adjustment, to our scientific machinery. Science has done the first job, and done it magnificently. It has shown us how to produce. Now it must show us how to distribute what we produce. It must go forward and not back. To production science we must add economic science, without for a moment ceasing to advance the former. Because we have surpluses of certain things does not mean that we have too much wealth or too much power to produce wealth. To suppose that we have, is to imply that man would be better off without means to make nature do his will.

To produce efficiently is to release time and energy for other uses, adding to the enrichment of life. Not to produce as efficiently as possible would be silly. Not to regulate the total volume of production, to relate it to consumptive demand, also would be silly. No factory is expected to produce without regard for the market conditions. No factory is expected to fail, even when producing at less than capacity, to take advantage of new efficiencies. The same reasoning applies to agriculture.

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Extension Stands Test of Time

C. B. SMITH
Assistant Director, Extension Service

C. B. Smith.

THE basic Federal law under which cooperative extension work is organized was designed to result in a larger application of the results of research to the practical problems of the farm and home, to the end that agriculture and homemaking might be efficient and result in larger farm incomes and greater satisfaction with farm life.

We have tens of thousands of examples of individual farmers whose incomes have been increased substantially as a direct result of extension work, men who as a result of extension stimulation have kept records of their farming operations, studied these records with extension agents, and made changes in their business to their profit as a result of these records and studies.

Extension has taught thousands of farmers how to prevent and control the diseases of their animals and crops to their profit. Extension has taught greater efficiency in feeding, breeding, and culling for meat, milk, butter, and eggs so that today we are getting more pounds of pork and beef for 100 pounds of feed fed than ever before. We are getting more butterfat per cow than ever before and more eggs per hen, and are producing these commodities at a lower cost than ever before. Inefficiency which adds to the problem of overproduction and lessens the margin of profit has been reduced.

Probably the largest result of extension is that it has taught hundreds of thousands of farm men and women how to study their business, how to analyze their problems, and how to develop a local or farm program to meet the needs of the farm or community, and how to work together to accomplish the ends sought. When farm men and women take part with the technically trained extension agents in gathering facts, studying and analyzing these facts, and formulating a betterment program based on those facts, you have builded something into their lives that is far reaching and of permanent value. That is what extension is doing now and has been doing for 20 years.

Training Boys and Girls

One of the results of 20 years of extension has been to give training, vision, and guidance in agriculture, homemaking, and character building to more than 5 million rural boys and girls 10 to 20 years of age. There is at present an enrolled membership of over 900,000 rural boys and girls in this organization of rural youth, known as "4-H club work." Its membership is increasing at the rate of about 8 percent per year, and nearly 28 percent of this entire number remain in club work 3 to 6 years. Thirty percent of this group, or about 270,000 boys and girls, are 15 years of age and above. Some 5.7 percent of the group, or over 50,000, are 18 or above.

The Smith-Lever Act, under which cooperative extension work operates, states the purpose of the act to be the improvement of agriculture and home economics It says nothing about character building; but, had the law put character building first and said nothing about the improvement of agriculture and home economics, I am not at all certain that we could have gone about character building in any more effective way than by the growing of crops and the making of homes wherein workmanship is taught, the laws of science applied, honesty, integrity, fair dealing, right human relationships developed, vision given, and ambition stirred.

Studies in the extension field by the Federal Government and State agricultural colleges cooperating — house-to-house canvasses, where over 18,000 records in 21 States have been obtained, have yielded facts of teaching that have made a distinct contribution to the whole field of education.

Through these studies, made available through several printed technical bulletins and mimeographed papers, there has been given to the world some knowledge of the relative values in teaching of such matters as demonstrations, lectures, personal contact, news stories, bulletins, exhibits, and like matters, and the relative cost of these different means and

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A community market of 20 years ago in Palos Park, Cook County, Ill. This market was started by boys and girls to market their produce and continued by their parents. Work in cooperative marketing began on a small scale and has grown until last year 1,690 cooperative marketing associations were organized with the help of extension agents and 8,602 previously organized associations were functioning.

Highlights of 22 Years of Home Demonstration Work

JANE S. McKIMMON
Assistant Director, North Carolina Extension Service

AS I look over 22 years of home demonstration in North Carolina, two things loom large as outstanding accomplishments. First, the strength and power of the organization of home demonstration clubs numbering 1,509 with a membership of 45,000 farm women and girls, and second, the leadership which has been developed through this organization.

In rural communities all over the State, women and girls have come together in clubs, averaging 29 to the county, which constitute machinery through which the farm woman may speak to her county, State, and Nation, and in return her Government speaks to her.

The Nation itself has twice had an opportunity of proving the value of this organization of farm people and its trained leaders, during the World War in 1917–18 and again in the present economic upheaval.

Caring for the Sick

The head of the State board of health said in the great influenza epidemic of 1918, when there was close cooperation between the board and the division of home demonstration work: "It was through the organized home demonstration clubs that we were able to systematically care for the sick in the county. With their trained leaders acting as practical nurses and operating their soup kitchens for those in need, we were able to come through the situation with the least amount of loss."

In 1933 when the division of home demonstration work was called upon by the State in its economic emergency, the office of extension work and the office of relief came together in planning a constructive program for the relief of farm people in endeavoring to help them help themselves.

It was a well-worked-out plan, involving both the farm and home agent. The office of relief agreed that it would pay local farm women leaders who had been trained in home demonstration work to act as assistants to home agents, and the home demonstration agent and the relief officer met to work out plans.

Outstanding results were a sharp increase in the number of people worked with, a total of 77,360 North Carolina farm homes being reached, which represents 407,967 people.

Gardens were grown and enough vegetables canned to fill 11,570,950 cans with soup mixture and other things for the family's pantry and for school lunches for undernourished children.

Sick people were taught what to eat to prevent pellagra; homes were made more comfortable and sanitary; and the family's clothing was renovated and cleaned.

Jane S. McKimmon.

The visiting homemaker was a busy person, going from house to house, helping the mother and daughter in home betterment. Just what she did in routing out people suffering from pellagra, getting them to the physician for a diagnosis, and afterward directing their eating for a cure has more than proved the worth of her knowledge of what foods do in the body.

The secretary of the North Carolina Board of Health said: "Those leaders have done much to bring the pellagra death rate down in North Carolina in their efforts to establish proper food habits, for it is to proper diet more than anything else that we look for the eradication of pellagra."

Gardening and canning, clothing, and sanitation are very concrete projects, and in consequence accurate data may be obtained regarding them, but perhaps the best work of a community leader is the fine contact she has established with the woman in the home, the inspiration she has given to the hopeless, and the results obtained in raising the standards of living.

Demonstration Method

The longer home demonstration work goes on, the more clearly is the value of the demonstration method of teaching shown by resulting practices.

A woman will never learn to make good bread by reading about it in a recipe. She does better if she sees it done, and best of all, if things are provided that she may do it herself.

Extension work as a whole constitutes one of the world's great movements in adult education, and home demonstration work has given the woman on the farm educational opportunities that have developed a well-informed homemaker and have brought more satisfaction into farm life.

Work in the different projects proceeds by rotation of subjects. The trend of rotation is usually from foods and nutrition to clothing, next to house furnishings, and on to home management. It is interesting to note that this procedure is in the order time and money are spent.

Foods take about 50 percent of a homemaker's time and in low-income groups about 50 percent of the family's living. The others follow in the order given.

From growing gardens, canning, and food preparation in the first few years, the program has broadened to take in what food does in the body, home management, clothing, home furnishing, planting the home grounds, child development, and family relationship.

The object of orderly rotation is to create an interest in a well-rounded homemaker's program for every club member, and the farm woman is encouraged to go forward toward a homemaker's certificate which states that she has satisfactorily completed 5 projects, 4 of which are in homemaking and 1 in agriculture.

Women are keenly interested in securing these awards, and each year the group of honor club members grows larger on county achievement day when awards are presented with due ceremony.

Home demonstration work has come a long way since its simple beginning 20 years ago. Farm houses have become homes. What a woman has learned of harmony of arrangement, color, and balance has helped her to create an atmosphere of comfort and good cheer; and her

(*Continued on page 84*)

After Twenty Years

The coauthor of the Smith-Lever Act, A. Frank Lever reaffirms his faith in the system which he helped to initiate.

DURING the two decades of its existence, the extension system has demonstrated the soundness of the principles upon which it was built.

Almost coincident with the signing of the act came the outbreak of the World War in Europe, into which a few years later our people were engulfed. Armies traveled on their bellies; the cry for food, feed, and clothing arose. The only organized forces prepared to meet this need, both for our people and our allies, were the extension forces. The hugeness of the undertaking did not deter them. The American Army was the best fed and clothed the world ever saw, and our soldiers may thank the Extension Service.

Then, came peace with its baffling problems. Great surpluses had been piled up under the initiative of the agents. Maximum price levels were reached. Agricultural prosperity was everywhere. Extravagant ideas were rampant. We were living in a fool's paradise and expected it to continue. The deflationary period came. Farm price levels dropped from the artificially high peaks of the war period to abnormally low planes. The county agent again was called upon to formulate and promulgate policies, not only to cushion as largely as possible the disastrous financial effect upon the farmer of this abrupt drop in price levels but to meet the more difficult task of readjusting the agricultural thinking of the Nation, warped severely as it was by the nightmare of the war period. He succeeded in doing both.

During the past decade, the acute problem of the Extension Service is the ever-increasing surpluses of staple agricultural products. The world needs all we have of food, feed, and clothing. World statesmanship must find a method to enable people who need to pay for what they need reasonable prices to those who have their needs to sell. There must be found an adjusted balance of farm production with world consumption. Whatever may be the plans agreed upon, it will be the county agent who will be called upon to put them into operation in this country. He has been the burden bearer in every crisis which has faced American agriculture during the last two decades. He has been the spearhead of the attack upon every difficult agricultural situation. He has met his varied responsibilities with the kind of leadership that defies defeat.

And now, at the end of 20 years, it can be said with all emphasis and in all truth that our extension forces, men and women, represent the best disciplined, most practical, most loyal, most efficient and cohesive organization of agricultural leadership the world has ever seen.

It is the first time in the history of this country that agriculture can be said to have a genuine leadership.

Highlights of 22 Years of Home Demonstration Work

(*Continued from page 83*)

broadened vision of the relation of the whole family to the farm enterprise has developed a family spirit which reflects in the family home life.

Production for the family food supply increased rapidly when a woman understood that not all the wealth of the farm was in cash from the crops, but that much of it lay in the vegetables, milk, eggs, and other foods with which the sound bodies of her children were built. She saw the health of her family improve when she acquired a better knowledge of what food did in the body and what was the relation between well-selected and well-prepared food and the family's well-being.

The machinery of the home moves more smoothly because the farm woman has learned to budget her time and energy as well as her cash income, and she has the leisure time for many of the joyful things of life.

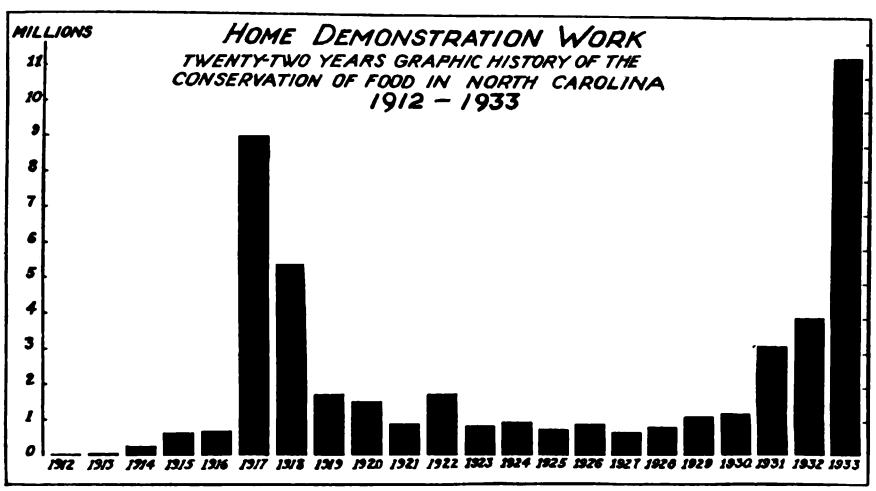
Good taste has been developed and the family is better dressed. Mother and daughter know something of selection, becoming lines, and colors, and how to construct and renovate costumes in which they may appear with credit.

The whole family has cooperated in planning and planting the home grounds, and all over the county one may see a farmhouse "tied to the ground" with base plantings, green lawns in front, unsightly objects screened by shrubs, and flowers and trees that make of the house a home.

The home has been made a place where the child may feel secure and where the child is better cared for, as parents have come together in an educational program seeking a knowledge of their part in the growth of personality and the development of character.

Developing, in more orderly fashion, the income earning which was begun in the early days by farm girls, farm women have cooperated in marketing the surplus butter, eggs, poultry, cream, vegetables, and the like, produced on the farm, and they have even capitalized on their skill in cookery to the extent that incomes have been increased enough to provide home comforts, conveniences, clothes, education for the children, and some of the luxuries of life.

Communities have become friendly neighborhoods with the coming of organized home demonstration clubs and the clubhouses that have been built or remodeled so that farm families have a place to come together. Here neighbor meets neighbor socially; here they play; here they discuss their problems or find their opportunity; and it is here that much of what home demonstration work means is given to them in the clear-cut information presented by the home agent.



Then and Now

County Agent Robert F. Spence, of Rockcastle County, Ky., tells of the changes in his county since 1914.

Robert F. Spence on the back of "Kentucky Bird" in 1914.

I AM attempting to be brief in 200 words when 2,000 accurately chosen words cannot interpret the change and progress in the extension service of Rockcastle County, where I have spent 20 years as county agent. I have seen this county evolve from the oxcart stage of agriculture to the automobile stage with knee action and freewheeling.

In 1914, I threaded the branches and creeks on the back of "Kentucky Bird" to reach some humble cottage at the head of the hollow, to see a man who had never heard of crop rotation or legumes.

In those days there was not a hard surfaced road in the county. Now there are more than 150 miles of concrete, tarred top, and gravel roads in the county, where an average speed rate of 40 miles per hour is possible.

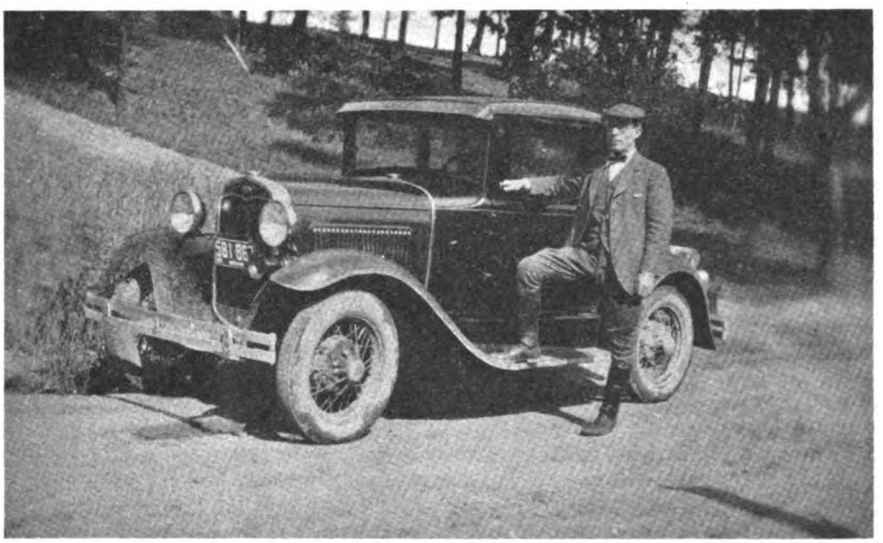
We did not think in terms of cash income in 1914, but only in terms of adequate supply for the household table. Now there are thousands of dollars of cash coming into the hands of Rockcastle farmers every year from tobacco, sheep, poultry, dairy products, and cattle.

In 1914 the dairy industry was unknown and only a few families had enough milk to supply their own tables. In 1929 the cream in Rockcastle County brought $221,000 in cash to owners of cream-producing cows. During the same year, the income from chickens and eggs of this county amounted to the handsome sum of $210,000.

In those days there was but little grass of reputable quality and quantity. Today there are thousands of acres of red clover, alfalfa, Lespedeza, cowpeas, and soybeans. The production of soybeans, cowpeas, alfalfa, and Lespedeza was unknown. Today there are in the county 200 acres of alfalfa, 6,000 acres of Lespedeza, 500 acres of sweetclover, and 3,000 acres of soybeans.

In 1914 we had four 4-H club members and no club while today we have 700 members in 28 clubs scattered over the county. These clubs typify the growing spirit in America. No longer do parents object to their children joining the 4-H club as they once did. They feel that it is an outlet and offers hope and possibilities. The farmers themselves have caught the spirit of the 4-H club members. They think in terms of cooperation and community action. It is no trouble to get a group of farmers to do things cooperatively.

In no place in America has the progress been more pronounced and more certain than in Rockcastle County.



County Agent Spence ready to start off in 1934.

As I See It Now

David K. Sloan.

YES, if I were to start again I would be a county agent. After 21 years as a county agent in Pennsylvania I can truthfully say that this has been a happy period of public service to appreciative rural people.

"Since March 20, 1913, when I entered the Extension Service, county agent work has undergone a remarkable change. This has resulted in progress and accomplishment undreamed of then. Just as the horse and buggy has been succeeded by the modern automobile on improved roads as a mode of transportation, equal and even greater changes have occurred in the organization of agricultural extension work. In the early days there were few specialists to assist with meetings and demonstrations; today a complete corps of specialists cooperating in the dissemination of the latest scientific information makes it possible for the county agent to answer the increasing demands with a properly planned diversified program. Improved office facilities available now are also of tremendous aid to the county agent in accomplishing the service expected of him. Modern extension work also receives a large contribution from those public-spirited citizens who devote time and energy as cooperators, project leaders, and officers of the county extension associations."

David K. Sloan, author of the above, has an enviable record. He helped to organize one of the early cow-testing associations in Bradford County, Pa., which has operated continuously since 1913. His work in organizing livestock breeders' associations and promoting cooperative sales of cattle has been attracting a great deal of attention for many years. Since 1929, County Agent Sloan has been located in Lycoming County where he is doing work equally as good.

Club Champions of 20 Years Ago

TWENTY years ago the Smith-Lever Act was passed, club work for boys and girls on the farm had reached considerable proportions. Clubs had been organized in nearly every State. Approximately 300,000 boys and girls were enrolled in club groups.

Some of these early club members developed unusual skill in their club projects and became the State champion in making bread or growing corn or gardening or canning. A group of these State champions came to Washington in 1914, as in other years, as a reward of merit. They were awarded certificates of approbation by Secretary of Agriculture Houston and were received by Mrs. Wilson, wife of the President, in the White House.

The following paragraphs tell what a few of these champions of an earlier day have done in the years since then.

Margaret and Maybelle Brown, of Mecklenburg County, were two of the first farm girls to join a home demonstration club in North Carolina. They became interested in the fall of 1911, when the Huntersville club was organized, and were loyal club members until they went to college.

Margaret was 13 years of age and Maybelle 11 when they became canning club girls. They were so successful with the growing of a garden, canning, and marketing that they both won a trip to Washington as a prize.

While there Margaret became acquainted with Walter Lee Junston from Alexander City, Ala., the champion from that State who raised 232 bushels of corn on his acre. This acquaintance ripened into a romance, and when Margaret was 18 years old she married Walter and went to Alabama to live.

From the beginning, Margaret worked hard on her club projects and determined to make her way through college. For two successive summers she went to the State 4-H short course held at Peace Institute, a girls' junior college in Raleigh, and determined she would devise some plan of working her way through college. The institution agreed to take 700 or 800 of her cans of vegetables each year on her tuition, and, because of her efficiency and dependability, gave her the job of counting the laundry in and out.

Maybelle took the 4-year college course at Queen's College, Charlotte, receiving an A.B. degree with first honors and later did graduate work at the North Carolina College for Women. She lacks only 2 hours on her master's degree. She plans to become a home demonstration agent.

Helen Fiergolla, as the breadmaking champion of Minnesota, made a trip to Washington in 1914. Because of the excellence of her club record, she was given a course in the State Teachers College at St. Cloud and after graduating accepted a position in the high school at Brainerd, Minn. She has been an unusually successful teacher. She has also served as guardian for a group of Camp Fire Girls and led a 4-H sewing club during her summer vacations at home in Sauk Rapids. Her superintendent says, "Her work in these extra-curricular activities has been very good and very much appreciated by us."

Club champions of 20 years ago receive certificates of approbation from Secretary of Agriculture Houston on the grounds of the United States Department of Agriculture.

Miss Fiergolla says her inspiration for leadership among young people came from her club experience, and her skill in baking has given her a special advantage in being of service to groups of young people in the community. She also feels that the things learned in her early club work have been of benefit in her personal life.

* * *

Hilmer Carlson won the Minnesota State corn record in the corn project under great difficulties. His record was used in the United States Department of Agriculture club exhibit called "Acres of Diamonds." The purebred Jersey bull calf which Hilmer received for the best corn record was the first purebred of any kind on the Carlson home place. With this beginning, he and his father built up a fine herd of Jersey cattle. Father and son worked in partnership until Hilmer married and moved to a farm of his own near Frazee, where he has another herd of fine purebred Jersey cattle. He has also been the successful county 4-H leader of Becker County.

* * *

Kenneth Osterhout, club member of Hillsdale County, Mich., was the champion poultry club member in his State in 1915. He was the first boy to graduate from the Michigan State College on the 4-H scholarships provided by the State Board of Agriculture. After graduating from college, he entered the Extension Service and is now county agent in Antrim County, Mich. "He carries a good club program", says R. A. Turner, club agent for the Central States.

* * *

Miss Mertie Hardin won the trip to Washington in 1913; it was her third year in club work. In 1914 she became assistant home demonstration agent in her home county, Benton, Tenn. She has served actively in the county since that time in varying capacities. In 1925 she married Bob Smith; they have 3 boys, too young yet to be 4-H club members, but they will be members. Mrs. Smith says that farm life is more pleasant and happier as a result of 4-H club experience.

* * *

Roy Halvorson, of Kerkhoven, Swift County, Minn., was the first State 4-H corn club champion. He produced 115 bushels of corn on his 1 acre in 1914 and came to Washington with the group of State champions that year. He is now one of the leading young farmers in his community of Kerkhoven, where he is now living on a farm of his own.

* * *

Merle Hyer, of Lewiston, Utah, is one of the community's outstanding farmers today. He is still raising good potatoes that he ships east each year at premium prices. He is operating a 500-acre farm successfully. In addition to the potatoes, his prize crop back in the early club days, he markets hundreds of fat steers and sheep each year. He is married and has 5 children.

FOR 2 years Milo Winchester, the vocational teacher, and William J. Clark, assistant county agent, have cooperated in the training of boys horticultural judging teams in Ulster County, N.Y. During the past year five members of the teams from this county won 31 out of a possible 45 points at the State Horticultural Society contests.

The Weather, the Farmers, and the Nation's Food

CHESTER C. DAVIS
Administrator, Agricultural Adjustment Act

NO RECITAL of facts can picture the misery brought to the individual farm families whose land is parched and unproductive in a drought season. In the Agricultural Adjustment Administration, we must take account of those human problems. So we are mapping every possible means of help that we can give in cooperation with other Federal and State agencies.

The farmers in the drought area who have taken part in the adjustment program for the basic crops have one protection for their incomes and buying power that was never before available. The adjustment programs, designed on the average to bring production under control and cut down surpluses, also give much needed help to cooperating farmers when drought or other calamities kill their crops.

While it is necessary to bring back the buying power of the export crops by restricting their production nationally, no man can make any money out of a crop failure on his farm. The way to make the reduction is on a pro rata basis, farm by farm. That is the way we have made it under the adjustment programs. And now, when crop failure hits producers of these commodities, they have some assured income from their benefit payments. These payments make it certain that a man's buying power will not be rubbed out, even if his crop fails utterly. These payments are based on past average production. Hence the amount of the payments is not diminished by a crop failure. They give the cooperating farmer an assurance of income no matter what happens.

The A.A.A. program, therefore, is the greatest farm crop income insurance operation ever undertaken anywhere in the world. It is a step toward the goal of greater security from the harmful economic effects on individual farm businesses of natural calamities.

Help for Drought Areas

But the people in the drought areas need more help than the adjustment payments to cooperating farmers can give. We intend to provide help to the limit of our powers under the Agricultural Adjustment Act. Other units of the Government will use their powers to bring aid to the stricken regions.

Since the beginning of the A.A.A. program, people representing certain elements in our economic life have been viewing the drought situation with alarm. They have taken an especially dolorous view since the attention of the public was drawn to drought conditions.

The experts of the Bureau of Agricultural Economics have made a study and concluded that the drought has not endangered the food supply of the United States. To illustrate, take their study of the wheat supply! In a normal year, the people of the United States eat, or feed to animals, and save for seed for the next year's crop 625 million bushels of wheat.

Wheat Prospects

That is what we need for next year—625 million bushels. The drought has damaged winter wheat prospects. The crop was forecast at 460,000,000 bushels on May 1. But, say it declines still further and only 400,000,000 bushels are harvested. In that event, we should have, with the carryover of some 260,000,000 bushels, a total supply of 660,000,000 bushels. And that does not allow for the spring wheat crop. Even though it should be as short as the shortest spring wheat crop in recent years, it would be still about 120,000,000 bushels. So with a very short spring wheat crop, and an extraordinarily short winter wheat crop, our present big carryover would give us ample supplies of wheat for the coming year. Do not take it that the economists predict a very short spring wheat crop, and a winter wheat crop of only 400,000,000 bushels. No one can accurately predict those harvests at present. They simply assumed the worst possible outturn, to demonstrate that if worse comes to worst, the public is in no danger of going on short rations of domestic wheat.

The situation with respect to other food products is the same as for wheat—the country does not face a food shortage.

If any of our people fail to be well nourished, it will be because our society has not provided the means for them to buy the food; it will not be because our farmers failed to produce the food.

We have piled up great surpluses of foodstuffs which we used to sell abroad. Formerly, if a crop shortage developed, we could take the part of a crop which would have been exported and turn it to domestic uses. That happened, for instance, with wheat in 1925. The crop was short—less than 700,000,000 bushels. We had been producing 800,000,000 bushels and exporting around 200,000,000 bushels. So when our crop fell to 700,000,000 bushels, we simply cut down our exports to less than 100,000,000 bushels. We dipped into normal export supplies to feed our own people.

But if the rest of the people of the Nation say to the farm people: "We plan to continue with tariff and other policies that will bar you permanently out of the world market," then the farmers will have to bring their production down to the domestic level. In the Agricultural Adjustment Administration and the Department of Agriculture, we are going to work to hold the farmers' share of any foreign market that is open to this Nation. But if our farmers are forced back to the home market only, we shall try to ameliorate their lot by the use of the domestic allotment plan, to avert price-breaking surpluses and assure farmers a fair income. The Nation should be assured of a heavy reserve supply to protect its people against food shortage in such times as this drought year.

Provisions for the Future

That raises questions of how to set up machinery that will keep the reserves on hand, but hold the reserves in such a way that they will not bear down too heavily on the price of crops in normal years. Maybe we have hit upon part of the solution of the idea of lending on corn stored on farms that is now being operated by the A.A.A. and the Commodity Credit Corporation. Perhaps we shall have to use powers granted the Government under the Agricultural Adjustment Act to remove crop surpluses for storage. Perhaps other devices and powers will be necessary. We are thinking of these matters now, and preparing to make provisions for the future. However, it will be unnecessary to use any special action this year to avert a food shortage. Our reserves now are ample. The problem is to keep them so in the future.

You can take it for granted that this will be done. The American people will have adequate supplies of food produced by their own farmers. I hope that these farmers will continue to have at least as good protection against the hazards of weather and other natural forces as the present domestic allotment plan affords them.

Farmers Trained to Think

THE question is often asked "What is the most valuable contribution to society made by the Extension Service since the passage of the Smith-Lever Act?" My answer is: The contribution to society most important has been the training of farm people to think objectively. The Extension Service has taught farm folks to know and to face the facts. This accomplishment will live so long as the present generation endures.

In the foregoing statement I would not minimize the value of improved farm practices, of bettered homes, of broadened lives. I would not detract from the hard-won victories of farm organizations which, built by the Extension Service, have spoken for agriculture with a new and larger voice. I am not forgetting that the Extension Service has so amply paid its way that for every dollar expended it has returned in immediate tangible benefits a hundred dollars in income. But above all these accomplishments the training in factual analysis will prove of most value.

In the early days of extension work people came to get the answer to a problem. In these later years they come to get the facts with which to solve their own problems. This change has not come about easily or quickly. The opinionated speaker in thousands of communities at millions of meetings has been confronted by the extension agent armed with the facts till, gradually, the farm folks have come to look for the facts first and then to form conclusions based upon the evidence. In hamlets all over America it has become dangerous to voice statements without a background of fact. The harangue of the demagogue has been laughed out of court.

If this thing has not been completely accomplished it is because education is never finished. The marvel is that an Extension Service so ill-supported has accomplished so much. Adult education for the masses of rural America has never yet been properly nor completely staffed.

B. H. CROCHERON,
Extension Director of California.

* * *

Organized Leadership

IN the debates in Congress which preceded the enactment of the Smith-Lever Act, the expectation was repeatedly expressed that through this act new facts could be made more readily available to farmers whereby a more rapid and efficient increase in production and agricultural products might be attained.

Under the attitude of mind prevailing at that time, it is not difficult to understand why the Extension Service and the agencies under its control would be considered advisory rather than social, and why the opportunity to develop the social rescources was little considered. It was not generally realized 20 years ago how competent was the American rural population to observe intelligently and to determine new facts for themselves, to devise practical procedure, and to apply this newly acquired learning effectively. Certainly, none comprehended the possibilities of a localized social organization, self-sufficient and wholly competent to develop information, methods of procedure and instructional ability, and with remarkably competent leadership.

It is a notable tribute to extension work that in these 20 years the efficiency of every line of endeavor of the American farmer has been increased approximately 20 percent.

Remarkable as have been the influences of extension upon production practices, this accomplishment is insignificant in comparison to the social influences for which it is directly responsible. In every State, an effective and influential extension organization exists. Through this organization, leadership is provided and interested individuals serve effectively under intelligently made plans to conduct projects in agricultural production, and to promote the health and contentment of rural communities through recreation and better living habits. Boys and girls are provided with a wide latitude of opportunity to gain practical experience and to make extensive contacts through which their outlook on life and their attitudes are improved. In Kansas alone, there are some 60,000 people definitely affiliated with either the agricultural, the home-economics, or 4-H club work, and the individuals who have assumed definite leadership responsibilities in one or another of these projects total more than 15,000.

It has been through this organized leadership that the Extension Service has become a powerful factor in making farmers of the Nation conscious of their place in American life. Extension work has had a prominent part in the development of the higher standards of living that have been established in our agricultural areas. With these higher standards of living and broader viewpoints has come the ability to see the complicated relationships which exist among different classes and different institutions of men. Had it not been for the extension organization with its leadership possessed of a wide experience and an understanding of the complicated relationships between classes of men and their interests, the general adoption of a program as complex as the Agricultural Adjustment program would have been an impossible undertaking.

In my judgment, rural America has a greater spirt of cooperation, a better knowledge of social and economic relationships, a keener appreciation of science in Government, an increasing confidence in universal education, and a finer spiritual belief than has heretofore existed, due very largely, to the efforts of the Extension Service.

H. J. C. UMBERGER,
Extension Director of Kansas.

* * *

What Has Be

Nine State extension directors, each with a re
most significant accomplishme

Intelligent Cooperation Fostered

OUR principal accomplishment? It seems to me that we have pried open a new attitude in farm people. Economic advantages may appear and disappear with changes in conditions, but the development of a cooperative outlook seems here to stay. While other forces have, no doubt, contributed to this, I believe that the organization growing out of the Smith-Lever Act is primarily responsible. When in a small State like New Hampshire, we can have the cooperation of over 2,000 local volunteer leaders representing practically every community, it is clear that a new attitude has been achieved. This is education—a drawing out of the mind.

J. C. KENDALL,
Extension Director of New Hampshire.

* * *

Self-Development Encouraged

THE most valuable things of life are seldom material possessions. Happiness is a state of being, a condition sought after by everyone. To aid a single person to obtain happiness is an undertaking worthy of the effort. "I come that they might have life and that they might have it more abundantly" refers not to a gift of gold or silver or lands, but to a gift of opportunity.

The Extension Service, while seeming to deal chiefly with the economic problems involved in helping the producer secure a greater income from his farm, and his wife to manage the home with greater economy and less effort, has contributed to rural society something vastly more important than a knowledge of improved practices and greater income.

Accomplished

ars of service, give what they consider to be the itive extension work since 1914.

To induce men and women and boys and girls to come together to think collectively, plan collectively, and then act collectively to bring about desired conditions, does something to the individual. It gives opportunity, the greatest boon to mankind, for self-expression and development.

It is not the acquisition of more lands or more cattle or more home equipment that brings greater happiness. It is the "finding of one's self", the development of leadership, improved skills, increased knowledge, broadened understanding, and greater appreciation attained by the individual taking part in community activities set afoot by the Extension Service that measures its value to rural people.

A. E. BOWMAN,
Extension Director of Wyoming.

* * *

Agriculture Reorganized

THE word demonstration conveys no new idea and has been applied in many ways. However, it was emphasized when Dr. Seaman A. Knapp organized the demonstration workers many years ago when the boll weevil first entered Texas. Secretary of Agriculture Wilson put Dr. Knapp in charge of the first campaign for boll weevil control. It was then that demonstration farms came into existence; the first one was located in Texas. Dr. Knapp was disappointed when very few farmers visited the farm, and those who did visit it made the observation that they could carry out the principles as laid down by Dr. Knapp if they had the United States Treasury back of them. It was then that Dr. Knapp conceived the idea that if the demonstration method were to succeed it had to be located on the farmer's farm and to be conducted by the farmer or under his observation. In this way the farmer had to accept the results of his demonstration. At that date, the farmers were more or less skeptical of scientific men and scientific methods; no one knew this better than Dr. Knapp, and so the demonstrations were of a very simple character. First, cultural methods and better seed; a little later cover crops; today every phase of agriculture is dealt with through these demonstration forces. Southern agriculture has been practically reorganized and saved by this contribution from this great man.

Dr. Knapp realized that owing to this prejudice of the farmers it was necessary to employ practical farmers as county agents for which he was criticized in certain quarters. The time soon came when it was necessary to employ as county agents and specialists college-trained men in the sciences, particularly of an applied character.

The president of this institution refers to the extension workers as his field faculty that writes the lesson on the ground rather than on blackboards and charts.

This brief statement in a measure shows the progress, stability, and value of this work.

W. W. LONG,
Extension Director of South Carolina.

* * *

Planning Developed

THE greatest single achievement of extension work during its brief span of life has been the gradual development of a system of planning—planning for the individual farm; planning for a group in which the individual farmer gets his just share; planning for the community good with the farm making its proper contribution. This planning consciously and unconsciously over the past score of years has touched, somewhere, every phase of the rural problem or all of the farm problems, if you prefer.

Some of this planning has been for commodities which reached from the individual farm to the national supply. Another part of this planning has been in the social realm without a consciousness of so-called social reforms but which has enabled thousands to stand in the face of the economic breakdown.

But for the development of a system of planning for rural life, consciously or unconsciously, which has involved not only the farm but the whole body politic, the effort today at National planning for agriculture would break down before it starts.

If the curtain finally rings down on extension work, the future historian will record as its greatest achievement—human progress in rural thought resulting in social and economic emancipation of rural people.

J. PHIL CAMPBELL,
Extension Director of Georgia.

* * *

Science Brought to Farm

RESULTS speak for themselves. The accomplishments of the Extension Service are to be measured more in the attitude and relation of people generally than in any observations or figures which might be presented. The confidence reposed in extension activities is certainly an indication of the fact that the rural people with whom extension is working, as well as those thoroughly familiar with its aims and purposes, believe that great progress has been and is being made.

Manifestly, it is difficult to list accomplishments in the order of importance, or to indicate the most valuable contribution to society. Fundamentally, however, among the most important contributions we would place the awakening of a consciousness of the importance and applicability of scientific facts to the business of agriculture and the development of the capacities of the rural people themselves in the solving of their own problems and in the development of their own thinking concerning those things which make for more satisfactory and more satisfying living in rural communities.

M. S. MCDOWELL,
Extension Director of Pennsylvania.

* * *

Better Attitude Toward Farming

THE most valuable contribution the Extension Service has made to society is the influence it has had in establishing a better attitude in the minds of farm people regarding their business and mode of living. It has given them self-confidence and a greater appreciation of the dignity of their calling. It has helped to eliminate the so-called "hayseed" character in our rural life and substituted in his place an alert, business farmer with a growing appreciation of the interdependence of agriculture and industry in our own country and in our relations with world affairs. It has raised the standards of living of rural people, increased their desire for education, and demonstrated advanced practices in farming and homemaking, so that greater progress in those fields has been made in the last 20 years than in any previous 50-year period. It has been the means of awakening farm youth to the unusual privileges of our age and shown them the way to greater leadership and better preparation for life. It has advanced the desire and need for adult education in all walks of life.

T. B. SYMONS,
Extension Director of Maryland.

* * *

Outlook Broadened

THE program of extension work in agriculture and home economics for 20 years has been based on the policy of personal participation on the part of farm people in the analysis of economic, social, and other problems, and in the carrying out of the solutions of them. Through these experiences they have discovered and developed their own ca-

(*Continued on page 95*)

Agents and Teachers Cooperate

Working Together in Texas

"NO agricultural program under supervision of the county agent in Lamb County is complete unless the vocational agriculture teachers have their part." This sentiment, voiced by D. A. Adam, county agricultural agent, prevails among Texas county agents.

"Properly construed, can the work of the teacher of vocational agriculture lead to any other goal than that of the county agent?" asks J. C. Patterson, county agent of Eastland County. In explaining what that goal is, he quotes Dr. Seaman A. Knapp, "To readjust agriculture, to reconstruct the country home, and to place rural life upon a higher plane of profit, comfort, culture, and power."

"There is more to be done in Houston County than all of us can accomplish, even by combining our efforts", writes C. E. Bowles, county agent. "Our six vocational agriculture teachers and I form a kind of agricultural workers' association. We meet from time to time to discuss mutual problems and for social contact. Our cooperation is pleasant and profitable."

In Lamb County the vocational teachers and county agent meet quarterly, and the general trend of work for the next three months is discussed. Teachers conduct their classroom work along these lines for that period. Vocational teachers are always advisers to 4-H clubs as well as to the future farmer organizations. Where vocational agriculture is taught club work is confined to the grades, but high school boys not enrolled in vocational work may associate themselves in club work with the boys in the grades. Sometimes, as in the case of J. W. Hulsey of Olton, vocational boys are also 4-H club members but always such boys keep their vocational projects and their club demonstrations separate.

Feeding projects and demonstrations are supervised jointly by the vocational teacher and county agent. It was this kind of cooperation that resulted last year in the largest baby beef show ever held in one county in Texas when 43 Lamb County boys exhibited 110 calves.

In terracing seasons, vocational teachers emphasize this method of soil protection and rainfall conservation with their boys and in their adult evening schools. Vocational classes turn out 100 percent strong to county agent field demonstrations, and the county agent helps the vocational teachers in conducting his evening classes.

In fairs, campaigns, and contests the teachers of Eastland County have cooperated most closely with the county agent, as J. M. Bird of Cisco and M. O. Hood of Rising Star testify. In Houston County, J. C. Sowers, R. L. McElhany, Glover Larue, J. C. Shoultz, and W. L. Maxwell plan work together with the county agent. This cooperation has resulted in the building of concrete sanitary toilets, placing of steam pressure canners in county, and a big improvement in the county fair.

It has been in the emergency work of the agricultural adjustment programs that the best type of cooperation has developed, as county agents everywhere have reported. The working comradeship already begun by teachers and agents has been carried to its highest point through this invaluable assistance rendered at times when help meant a great deal. The Texas county agent does not regard the vocational teacher as a competitor but as a companion in arms.

Oregon Cooperation Aids Adjustment

The Agricultural Adjustment Act, with its wheat, corn-hog, and other production-control programs which place responsibility for the education of the public as to their various provisions and benefits on agricultural leaders throughout the country, has brought about a closer and more sympathetic cooperation than ever before between members of the Extension Service and Smith-Hughes workers in Oregon.

In the wheat adjustment campaign, Smith-Hughes instructors in Oregon cooperated with the county agricultural agents in arranging for meetings, in explaining contracts, and other points to farmers both individually and through the evening farm schools, and in obtaining mailing lists of wheat farmers. The same kind of assistance is being given in the corn-hog control program.

During the past winter, 28 evening schools for adult farmers have been conducted by Smith-Hughes instructors. Of these, 16 have dealt entirely with discussions of farm reorganization and Federal farm credit. Assisting with this educational program have been the various county extension agents and Prof. E. L. Potter and H. D. Scudder, of the State college staff, whose help was obtained through the State extension service.

In the wheat adjustment campaign alone, figures compiled show that Smith-Hughes teachers in Oregon held a total of 54 meetings, attended by 1,904 farmers, for the purpose of explaining contracts and answering questions in regard to the procedure to be followed, possible benefits, use of retired acres, and a multitude of other points that arose. In addition, they gave individual assistance to other farmers.

The Future Farmers, too, have been eager to join in the A.A.A. program, reports Earl R. Cooley, State supervisor of agricultural education. Considerable classroom time has been devoted to discussions of the various plans, and many of the boys have volunteered to join with their dads in reducing crop acreages and curtailing production.

The annual State-wide public speaking contest of the Future Farmers of America, was devoted to topics of timely interest to the farmer, largely related to agricultural adjustment. Boys from 36 agricultural departments appeared before granges, farmers' unions, and civic clubs throughout the State, speaking on some phase of production control, Federal farm credit for the farmer, or possible effects of inflation on the farmer.

Arrangements have recently been completed whereby the department of visual instruction of the Oregon Extension Service will make available to Smith-Hughes instructors of the State, agricultural motion picture films and slides for use in classroom instruction, at no cost other than for transportation.

The State extension editor also is cooperating with other departments of the Extension Service in supplying the Smith-Hughes staff members with information regarding the progress of agricultural adjustment. Each week a digest of the important happenings of the previous 7-day period is prepared at Corvallis, copies of which are forwarded to all Smith-Hughes workers as well as to the county agents. This practice aids in keeping both forces well informed on the status of the movement as it applies to Oregon.

THE livestock program in Pontotoc County, Okla., has the support of four teachers of vocational agriculture, S. D. Lowe and O. B. Holt at Vanoss, D. B. Grace at Stonewall, and Elmo Hendrickson at Allen, as well as that of the county agricultural agent, J. B. Hill. Much of the success that has accompanied this project has been due to the close cooperation of these men. Over 100 head of baby beeves were shown at last year's county fair by the 4-H clubs and the vocational students.

Rural Leadership Through the Years

MARY ELLEN BROWN
State Home Demonstration Leader, Nebraska Extension Service


Mary Ellen Brown.

SPLENDID changes have taken place in the last 20 years in home demonstration work. In 1914 it was in its infancy. Now it is emerging from its adolescent period. Twenty years ago a few homemakers had heard about its offerings and had attended lectures or farmers' institutes where State specialists gave demonstrations to groups of women, many of whom had been brought to the meeting by the men folks. Then few farmers' wives drove their own cars; in fact, most of them came in horse-drawn vehicles. Only a few of the States had heard of county home demonstration agents. Most of the work was done by State home-economics specialists who gave demonstrations on such subjects as canning, cooking, and sewing.

Field Widened

During these 20 years the field of demonstration has greatly widened until now it has reached the principles of clothing selection; the fundamentals of nutrition; the standards needed for good health; the value and use of efficient equipment; the beautification of the home, both indoors and out; child training and family relationships; civic responsibilities; and recreation for the home and for the community. The training in skills holds its place in home demonstration work, but creating a comfortable satisfying atmosphere in the home is considered even more vital.

One of the outstanding and most important growths has been that of developing leadership on the part of the club members. Training given the project leaders prepares them in turn to take the demonstration to their own club members. In this development, women have found that they have initiative, executive ability, and latent talents, of which neither they nor their families had dreamed. Through this new power of leadership the women have gained satisfaction in increased self-confidence and poise and have made contributions both to their homes and to their communities.

Attitude Toward Homemaking

If in the past two decades home demonstration work has done nothing more than develop a professional attitude toward homemaking, it has been worth all that has been spent upon it. However, it has done much more than that; it has been one of the important factors which have helped rural homemakers to be proud of the fact that they lived on a farm.

There has been an almost continuous growth in numbers. At the present time the interest is the greatest it ever has been, and the outlook for future increases is a challenge to all. Another noticeable change which has come through the years is that there are so many worth-while things to talk about there is little time or interest in gossip at the project club meetings.


Gummed paper dress forms found favor among farm women back in the early twenties. From the sewing classes of early days to the present broad program, extension work in clothing has always been popular among farm women.

A more recent development has been the vacation camp for rural women. All members of the family seem to be enthusiastic about giving mother this chance to play and sing, to listen to speakers, and to talk over timely topics with the other campers as she has her vacation away from all home worries and responsibilities.

Have any of your childhood dreams come true? If so, you realize the feeling I have about the home-economics part of the agricultural extension work. As a girl, growing up on the farm, it seemed to me somehow, there could be training that would help mother accomplish her housekeeping duties with more ease and that would make life happier for her. Then, too, the girls in our family needed to be studying homemaking to improve their share of the farm home life; but at that time as far as we knew, there was nothing to help either the girls or mother.

How different living on a farm may be today. Now, there are home demonstration clubs for mothers and the 4-H clubs for the girls. It would have meant much to my mother to have had an opportunity to belong to a project club or to have had the joy of being a project leader and to have been privileged to attend a mothers' vacation camp. How I wish we could have had these in my girlhood!

The past 20 years have meant much to the rural women of America. We trust the future of agricultural extension will have added satisfactions and joys in store for them.

AT Cooperstown, N.Y., during the past winter the Smith-Hughes teacher and the county agent, M. E. Thompson, have conducted a successful tractor school. There were 38 men enrolled in the class, and 10 tractors and 7 gas engines were overhauled.

New Regional Heads Appointted

H. W. Hochbaum and C. L. Chambers, principal agriculturists, have been appointed regional heads in the Office of Cooperative Extension Work, United States Department of Agriculture, to be in charge of extension work in the 12 Eastern and 12 Southern States, respectively.

Mr. Hochbaum received his degree in agriculture at Cornell University in 1905 and for several years was engaged in educational work. His experience in extension work began with his appointment as county agricultural agent in Ada County, Idaho, in July 1913. After 2 years' service he was appointed county agent leader and later assistant director in that State. Mr. Hochbaum joined the staff of the Office of Extension Work on December 1, 1918, working in the 11 Western States. In 1923 he was moved to the eastern section, but also worked in many States outside this region because of his interest and experience in organization, program analysis, and planning. He has led in interesting extension agents and specialists in analyzing actual farm situations and conditions, and in planning programs which might aid farmers to adjust their operations to meet such situations. Mr. Hochbaum has also aided in the analysis of extension's teaching problems and the application of what is ordinarily known as methods.

Mr. Hochbaum taught classes in extension work in the summer graduate school at Cornell in 1930 and again in 1932. He has been a frequent contributor in the field of extension literature.

C. L. Chambers. H. W. Hochbaum.

Mr. Chambers is taking the place made vacant by the retirement of J. A. Evans, who has served for 30 years in extension work and retired on December 31, 1933, because of reaching the age of 70. Mr. Chambers obtained his degree in agriculture at Alabama Polytechnic Institute in 1908.

After graduation Mr. Chambers organized one of the first State agricultural high schools at Hope Villa, La. As principal and instructor in agriculture he led the patrons and students in the development of a demonstration farm in connection with the school. He then taught a teachers' course in agriculture at the Louisiana State University and Louisiana Polytechnic Institute. While head of the agricultural department of the latter institution he outlined a course in agriculture. The college farm was planned to serve as a demonstration farm and faculty members carried on a type of extension work throughout the county. Mr. Chambers was livestock specialist in Oklahoma for 2 years. During this period he majored in 4-H club work, organizing the first pure-bred phase of pig and calf clubs. He was then livestock marketing specialist in Alabama for 2 years, during which time he instructed farmers in selling their hogs cooperatively.

He came to the Department on December 1, 1917, as assistant in club work. He helped organize the first interstate livestock judging contest in Chicago and in outlining plans for club contests at the National Dairy Show. When he was transferred from club work to county agent work he led in the planning of programs for the Southern States based on economic conditions. He also developed an improved system of keeping records on demonstrations and of office management for county agents.

The regional heads will be in charge of the administration of all the Department's extension work carried on in those States in cooperation with the State agricultural colleges. Mr. Hochbaum's region will include Maine, New Hampshire, Vermont, New York, Massachusetts, Rhode Island, Connecticut, Pennsylvania, New Jersey, Delaware, Maryland, and West Virginia.

Mr. Chambers will be in charge of the work in Virginia, North Carolina, South Carolina, Georgia, Florida, Tennessee, Alabama, Mississippi, Arkansas, Louisiana, Oklahoma, and Texas.

The Home Demonstration Agent

NEALE S. KNOWLES

State Home Demonstration Leader, Iowa Extension Service

DURING the last 20 years, home demonstration work has worked its way up from the specific-service type of help to a high type of leadership and adult education.

The home demonstration agent is not only a teacher but an inspiring leader and friend. As a teacher the home demonstration agent helps women to keep in touch with the latest information, not only concerning the home but concerning the woman's responsibility as a good citizen. As a leader, the home demonstration agent helps women to see the home from the educational, recreational, and æsthetic viewpoint as well as the more obvious phases of homemaking.

The home demonstration agent helps women to experience real joy in serving as community leaders, whether the need be public health, recreation, sanitation, education, or any phase of civic responsibility.

As a leader and friend, the home-demonstration agent helps to bring about a spirit of cooperation between individuals and between organizations. She inspires the women with courage and faith in their own ability to achieve. She helps women to accept their responsibility toward the development of rural living.

This responsibility is not only for the present but for the future. The home demonstration agent has the future in mind when she helps women to serve as 4-H club leaders and helps them to feel that the real purpose of 4-H club work is to develop strong agricultural leaders and high standards of future rural living.

The fundamental development in home demonstration agent work has been toward a broader vision of purpose and goals. Some of the definite achievements have been definite organization, carefully planned and definite educational programs, strong local leadership, cooperation with other organizations, broader vision of home life, broader vision of good citizenship, greater appreciation of educational opportunities, greater love for rural living, and full appreciation of the home demonstration program as a part of the adult-education program.

Montana's Happy Young Folks

SIX YOUNG 4-H club members of Teton County, Mont. The three McDermott sisters, Natalie, Helen Rae, and Winifred, are very well pleased with the Holstein heifers they are grooming for the fair, while the Shoquist boys, John, Donald, and Grant, are just as proud of their baby beeves.

Farm Women Have Flower Show

IN THOSE parts of the Nation where plenty of moisture and other climatic conditions favor bounteous flower gardens, it may not be any great problem to grow numerous varieties of bloom for the annual flower show. Regardless of possible dry and unfavorable flower garden seasons, Kansas home makers, through their home demonstration groups, find tne staging of flower shows a coming enterprise.

The shows offer an opportunity for collective thinking on the part of those in attendance as to how they can beautify their rural school grounds, public parks, and of more immediate importance, the beautification of farm home surroundings. Here is an opportunity for exchange of ideas on flower gardening, cultural practices, and the exchange of plants, bulbs, and seeds.

Unit programs are made up at the beginning of each year, and at that time committees are appointed to handle the detail work of the show. At this meeting the date for the show is set. By setting the date for the show early the farm women are enabled to plan their activity so as to have the best of blooms available for the show. Various plans have been tried out regarding the location of the exhibit. In some counties the show is held at the county seat, whereas in others community shows are planned.

The committees have complete charge of the arrangements for the meeting; they arrange the program, obtain the necessary equipment, and arrange for the various awards. The show is an all-day affair, including the basket dinner, the judging of the flowers, talks, demonstrations, and the arrangement of many types of garden plantings. In some places the show is held in connection with some other activity.

Many varieties of flowers are exhibited, some of them of very high quality. New plants are given each year as a part of the list of prizes. In this way new varieties are introduced.

The shows have attracted very wide attention within the county, and additional counties enter the project each year. When the show is completed the flowers are sent to hospitals and to shut-ins.

The project is directed as home beautification as well as the growing of flowers for the show. Planting plans are carefully followed to give the home a better appearance. Cut flowers are used as interior decorations in the home to improve home life.

OVER a million dollars formerly spent by farmers of St. Francis County, Ark., for meat and meat products is now kept at home since they began curing their own meat supply, according to J. M. Thomason, county agent.

A creamery company in the county cooperated with the county agent in a program of chilling and curing pork for farmers. Later an ice company agreed to cooperate in the program, giving the county two chilling and curing centers. Farmers at once realized the value of these new services and a number of them cure as high as 100 head of hogs in these plants at one time.

In early February approximately 10,000 pounds of pork was cured or was in the process of curing in these two plants, with thousands of pounds more to be cured as fast as space became available.

Mr. Thomason states that about one-third of the annual meat loss in St. Francis County was due to unfavorable weather conditions. This situation, to a great extent, has been changed since the establishment of cold storage plants, as farmers are not losing as much meat as they did before the plants became available for curing. Farmers using these plants are finding a ready market for all the surplus hams and shoulders they have for sale.

Home-Grown Cotton Mattresses

HOME-MADE cotton mattresses have become popular in many States where cotton is grown. In the Southern States, during the last 2 years more than 9,000 mattresses have been made by farm women and girls for use in their homes. In Arkansas, home demonstration club women began making mattresses when the price of cotton fell to 5 cents a pound, which was much below the cost of production. County home demonstration agents have been very active in directing this work, having reached clubs in 41 counties of the State with special demonstrations during the past two years.

In one county in Arkansas more than 300 mattresses have been finished with an estimated saving of $3,000 to the farm homes of that county. A farmer, somewhat dissatisfied with the expense, went to town and priced mattresses of similar quality. The nearest he came to matching the quality was marked at over $20, while his total bill for the home-made mattresses was just $7. With ordinary care a good home-made cotton mattress will last from 20 to 30 years.

In one of the mattress-making demonstrations given by a home demonstration agent on a 6,000-acre plantation in Arkansas, the cotton was picked, ginned, and made into a mattress in one-half day.

In 1932, 375 mattresses were made in 16 counties, with an average cost of $4 for the material. In 1933, 1,225 cotton mattresses were made in 37 Arkansas counties, with the average cost just below $4. Texas farm ranch women made 2,400 mattresses.

Through this work, another interesting increase in the utilization of cotton has resulted in the making of sheets, lightweight covers, and other articles of bed linen for better bedrooms in thousands of farm homes. Making the bedrooms in farm homes more comfortable and attractive has been an important part of the home-improvement work carried on by home demonstration agents.

National 4-H Club Radio Program

Annual Theme: 4-H Club Work Influences the Farm and Home

Eighth Phase—4-H Club Work Promotes Organized Recreation

Saturday, August 4, 12:30 to 1:30 p.m., Eastern Standard Time

4-H clubs promote rural recreational activities in our county	4-H club boy from Rhode Island.
Rural dramatics in our club	4-H club girl from North Carolina.
4-H clubs and local leaders active in community recreation	State club leader from North Carolina.
The meaning of leisure and its wise use	A. B. Graham, U.S. Department of Agriculture.
Music we should know—Eighth phase of the 1934 national 4-H music hour—Featuring compositions by Moszkowski, Pierne, Thomas, Liszt, Beethoven, Luders, and Brahms	United States Marine Band.

Extension Stands Test of Time

(*Continued from page 82*)

agencies and their relative value in getting new farm and home practices adopted. These studies, made coordinate with but wholly independently of Thorndyke's studies, revealed to us, also, that adults who have been contacted in extension work learn as readily at 50 or 55 years of age as they do at 35 years of age and under, at least in agriculture.

When we asked members of our staff who have worked in extension for 20 years or more in all parts of the country as to the most significant changes that have taken place in rural America in 20 years, the reply was, higher standards of living on the farm, better-balanced meals, better-dressed rural people, greater pride in the business of farming, a more prosperous looking countryside, more contentment on the farm, a changed attitude on the part of farming people toward science, a greater toleration of new things, closer contact of rural people with the agricultural college and experiment station, larger development of rural social contacts, and in the South the almost complete replacement of the scrub with improved livestock and poultry. The man who doesn't use improved varieties and clean seed these days is unusual, and feels the need of apology.

Summed up, we would leave these impressions on your mind. As a result of 20 years of extension, we have increasing numbers of truth-seeking farmers, men who base their decisions on gathered fact and analysis, who put their faith in the findings of agricultural research and the practices of the best farmers, and who go about their farm tasks with confidence and enthusiasm because they are increasingly better craftsmen and business men.

Recreation and Social Life

Extension is developing the recreational and social life of rural people, establishing higher standards of living, and increasing the satisfactions of rural life.

Because of agricultural colleges, vocational schools, experiment stations, and extension work, the farmers of America today are as efficient in their business as is any other group of men in any other line of work anywhere.

During the past year the extension forces have carried out the field responsibilities of the Agricultural Adjustment Administration. It was a tribute to the organization that this work should be placed in their hands. A greater tribute is that the farmers of this country have shown their confidence in the county extension agent. It was because the advice of these agents over a period of 20 years proved sound, because the extension worker had the confidence of the farmer, that the achievement of success in these adjustment programs has been possible. It is an imposing tribute to the 20 years' experience of extension work and extension workers.

AS a memorial to Mrs. Coe, first home demonstration agent of Montgomery County, Kans., a traveling library was established at the sixth annual Coe Day, held in her memory. Farm bureau women paid $0.05 each toward a fund to pay express on books borrowed from the State traveling libraries. In addition, those who cared to, donated a good book to the library. About 100 books were donated in this manner. Books from the Lila S. Coe Traveling Library have been transported from club to club by the home demonstration agent as she went to club meetings. A total of 100 farm bureau women have used the library free of charge this year.

She Believes in Club Work

Mrs. Robert Linton.

FOR 20 years Mrs. Robert Linton, who is affectionately known as "The mother of club work in Boulder County, Colo.", has been active as a club leader. Mrs. Linton estimates that she has supervised the training of about 225 boys and girls in 4-H club work. Not only has she the ability to lead clubs in sewing and meal preparation, but she has been equally capable in training club members in the production of sheep, poultry, corn, and swine.

"I have certainly enjoyed my work with farm boys and girls", Mrs. Linton says. "The results we have obtained show that our efforts have not been wasted. I have seen young men and women grow up to become farm leaders, professional men and women, and capable housewives, and I know that 4-H club work has encouraged them along these lines."

Many of her former club members have completed their agricultural and home-economics work in college, while others have gone into other vocations.

Mr. and Mrs. Linton live on an 80-acre farm 2 miles south of Longmont. They have raised a family of three, all of whom have been 4-H members and are now grown men and women in the business world. Mrs. Linton is an active worker in the grange, being secretary of the St. Vrain local, lecturer in Pomona, and chairman of the home-economics committtee of the Colorado State Grange.

New Film Strips

TWO new film strips as listed below have been completed by the Office of Cooperative Extension Work in cooperation with the Bureau of Agricultural Economics. They may be purchased at the price indicated from Dewey & Dewey, 7603 Twenty-sixth Avenue, Kenosha, Wis., after first obtaining authorization from the United States Department of Agriculture. Blanks for this purpose will be supplied upon request to the Office of Cooperative Extension Work.

Series 312. Apple Outlook Charts, 1933-34. Illustrates selected charts with brief titles prepared by the Outlook Committee of the Bureau of Agricultural Economics. The explanatory notes should be supplemented by consulting the agricultural outlook reports issued by the Bureau and by the States for the current year. 42 frames. 36 cents.

Series 329. Citrus Fruit Outlook Charts, 1933-34. Illustrates selected charts with brief titles prepared by the Outlook Committee, Bureau of Agricultural Economics. The explanatory notes should be supplemented by consulting the agricultural outlook reports issued by the Bureau and by the States for the current year. 24 frames. 36 cents.

The Series Number 207 assigned to "Poultry in the Live-at-Home Program" which was announced in the May issue should read Series 313, "Poultry in the Live-at-Home Program."

Revised Series

The following series have been revised:

Series 304. Cotton Outlook Charts, 1933-34. Illustrates selected charts with brief titles prepared by the Outlook Committee of the Bureau of Agricultural Economics. The explanatory notes should be supplemented by consulting the agricultural outlook reports issued by the Bureau and by the States for the current year. 48 frames. 36 cents.

Series 309. Poultry and Egg Outlook Charts, 1933-34. Supplements the 1933-34 outlook report on poultry and eggs. 49 frames. 45 cents.

Completed Localized Film Strips

The following three localized film strips were completed by the Office of Cooperative Extension Work in cooperation with county extension agents, specialists, and other extension workers. The photographs used were all local pictures, either selected or taken by the agents themselves.

Series 1134. A Maryland Farm Feeds the Family. 33 frames. 36 cents.

Series 1135. What a Hog is Worth to the Jones Family. (Maryland.) 17 frames. 36 cents.

Series 1136. Glimpses of Home Demonstration Work in Wyoming. 57 frames. 45 cents.

THE outlook in Okfuskee County, Okla., is much brighter this year than last, according to G. M. Parker, assistant county agent. In February 1933 there were 2,500 farm people on the county relief rolls, whereas only 200 farm people are on the rolls this year. Agent Parker's survey showed that all business is sharing an increase of from 25 to 50 percent, with clothing and hardware stores in the lead. A hardware store at which he inquired reported that recently 200 horse collars had been sold in 60 days; in the same period a year ago only 25 were sold. Last year this same store employed 2 clerks and now employs 9.

THE value of community discussions has been demonstrated in Illinois by nearly 3,000 Agricultural Adjustment Administration corn-hog and wheat adjustment meetings. Several counties are now training discussion leaders and organizing discussion teams in various types of community units. Training schools, attended by approximately 150 rural people from 32 different community units, have been conducted in Champaign, Ford, and Sangamon Counties for the purpose of developing discussion leaders. During the corn-hog campaign more than 90 percent of the farm operators in the State attended community meetings to discuss the adjustment problem. "By training leaders who can conduct discussions at rural community meetings, Illinois farmers will be better prepared to develop future cooperative activities related to their industry," states D. E. Lindstrom, associate in rural sociology at the College of Agriculture, University of Illinois.

IN one week the Civil Works crew in New Hampshire cut down 4,774 worthless apple trees in the campaign against apple pests.

What Has Been Accomplished

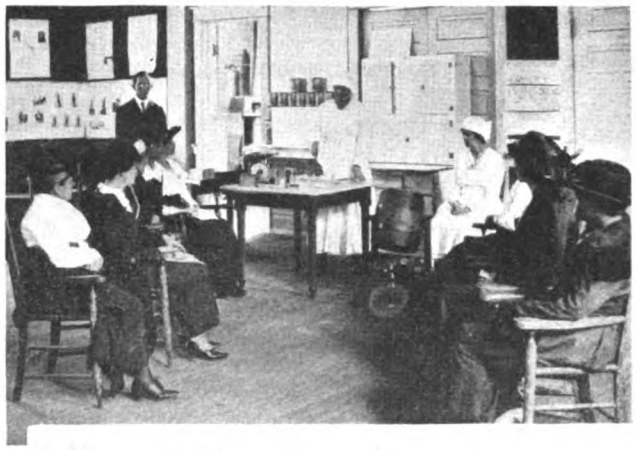
(*Continued from page 89*)

pacities for learning and leadership. Studying, thinking and acting together has stimulated growth, nourished initiative and inspired self-dependence.

Out of their achievements in farm, home, community, State, and national programs have come much confidence, courage, and understanding. Outlook has been broadened, morale has been kept up, ideals have been expressed, and attitudes toward agriculture, the industry upon which they depend for a home and a living, has become more wholesome. This development of people themselves, through their own efforts, I believe is the Extension Service's most valuable contribution to society.

R. J. BALDWIN,
Extension Director of Michigan.

Pictures of Earlier Days



First column: A Massachusetts community kitchen doing its share to win the war.
J. A. Evans, one of the first agents to be appointed, ready for business.
One of the first tomato clubs organized in 1913 by Mrs. Redfearn, who is still in Anson County, N.C.
Second column: A butter demonstration at Alabama's first short course for women.
A sheep demonstration in 1914.
An Arizona farm boy does his best to utilize waste in feeding his "Liberty Pig."
A typical rural road of 20 years ago.

20 YEARS' SERVICE

THE following list of 236 men and women who have been in extension work in the States since 1914 shows that extension work can and does hold its personnel. It is a work in which the individual can grow and find satisfaction, a profession which fills an important niche in the educational needs of the Nation. . . From the standpoint of the Extension Service, I cannot overestimate the value of this nucleus of tried and true agents, farm bred and educated in our agricultural colleges. Through the years of practical experience these agents have improved their abilities and relations with farm people in the light of constantly changing conditions. . . I want to congratulate them on their service records and also those hundreds of others who are making extension work their life work. They have dedicated their efforts to improving the social and economic welfare of farm people. They are always ready to take the lead in any movement for the betterment of agriculture. These are men and women of tremendous influence upon the rural life of the Nation.

Director of Extension Work.

Alabama
R. G. Arnold
H. H. Best
John Blake
T. M. Campbell
E. R. Carlson
W. T. Coker
S. M. Day
L. N. Duncan
A. G. Harrell
J. W. Sartain
Diana B. Williams
J. D. Wood

Arizona
Frances L. Brown
Charles R. Fillerup
P. H. Ross

Arkansas
J. C. Barnett
Connie J. Bonslagel
W. D. Ezell
W. J. Jernigan

California
H. J. Baade
B. H. Crocheron
T. C. Mayhew

Connecticut
A. J. Brundage
B. W. Ellis
R. E. Jones

Delaware
C. A. McCue

Florida
A. P. Spencer

Georgia
Maggie E. Bethea
J. Phil Campbell
C. B. Culpepper
G. V. Cunningham
G. B. Eunice
J. A. Johnson
P. H. Ward
Annie W. Wiley
H. G. Wiley
L. S. Watson

Idaho
E. F. Rinehart

Illinois
O. G. Barrett
Otis Kercher
M. L. Mosher

Indiana
T. A. Coleman
Z. M. Smith

Iowa
R. K. Bliss
C. L. Fitch
M. A. Hauser
Neale S. Knowles
Murl McDonald
K. W. Stouder
P. C. Taff
S. H. Thompson

Kansas
C. G. Elling
Amy Kelly

Kentucky
T. R. Bryant
T. P. Cooper
H. K. Gayle
E. J. Kilpatrick
C. A. Mahan
W. R. Reynolds
R. F. Spence
W. C. Wilson

Louisiana
W. C. Abbott
H. F. Cassell
C. C. Chapman
A. G. Graham
T. J. Jordan
W. M. McBride
W. B. Mercier
L. E. Perrin
C. P. Seab
F. A. Swann

Maine
Clarence Day
Arthur Deering

Maryland
E. N. Cory
S. B. Shaw
T. B. Symons
C. E. Temple
G. F. Wathen, Jr.

Massachusetts
Allister MacDougall
F. C. Smith
George F. E. Story

Michigan
R. J. Baldwin

Minnesota
W. L. Cavert
S. B. Cleland
T. A. Erickson
W. P. Kirkwood
K. A. Kirkpatrick
R. S. Mackintosh

Minnesota *Con.*
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Julia O. Newton

Mississippi
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Harris Barnes
B. A. Brady
H. A. Carpenter
Mary E. Doney
A. J. Flowers
May E. Haddon
L. A. Higgins
M. M. Hubert
W. C. Mims
G. C. Mingee
J. E. Ruff
J. E. Tanner
A. E. Terry
J. W. Whitaker, Jr.

Missouri
R. H. Emberson

Montana
J. C. Taylor

Nebraska
I. D. Wood

New Hampshire
J. C. Kendall
E. P. Robinson
H. N. Wells

New Jersey
H. J. Baker
Ellwood Douglass

New Mexico
W. L. Elser

New York
Bristow Adams
J. H. Barron
M. F. Barrus
H. E. Botsford
C. R. Crosby
H. A. Hopper
L. M. Hurd
B. B. Robb
Montgomery Robinson
L. R. Simons
R. H. Wheeler

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J. A. Arey
T. J. W. Broom
J. W. Cameron
Oliver Carter
Minnie L. Garrison
R. D. Goodman
R. W. Graeber

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J. P. Herring
C. R. Hudson
Jane S. McKimmon
Zeno Moore
F. E. Patton
Hattie F. Plummer
Rosalind A. Redfearn
J. R. Sams
H. K. Sanders
I. O. Schaub
Cornelia Simpson
Annie P. Smith
F. S. Walker

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G. B. Crane
D. R. Dodd
J. E. McClintock
W. H. Palmer

Oklahoma
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T. M. Marks
E. B. Shotwell

Oregon
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Paul V. Maris
G. A. Nelson
Claribel Nye

Pennsylvania
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F. S. Bucher
M. S. McDowell
D. K. Sloan

South Carolina
T. A. Bowen
S. W. Epps
E. P. Josey
Lonny I. Landrum
W. W. Long
R. H. Lemmon
A. A. McKeown
W. J. Tiller
Dora Dee Walker

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Margaret A. Ambrose
C. P. Barrett
R. E. Ellis
F. R. Hines
C. A. Keffer

Tennessee *Con.*
Elizabeth M. Lauderbach
H. S. Nichols
T. H. Richardson
Ebb Thomae

Texas
George Banzhaf
D. F. Eaton
J. R. Edmonds
J. H. Erickson
Elbert Gentry
L. T. Hunter
O. B. Martin
G. W. Orms
R. W. Persons
J. L. Thomas
Edna W. Trigg
H. H. Williamson
T. B. Wood

Utah
J. C. Hogenson
V. L. Martineau
R. H. Stewart

Vermont
J. E. Carrigan
E. L. Ingalls
E. H. Loveland

Virginia
J. G. Bruce
O. M. Cockes
H. B. Derr
F. S. Farrar
Hallie L. Hughes
J. R. Hutcheson

Virginia *Con.*
Lizzie A. Jenkins
J. W. Lancaster
W. O. Martin
H. E. McSwain
F. W. Michaux
A. W. Pegram
J. B. Pierce
J. H. Quisenberry
W. C. Shackelford
D. D. Sizer
Sylvia Slocum
J. C. Stiles
B. A. Warriner
R. E. F. Washington
W. W. Wilkins
J. F. Wilson

Washington
F. E. Balmer
A. E. Lovett
R. N. Miller
O. V. Patton

West Virginia
C. H. Hartley
W. H. Kendrick
Jeanette Weil

Wisconsin
T. L. Bewick
K. L. Hatch
E. L. Luther
J. F. Wojta

Wyoming
A. E. Bowman
F. P. Lane

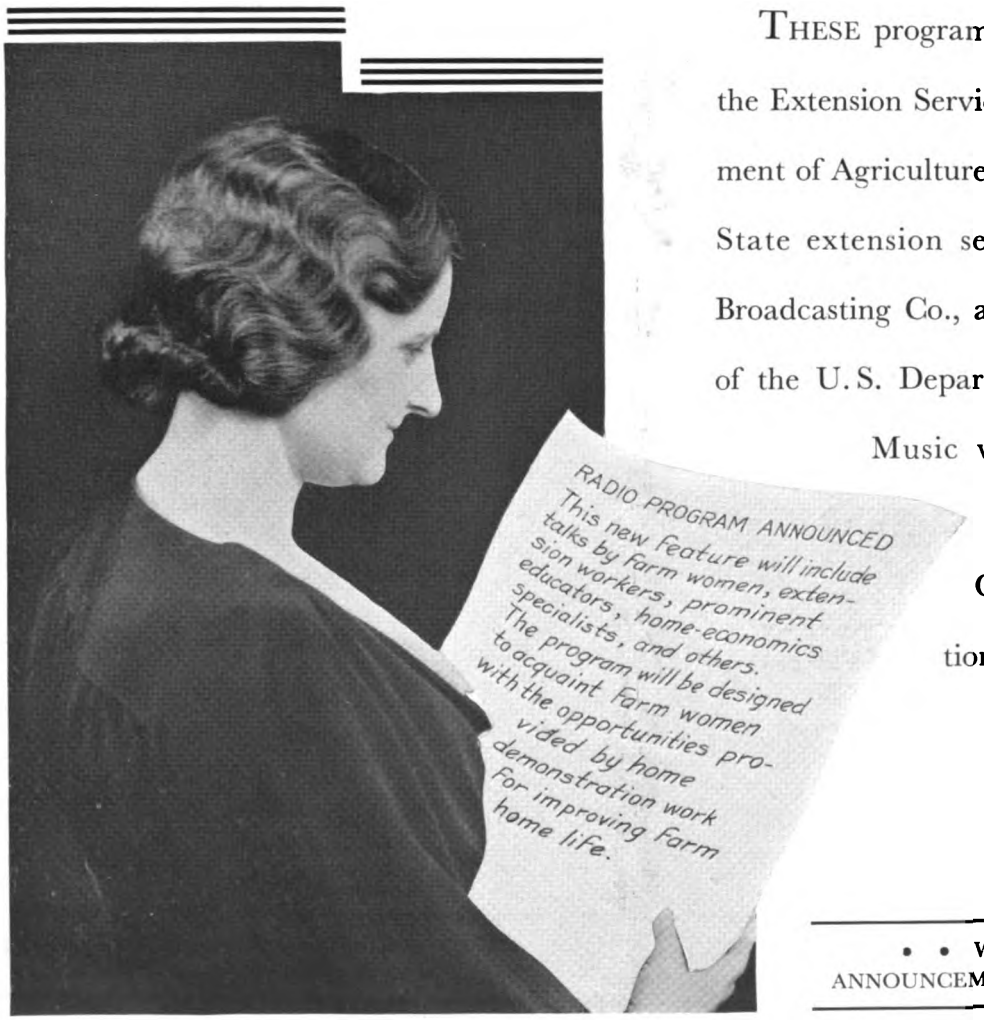
THE HOME DEMONSTRATION RADIO HOUR

A new monthly radio program featuring topics of interest to farm women, extension workers, and others interested in home-economics subjects.

It goes on the air

THE FIRST WEDNESDAY OF EVERY MONTH

From 12:30 to 1:30 p.m., Eastern Standard Time



THESE programs will be presented by the Extension Service of the U. S. Department of Agriculture, cooperating with the State extension services, the National Broadcasting Co., and the Radio Service of the U. S. Department of Agriculture.

Music will be furnished by the Homesteaders' Orchestra of the National Broadcasting Co.

• • WATCH FOR • •
ANNOUNCEMENTS OF BROADCASTS

EXTENSION SERVICE
UNITED STATES DEPARTMENT OF AGRICULTURE
WASHINGTON, D.C.

U. S. GOVERNMENT PRINTING OFFICE: 1934

Extension Service Review

VOL. 5, NO. 7 JULY 1934

USING LEISURE MOMENTS TO MAKE AN IMPROVED WATERING TROUGH FOR POULTRY

ISSUED MONTHLY BY THE EXTENSION SERVICE
UNITED STATES DEPARTMENT OF AGRICULTURE
WASHINGTON, D.C.

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In This Issue

With the organization of more than 650 production credit associations a complete credit system adapted to the needs of farmers is being rounded out by the Farm Credit Administration. S. M. Garwood, who is the production credit commissioner of the Farm Credit Administration, tells us how this credit system is functioning.

Chester Davis believes that a 28 percent rise in the purchasing power of farm income during the first 4 months of 1934 over the corresponding period in 1933 is a significant indication that the recovery of agriculture is on the way and points out that the farmer's increased ability to buy industrial goods will be reflected in better business conditions. The enlisting of 3,000,000 farmers in a voluntary attack upon basic production problems is the greatest cooperative effort ever undertaken by farmers and although incomplete, it marks the start of a large-scale transition away from a purely individualistic agriculture. In his article, Chester Davis explains what benefits have already accrued to farmers from the operations of the adjustment program.

How the Agricultural Adjustment Administration program is conducted in Kansas is told by L. L. Longsdorf, Kansas State extension editor. Two committees, the interpretative committee and the clearing-house committee, are responsible for interpreting and disseminating the rules and regulations. As an aid to field workers the committees created a handbook in which are classified all rulings pertaining to the national, State, and county programs.

Besides enjoying a pleasant vacation at their camps Kentucky homemakers use their time to good advantage by making useful as well as ornamental articles for their homes. Myrtle Weldon, State home demonstration leader, gives an interesting account of handicraft work in Kentucky's vacation camps for women and tells how it contributes to better homes.

After 4 years that were favorable to several local species of grasshoppers, these insects again menaced crops this year. The damage has been so serious in the area affected that Congress appropriated funds for organizing and conducting control measures. How these measures have been carried out is described in the article on fighting the grasshopper.

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On The Calendar

Farm and Home Week, Durham, N.H., August 14–17.

Farm and Home Week, Clemson College, S.C., August 14–17.

Farm and Home Week, Burlington, Vt., August 16–17.

Tri-State Fair, Amarillo, Tex., September 15–21.

Eastern States Exposition, Springfield, Mass., September 16–22.

National Recreation Association Meeting, Washington, D.C., October 1–5.

National Grange Convention, Hartford, Conn., November 14–23.

The success of the rural rehabilitation program requires definite cooperation between Federal, State, and county emergency relief administrations, the Extension Service, and the Agricultural Adjustment Administration. How five extension workers, with J. Phil Campbell heading the group, are acting as coordinators and aiding the Federal Emergency Relief Administration in developing cooperative plans is explained in the article "Rural Rehabilitation Program Forges Ahead." What Alabama is accomplishing in rural rehabilitation is also outlined in the following article.

Happiness and success on the farm are contingent upon close cooperation of all members of the family. With so much at stake, E. L. Moffitt, Pennsylvania farm management specialist, wonders why more extension workers do not take an active interest in striving for a closer relationship between programs in farm management and home management. He outlines some of his experiences in attempting to obtain a better tie-up between the farm as a place of business and the farm as a home.

By providing almost year-round pastures for their stock Missouri farmers are reducing the cost of producing meat, milk, and wool. The Missouri Extension Service has carried on intensive work on pasture improvement for 6 years.

THE EXTENSION SERVICE REVIEW is issued monthly by the Extension Service of the United States Department of Agriculture, Washington, D.C. The matter contained in the Review is published by direction of the Secretary of Agriculture as administrative information required for the proper transaction of the public business. The Review seeks to supply to workers and cooperators of the Department of Agriculture engaged in extension activities, information of especial help to them in the performance of their duties, and is issued to them free by law. Others may obtain copies of the Review from the Superintendent of Documents, Government Printing Office, Washington, D.C., 5 cents a copy, or by subscription at the rate of 50 cents a year, domestic, and 75 cents, foreign. Postage stamps will not be accepted in payment.

C. W. Warburton, *Director* C. B. Smith, *Assistant Director* L. A. Schlup, *Acting Editor*

Meeting the Farmers' Credit Needs

S. M. GARWOOD
Production Credit Commissioner of the Farm Credit Administration

EXTENSION workers and colleges of agriculture have long realized the need for a well-rounded financial program for agriculture. They know that just as credit is the lifeblood of commerce, it is the lifeblood of agriculture.

One of the stumbling blocks in the development of such a financial program for farmers and stockmen has been the lack of short-term and intermediate credit facilities adapted to their needs. It is this gap in the financial structure that the new cooperative production credit associations were organized to fill. The associations have been established to provide a permanent credit system to serve farmers for years to come as well as during the present emergency.

Farmers and stockmen need loans that will mature when they have marketed their crops or livestock, which is usually from 3 months to a year in the case of loans on crops, and 1 to 2 years in the case of livestock or general-purpose loans. In order to meet this need, loans made by production credit associations mature when the farmer-borrower expects to market his products. This eliminates the necessity of paying renewal fees on loans.

Interest Savings

The savings in interest charges on loans made by production credit associations is not limited to the present low rate of 5 percent, for interest is charged on a yearly rather than a flat basis. For example, the interest on a $1,000 loan for 1 year would be $50, while the interest on a loan of the same size for 6 months is $25 and only $12.50 on a 3 months' loan. The entire amount of the loan may be used by the borrower as he is not required to keep any of the money borrowed on deposit. The interest is not discounted or deducted from the original loan, but is payable when the loan matures. These factors result in an actual interest rate lower than farmers commonly pay for production credit.

In addition to these savings, many farmers have reduced their interest charges still further by obtaining loans in a series of advances. Such advances will be made to borrowers as they need money during the season. This plan of making advances on loans results in a saving to the borrower, as interest is charged only for the time he has each advance. For example, if a farmer borrows $1,000 and has $500 for 9 months for which he pays an interest charge of $18.75 and has the balance, amounting to $500 for 3 months for which the interest charge is $6.25, he pays a total interest charge of $25. If he borrowed the entire $1,000 for 9 months, he would pay $37.50 in interest. By getting such a $1,000 loan in two $500 installments, the borrower saves $12.50 in interest.

Farmers in many parts of the country are using this new source of short-term and intermediate credit to pay cash for the things they buy, rather than obtain credit from storekeepers, merchants, and feed and fertilizer dealers. When buying on time they pay extremely high interest rates in the form of higher prices charged by stores and dealers granting credit. Merchants and dealers are engaged primarily in selling goods rather than extending credit.

Borrowers Vote

The ownership of capital stock in his production credit association by the farmer-borrower not only assures him of a voice in the management of the association, but also gives him the responsibility, along with the other borrowers, of maintaining the strength of his loaning agency. After the first purchase of stock in his association, the borrower may obtain loans from the association in future years without the necessity of additional stock purchases, unless he wishes a larger loan or the capital of the association has become impaired. The borrower may also sell his stock in the association when his loan is repaid. Stock ownership, thus, is not an extra cost of obtaining this type of credit, but an investment in a permanent financial institution, the success of which will insure the farmer-borrower low cost credit for years to come.

The associations are not lending government money, but obtain their loan funds by discounting their borrowers' notes with the Federal intermediate credit bank of their district. The intermediate credit banks obtain their funds by selling their debentures to the investing public. The Government provided some of the capital of the associations through the production credit corporation of the district, but this together with the capital supplied by the borrowers themselves is, of course, not used to make loans. It is invested in high-grade bonds which are deposited with the Federal intermediate credit bank as collateral security for the notes it discounts.

Sound Loans Essential

Loans must be made on a sound business basis if the low cost credit of the financial centers is to continue to be available to farmers in all sections of the country. It is necessary that farmers and stockmen put up collateral for their loans in the form of liens or chattel mortgages on personal property such as crops, livestock, or equipment. This helps protect their association from possible losses. While it is necessary for the borrower to put up sufficient collateral, the associations make their security requirements as reasonable as a sound lending policy permits. Loans are made with the expectation that they will be repaid and the collateral is only a safeguard against unforeseen circumstances and against the possibility of other creditors taking the property and thus depriving the borrower of his means of earning an income.

In addition to loans to finance the production and marketing of crops and livestock, loans are also made for general agricultural purposes, such as the pur-

71126—34

chase of workstock, machinery and supplies, and the financing of repairs and improvements. General-purpose loans are made only for such projects that will enable the borrower to repay the loan in 1 or 2 years.

Members of 4-H clubs and Future Farmers of America organizations may now borrow from these production credit associations to finance their projects. The loans are made through a sponsor. Such loans will give the members of these organizations experience in sound financing of their various projects.

The 650-odd local production credit units were organized in 6 months and began to make loans to their members immediately. Through June 8 they had completed 88,985 loans amounting to $48,452,187, although a large amount of spring financing had been completed through then existing regional agricultural credit corporations which have since ceased making loans. Of this amount, $32,529,842 was disbursed and the balance was being held for the accounts of farmers who arranged to have their loans paid in a series of advances during the season.

Loans Speeded Up

As secretary-treasurers, boards of directors, and loan committees of new associations have become better acquainted with the operation of their individual units, the forms and the procedure necessary to obtain a loan have been simplified. Thus the costs to both the borrower and his association are further reduced, and the time required to get a loan is greatly decreased.

The ideal production credit association would serve one community. At the same time, it should be able to make enough sound loans so that it can pay its operating costs and have a surplus to strengthen its financial position and pay a profit to its farmer-borrowers. While it is desirable for production credit associations to serve as small a territory as possible, so that they may be easily accessible to the farmers and stockmen in the area served, it is essential that the associations cover enough territory to supply a large volume of business. Only in this way is efficient operation possible. This makes it necessary for some associations to cover large territories where the volume of loans is small. However, in the case of associations covering large areas a representative is being placed in each county to receive applications and remittances to make credit readily available.

The production credit associations are not only loaning money to their farmer-members on a permanent, sound, cooperative basis, but are also helping the farmer-borrower to develop a well-rounded financial plan by requiring each borrower to submit a financial statement and a plan for repaying his loan. Thus borrowers are encouraged to plan their financial operations in advance and to make an inventory to show their current standing, as has long been advocated by many county agents and extension workers. Adequate short-term and intermediate credit facilities enable farmers to use credit efficiently and aid them in getting out of debt rather than into debt.

How Production Credit Associations Serve Agriculture

1. They provide a permanent, adequate source of short-term and intermediate credit adapted to farmers' needs.
2. They are managed and partially owned by borrowers.
3. They lend at cost. Borrowers share in any profits.
4. They enable borrowers to reduce their interest costs by making loans in a series of installments.
5. They eliminate dependence on expensive sources of short-term and intermediate credit.

AT Fairview, Okla., W. M. McMurtry, the vocational agricultural teacher, and the county agent, W. B. Hanly, have teamed up in the adjustment programs. Mr. McMurtry handles the educational work and Mr. Hanly attends to the individual requirements of the contracts.

MORE than a million and a half trees were set out by boys and girls of school age on idle acres of their home farms in New York this spring. The State conservation department furnished the trees in lots of 1,000 each to members of 4-H clubs and young farmers' clubs, and the extension forester conducted demonstrations in planting and caring for the young forest trees.

Family Expenses Studied

Although farmers in Illinois produce 68 per cent of the food served on their tables, the grocery bill is still the largest item in the family's cash expenditures, according to a summary of 167 home-account records.

During the past year the Illinois farm families covered in the summary made total cash expenditures ranging from $350 to $1,778, or an average of $679 each. Of this amount, $147, or 21.5 percent went for the purchase of food.

Cash operating expenses such as telephone, fuel, light and power, ice, servant hire, soap, matches, and similar small supplies amounted to 15 percent of all cash expenditure. Another 15 percent, or approximately $101 for each family, was used in buying clothing.

Automobile charges accounted for the fourth largest item, involving 12 percent of all cash expenditures, while recreation and education combined required 11 percent, or an average of $77 for the average family during the year.

Under the item of shelter costs, the farm families entered 9.5 percent of their cash expenditures. This included an average of $18 a year for cash repairs and fire insurance and $45 for furnishings and equipment.

The physician, the dentist, and the drug store claimed an average of $42 from each family under the heading of health expenses, thereby accounting for 6 percent of the total cash expenditures. An equal amount was contributed to the church and in other gifts, while the remaining 4 percent of all expenditures went for personal items of all members of the family.

ELEVEN counties in New York were represented at the recent conference on child development and parent education held at the College of Home Economics at Ithaca. The meetings were attended by home demonstration agents, county and city leaders, and representatives of child study clubs.

Child study clubs are composed of groups of parents who organize to study children through the reading of books, current literature, and discussion. They are in constant touch with and receive help from the college. Eighteen study courses that cover guidance and parent education have been organized.

Fifty-six such clubs now exist in New York State, and in addition to studying their own children, they interest themselves in Boy Scout, Girl Scout, Brownie, and parent-teacher groups.

Increased Farm Income Under the Adjustment Program

CHESTER C. DAVIS
Adminstrator, Agricultural Adjustment Act

MUCH of the credit for the success of the program for agricultural recovery must necessarily be given to the many cooperating organizations—the county allotment committees, the extension workers, and to the 3,000,000 farmers who have signed adjustment contracts. While these farmers do not constitute, in actual numbers, quite half the farmers of the United States, they do represent more than 90 percent of the cotton and tobacco, 80 percent of the wheat, and most of the corn-hog production that is significant. They may be taken as an accurate measure of the first year's achievements under the programs of the Agricultural Adjustment Administration. The year has been filled with hard work on the part of the thinking farmers and their temporary servants in the thousands of county associations. Acting together, they have gone a long way in accomplishing what they as individuals could not attempt—the adjustment of their production to the quantity that the Nation and the world will buy at a fair price. In uniting in this cooperative plan the American farmers seek to gain only their fair share of the Nation's income.

The active cooperation of the farmers is shown in the number who have signed the various commodity agreements. More than 1,000,000 cotton farmers, 550,000 wheat farmers, nearly 300,000 tobacco farmers, and 1,200,000 corn-hog producers, have all expressed their willingness to cooperate in the form of a reduction contract. To this list must be added the 10,800 rice growers, approximately 90,000 dairy farmers who have benefited through the 27 effective milk licenses, and the 740,000 producers of special agricultural crops whose prices have been increased and whose marketing conditions have been stabilized by 22 marketing agreements.

Farm Prices Improved

Definite progress has been made toward "parity" in farm prices, the objective of the Agricultural Adjustment Act. The prices of the seven basic commodities averaged 51 percent of the pre-war level in March 1933, and 76 percent of the pre-war level in May 1934. However, when benefit payments are added, the average price on the domestically consumed portion for the cooperating producers in May 1934 was 100 percent of the pre-war level, as compared with 66 percent in May 1933, and 51 percent in March 1933. By the third week in June they averaged about 110 percent of pre-war level.

A FEW weeks ago the extension workers celebrated their twentieth birthday. The Agricultural Adjustment Administration was passing through the first weeks of its second year. The extension organization is justly proud of the accomplishment of 20 years in the service of the American farm family. I believe it can feel equally proud of its accomplishments during the last year in acting as the principal field force of the Agricultural Adjustment Administration.

Administrator, Agricultural Adjustment Administration.

Prices paid by farmers in June 1934 were 122 percent of the pre-war level. Making allowances for this increase, the purchasing power of these basic commodities was about 90 percent of the pre-war level in June 1934, as compared with 50 percent in March 1933. In other words, for the domestically consumed portion of these crops, the cooperating farmers have received, and will receive, an improvement in the exchange value of the 7 basic commodities representing four-fifths of the distance toward the parity defined in the act.

But the purchasing power of farm income, rather than the purchasing power of price per unit, is the real measure of farm progress. During the first 9 months in which benefit payments were distributed, the purchasing power of farm income has been 25 percent higher than in the corresponding period of 1932–33. During the first 4 months of 1934, the purchasing power of farm income has been 28 percent higher than during the corresponding period of 1933.

The total cash of the farm income was 39 percent larger during the first 12 months under the adjustment plan than during the 12 months preceding the passage of the act. An increase of more than $1,500,000,000 in cash income, exclusive of the value of products used on the farm, has meant much to farmers. More than 12 percent of this increase can be traced directly to the benefit payments and land rental payments, which during the first year under the act, were in excess of $185,380,000. The distribution of this total among the producers of the basic commodities on which payments were made was as follows: Cotton, $112,515,866; wheat, $67,617,486; tobacco, $5,206,778; and the first few payments under the corn-hog plan, corn $15,536 and hogs $24,844. For cotton and tobacco, the payments include those made under the 1933 and 1934 contracts, while the others are representative of the payments for the 1934 contracts.

Income Increased

There is no doubt that the farm income has been increased by the adjustment plan. It is true there have been other factors which have influenced this increase outside of the direct benefit payments. More money has been placed in the channels of trade through increased industrial activity and various governmental emergency programs, and the devaluation of the dollar has had its effect.

Other facts are in evidence as to the actual increase in farm purchasing power. The potential gross income of the cotton growers for the 1933 cotton crop, including rental payments and profit from cotton options, is $857,000,000 as compared with $425,000,000 for the 1932 crop. The gross income from grains, including wheat benefit payments, was close to $700,000,000 in 1933, compared to less than $325,000,000 in 1932. The total estimated value of the 1933 flue-cured tobacco crop is $115,000,000 compared with $44,000,000 for the 1932 crop. The income of other tobacco producers has been raised in a like manner. The payment of approximately $350,000,000 has been started to the corn-hog producers of the country. Benefits will go to the producers of cattle and sugar beets in the near future, made possible through an amendment to the original Adjustment Act.

Not only has the cooperating farmer received cash benefit payments and increased income through the control pro-

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New Under Secretary and Assistant Secretary

Rexford G. Tugwell

REXFORD GUY TUGWELL, formerly Assistant Secretary of Agriculture, has been appointed to the position of Under Secretary of Agriculture. His nomination was confirmed by the Senate on June 15. The office of Under Secretary was created by the last Congress in order to relieve the Secretary of some of the policy-making and executive duties which have accumulated as the problems of agriculture have become more complex and as Congress has increased the administrative obligations of the Department. Under Secretary Tugwell was born and reared on a farm in New York State. After graduating from the University of Pennsylvania, he taught economics there, at the University of Washington, and at Columbia University. Though his field has been general economics, he has for many years devoted special attention to the economic problems of agriculture.

M. L. Wilson, who will take Dr. Tugwell's place as Assistant Secretary of Agriculture, came to the Department of Agriculture from Bozeman, Mont., soon after the Agricultural Adjustment Act was passed. The domestic allotment plan and the wheat production adjustment campaign were largely worked out by Mr. Wilson. After the wheat adjustment campaign was under way, he was put in charge of the Subsistence Homesteads Division of the Department of the Interior.

Mr. Wilson was born in Cass County, Iowa, and has had extensive experience as a farmer, as an extension worker, and as an economist. Appointed as one of the first two county agents hired in Montana, he later became county agent leader. For two years he headed the Division of Farm Management and Costs in the United States Department of Agriculture and then went back to Montana as head of the Department of Agricultural Economics at Montana State College, which position he held until called to Washington to assist in administering the A.A.A.

M. L. Wilson

Increased Farm Income Under the Adjustment Program

(*Continued from page 99*)

grams and marketing agreements, he also has an opportunity to improve the land from which he obtains his living. He has an opportunity to control erosion and to make use of soil-improvement plantings. The demand for seed for the planting of soil-improving crops indicates that much of the land taken out of production will be improved by the use of such crops.

Help in Drought Area

We have taken into consideration the factors that have been of influence, in the success of the adjustment programs under normal farming conditions. I do not believe that any of us could foresee the drought, an emergency within an emergency, an unusual weather condition which in some areas is reducing production more drastically than the adjustment program. The flexibility of the adjustment contracts has been brought fully into play to meet this situation. There is no need to fear famine. The warehouses and elevators of this country are full of the surplus commodities that have accumulated over the past several years. Nature has come to aid in the adjustment of supply to demand. But, Nature's methods are ruthless, while man's are merciful. We have taken a number of major steps to help the farmers in the drought area. Cattle are being purchased. Contract regulations have been relaxed. The wheat contract, for example, required that producers plant not less than 54 percent of the base average acreage. In the drought area where planting was impossible, this clause was modified and the payments will be made, even if no wheat can be planted in that region. Modifications that served to encourage the planting of forage crops to produce feed for livestock have been made in all contracts.

Further changes are being, and will be made, to adapt the contracts to the situation, if necessary, as the problem becomes more acute. The benefit payments serving as crop-income insurance, will go a long way in assuring the cooperating farmers of an income.

Even though there has been an increase in the farm income, I believe that it has not been the most important factor in the program for agricultural recovery. It has been responsible for an improvement in rural living; it has put new courage in the hearts of the farmers, and it has given the farm family new opportunities. I cannot help thinking that these are worth-while achievements made possible by the adjustment program. Secretary Wallace recently said, "To my mind the outstanding accomplishment of the past year has been the driving home to the farmers themselves the causes of their troubles." It has certainly started farmers to thinking new thoughts in regard to agricultural production.

If we have achieved a degree of success, the measure of that success must be in the cooperation of the individual farmer. I believe that the recovery of America's basic industry—the production of food for a Nation's people—is on the way. Yet we must face the future with a determination and renewed belief in the goal for which we are working to place agriculture on a sound and permanent program of production in relation to markets.

Keeping Up to Date

Kansas System Brings Orderly Distribution of A.A.A. Information to Agents and Farmers

The plan of procedure as outlined in the article by L. L. Longsdorf, Kansas State extension editor, is part of the machinery that has been set up in Kansas to take the adjustment program to the rural and urban districts of the State. It functions best because its operators believe the principles of the program to be sound, and by such means is offering a program for national, State, and county farm adjustment to improve the standard of living on the farms of America.

THE "Three A's", those three letters which represent adjustment for the farming business of some 166,000 Sunflower State farmers, has earned for itself a place on the masthead of the Kansas Extension Service Program. From a 26 page booklet comprising the factual data of the Agricultural Adjustment Act as approved by President Roosevelt on May 12, 1933, the program has developed in the short time of 13 months into what may be termed "a metropolitan newspaper"—its influence reaching into the homes of thousands of farmers and businessmen in rural and urban Kansas.

Trained Leaders Developed Program

The program as now underway did not grow like Topsy. It grew to its present size under the direction of trained leaders. And, heading this group of workers was the director of extension, H. Umberger, a leader believing in applying humanitarian principles to farming, firm in the belief that conservation of our natural resources is imperative, and thoroughly convinced that the farmers and homemakers of the State would be willing to carry the load of adjustment if governmental direction were provided for them. Furthermore, he was of the opinion that agriculture and homemaking could not prosper until such adjustment was forthcoming, wherein the returns of the farmers' labors would be sufficient to insure for them a fair standard of living for the rural families of the country.

Then backing these principles were the "go between" workers—specialists of the central office, the county agents, and the corps of volunteer workers comprising the community leaders. The latter group was composed of the farmers themselves, the final unit in the organization that put into action the principles of the Adjustment Act by first gaining community confidence in the program.

Begin Intensive Educational Campaign

The first step in the adjustment program was that of acquainting thousands of farmers with the principles behind the adjustment act. This called for an intensive educational campaign. No sooner had the act been signed by the President than the mediums of the press and radio were used for the dissemination of the needed information. Fed to the central office of the State from national headquarters, the materials were interpreted by State officials to best meet the needs of State readers and listeners.

Next, the State was charted into districts to more readily facilitate getting the desired information to the prospective contract signers. District leaders were selected to supervise these sections. Schools were held for county agents and picked farm leaders, such schools having been conducted by the district supervisors. After the district schools, county and community schools were held. These were directed by the county agent, but the community leaders were the instructors for their own community group gatherings.

Then came the wheat adjustment program, followed closely by the corn-hog adjustment program. There then followed other proposed adjustments: namely, dairy, drought, and the possibility of beef cattle.

Unified System Needed

To keep the entire field organization working as a single unit and acquainted with all the rules and regulations laid down by the national leaders, it was imperative that a unified system of dissemination of information be worked out. Such thought prompted the selection of two central office committees. The first is known as the interpretative committee and the second the clearing-house committee.

The first named, soon to become known as the "lamp light" committee, meets each morning at 7:30 with the director of extension as its chairman. Represented on this committee are specialists, who in turn are responsible for interpreting the rulings to the district leaders, county agents, and finally the farmers of the State. Here, all rules and regulations as received from the Washington headquarters are studied. Before a single ruling is released to the field organization, it must be thoroughly understood by all members of the committee. Otherwise, a clarifying statement is requested of the national office before such ruling is released.

Materials Clear Through One Committee

Immediately following the daily conference of the interpretative conference, the clearing-house committee meets to distribute through the proper channels the regulations for the day.

The original committee, as designated by the director, is composed of a representative of the director's office, an extension field supervisor in charge of all supplies for central and county office work and budgets, and a representative of the press and radio. When the committee meets, others in the group include a member in charge of agricultural specialists who are enlisted as district supervisors, and a field organization specialist for each commodity.

Through this committee, there was created what might be termed the "Triple 'A' Bible." In other words, it is a loose-leaf handbook wherein may be classified every ruling pertaining to the National, State, and county programs.

All Regulations are Classified

As an illustration, the corn-hog handbook contains such classified sections as, philosophy and general situation; corn-loan contract and rulings; corn-hog compliance; administrative rulings—organization; administrative rulings—budget, supplies, reports, publicity, office organization, and processing tax.

There are 145 such handbooks prepared for the corn-hog program alone. Similar handbooks are prepared for wheat and drought, and others are ready for distribution in preparation for the suggested beef cattle program. A handbook has been placed in the hands of every central office worker and every field worker, as well as a number sent to the national headquarters for those in charge of the respective programs.

A "Sign-Your-Name" Plan

In line with the rules of the game, it seemed necessary to create rules for keeping the handbook up-to-date. As

each ruling or added instruction is reviewed by the interpretative committee and submitted to the clearing-house committee for classification, a letter of transmittal is prepared to accompany every release to a field worker or handbook holder. This letter of transmittal carries the key to the success of the entire enterprise. The lower half of the letter carries with it a receipt to be signed by the handbook holder and returned to the central office. That receipt is proof that the new instructions have been received. Failure to return a receipt prompts a telegram, with charges reversed, from the central office to the field worker. If the field worker's purse is filled sufficiently to disregard a "collect telegram", the next measure is a long-distance call with reversed charges. So successful has been the maintenance of these handbooks by the field workers that records show nearly 100 percent compliance with the issuance of new handbook releases.

When rulings become obsolete, they are recalled, the receipt idea being likewise used.

A Handbook for Each Commodity

The principle of the handbook idea seemed to be sound as based on the reactions of all field workers. After the first handbooks were distributed, and the ease of keeping records under one-ringed-cover was brought to the workers' attention, they clamored for handbooks for all commodities. Furthermore, the workers find that their handbooks conform with those of every other handbook holder in the State. County agent number 1 has the same instructions as county agent number 2, and both have the same instructions as contained in the handbooks of their district leaders and their director of extension.

The same principle as used for the triple "A" handbooks applies to the distribution of all supplies, all press and radio releases, circular letters, and miscellaneous materials. Furthermore, all communications going and coming are signed by or addressed to the director of extension. These, then, are brought to the immediate attention of the clearing-house committee for daily classification and release. All instructions and letter communications between the central office and field workers are mailed under one single cover each day. Such procedure avoids confusion in the offices of the field workers.

Workers "Talk" Triple "A"

In addition to their numerous duties allied with triple "A" activities in the State, each central office worker finds time to appear at regular intervals—which in many cases run for 6 weeks at a time daily—to tell farmers and homemakers of the A.A.A. program over the college-owned radio station. No one is cheated in terms of radio appearances, including the director and his entire central office staff. Since the Agricultural Adjustment Act was first signed, an average of 15 minutes of time daily has been devoted to this phase of extension work. Then a summary program each Saturday comprises another one-half to 1 hour of time on the air.

Archways Made Memorials

ON JUNE 16, President Roosevelt signed Senate Joint Resolution 100, designating the archways which are to join the east and west wings of the main building of the Department of Agriculture with the new south building as memorials to Hon. James Wilson, former Secretary of Agriculture; and Dr. Seaman A. Knapp, founder of extension work, respectively.

These memorials are the first in Washington in recognition of high achievement in the interest of agriculture.

Mr. Wilson was secretary during the administration of Presidents McKinley, Theodore Roosevelt, and Taft, from 1897 to 1913, a longer period than any other man in a cabinet position in the history of our Government. He formulated a plan for a permanent home for the Department. The east and west wings, a part of his plan, were completed during his term of office. His administration was one of organization and development.

Doctor Knapp, who was a close friend of Secretary Wilson, was asked by him to organize the farm demonstration work in the Southern States in connection with the campaign against the cotton boll weevil. This archway will be not only a fitting memorial to a pioneer extension worker but also a formal national recognition of the importance of extension work.

An appropriation for the archways has already been made. Construction probably will not begin until the south building is completed. The Joint Resolution authorizes the National Honorary Extension Fraternity, Epsilon Sigma Phi, to provide memorial tablets to be approved by the Commission of Fine Arts.

President Roosevelt very graciously presented the pen with which he signed the Joint Resolution to the originator of the idea, W. A. Lloyd, Grand Director of Epsilon Sigma Phi, which organization promoted the legislation through Congress.

Regional Conference Held in West

The directors of 10 Western States and W. A. Lloyd of Washington met in Salt Lake City recently to discuss the problems incident to the Agricultural Adjustment campaigns. The directors expressed serious concern over the fact that the heavy duties of extension workers, in connection with the campaigns, have directed attention away from the regular extension program. Farmers were reported as making even larger demands on the county agents in connection with the old established program. Many such requests could not be cared for because of the pressing nature of the emergency work. The western directors felt that in order to care for the regular extension work and the added emergency activities, it was imperatively necessary that extension personnel be largely increased on a permanent basis, preferably through appropriations by Congress direct to the Extension Service.

Detailed consideration was also given to the long time program for the Agricultural Adjustment Administration, rural rehabilitation, possibilities of one contract for the whole farm and participation of the Extension Service in Agricultural Adjustment Administration compliance, the maintenance of the regular extension program, and the relationship to farm credit and finances.

Director P. V. Cardon, of the Utah Experiment Station, regional director of Division of Program Planning, reported on the set-up for the western area.

PREVIOUS to Agricultural Adjustment Administration activities, Andrew County, Mo., had been without the services of county extension agents for several years. Wayne Sandage, upon being appointed emergency agent, found considerable interest in erosion control which he carefully nursed along until he found time for field activity, when he arranged with his county officials for a township demonstration of terracing in each of the 10 townships of his county. As a result of this outstanding program, effective control of erosion on the rich soils of Andrew County will be thoroughly demonstrated.

Rural Rehabilitation Program Forges Ahead

FIVE EXTENSION workers have been named to act as coordinators between the Division of Rural Rehabilitation and Stranded Populations of the Federal Emergency Relief Administration, the Agricultural Adjustment Administration, and with workers of the Division of Cooperative Extension Work.

J. Phil Campbell will head the group representing the Agricultural Adjustment Administration Division of Program Planning. Mr. Campbell has had a long acquaintanceship with extension work, having been director of extension work in Georgia since 1915. He has spent the past year in the Replacement Crops Section of the Agricultural Adjustment Administration.

Regional Coordinators

Working with Mr. Campbell will be four regional coordinators. Paul V. Maris, who has been in extension work since 1915 and director in Oregon since 1920, will work out of Salt Lake City, Utah, in cooperation with the Extension Service in the Western States. S. B. Cleland was first employed in the Minnesota Extension Service in 1914, where he has been farm management specialist. He will be coordinator in the Central States, with headquarters at University Farm, St. Paul, Minn. Earl P. Robinson has been in extension work since 1913, first in Michigan and then transferred to New Hampshire in 1919, where he has been doing farm-management work. He will be in charge of the work in the Eastern States and operate out of Durham, N.H. W. T. Bennett has been connected with extension work in Georgia for several years as livestock specialist. He will have charge of the coordinating work in the Southern States with headquarters at Atlanta, Ga.

During the third and fourth weeks of June the four regional coordinators met with Mr. Campbell in Washington to discuss the aims and objectives of the rural rehabilitation program. Meeting with them and representing the Federal Emergency Relief Administration were seven regional advisers. All members of this group also have had experience in extension work.

Aims and Objectives

The major and primary purpose of the program is to make it possible for worthy destitute farm families, eligible for relief, to become self-supporting on a plane consistent with American standards and insofar as possible on their own farms.

An immediate survey will be conducted to eliminate from relief rolls all families or persons in rural areas having the necessary resources and facilities for self-support when coupled with diligence and energy. Aid will be offered to families that upon investigation prove to be worthy and in need of additional support.

This support and aid will consist of (1) making such seed stocks, farm animals, equipment, buildings, or land available as may be required for subsistence purposes, (2) providing the services of trained specialists in agriculture and home economics, who will plan, aid, and supervise subsistence farming and homemaking operations, (3) provide supplementary employment in private industry or on public work relief projects if and when necessary to complete the family budget needs.

Plans are also under consideration for aid to those "border-line" cases where

J. Phil Campbell.

the resources necessary for subsistence are almost exhausted. Farmers or farm laborers who have recently been "displaced" will receive aid in obtaining other farm land for subsistence production.

A plan of subsistence garden activity is being worked out to aid families who have not the agricultural background necessary for subsistence farming operations. However, the large part of the aid to this group must come from revived dormant industry.

In this program of activity it is not contemplated to move vast numbers of urban population onto farm lands. The enterprise of farming is already producing food enough for the Nation. However, there are numbers of destitute urban families that could produce food for their immediate family needs without seriously influencing general

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Earl P. Robinson.

Paul V. Maris.

S. B. Cleland.

W. T. Bennett.

Rehabilitation Makes Progress in Alabama

IN ALABAMA the Relief Administration, in cooperation with the Extension Service of the Alabama Polytechnic Institute, is making visible progress in taking destitute farm families off "direct relief" and establishing them on a self-supporting basis. The Relief Administration, where no work stock are available, lends each family a work animal, farm equipment, feed, seed, and fertilizer to make a crop, and food. Each family is required to give a chattel mortgage and crop lien for the supplies so that the Relief Administration may repossess the materials if the family fails to fulfill the provisions prescribed. Everything advanced the family must be repaid in produce or in work on public projects.

The Relief Administration does not permit a family on rehabilitation to grow products for sale in competition with other farmers. All products produced by relief families are to be sold directly to the Relief Administration which plans to take the products and furnish them to families on relief in urban centers. When the products are turned over to the Relief Administration, the family producing the crop will be given credit on indebtedness.

The farm program followed by the family is a live-at-home program worked out in cooperation with the county agricultural and home demonstration agents in each county. Farm foremen are furnished to see that the program is followed; also to supervise planting, cultivation, and harvesting. Much of that produced will be preserved by canning and drying.

Most land owners have cooperated gladly when the aim of the program was explained. Through their cooperation much land, which otherwise would have remained idle, is being cultivated to grow food and feed crops. In return for the use of the land, the destitute farm family agrees to repair the farm buildings and fences. The Relief Administration, through local experienced foremen, is responsible for fulfillment of this agreement. Landlords profit by having the property occupied, the house made livable, the land properly drained and intelligently farmed, and the farmer properly supervised so that he will be a better farmer in the future.

The initial step in the program was the appointment of a State rural rehabilitation committee to serve (without compensation other than necessary traveling expenses) as an advisory board to the Alabama Relief Administration in formulating the State rural rehabilitation program. On the committee are Donald Comer, industrialist of Birmingham, chairman; Robert K. Greene, farmer, Greensboro, vice chairman; L. N. Duncan, director, Alabama Extension Service, Auburn; Herbert C. Ryding, retired capitalist, Birmingham; Allen Behel, Lauderdale County farmer, and Dr. R. R. Moton, president of Tuskegee (Negro) Institute. Mr. Greene is director of the work.

In each county a rural rehabilitation committee has been appointed. This committee consists of the county director of relief, the county agricultural agent, the home demonstration agent (where there is one), the chairman of the local welfare board, a business man and a representative farmer. In counties not employing a home demonstration agent, some woman resident who is in sympathy with the rural rehabilitation program has been appointed. A county rural rehabilitation director has been named in each county to direct the work.

For each 25 families the Relief Administration furnishes a farm foreman to supervise their operations. These are experienced farmers who visit all families receiving aid and supervise their planting, plowing, and harvesting. For each 40 farm foremen there is a district rehabilitator who, in cooperation with the county agent, directs the work of the farm foreman and the program followed by the farm families.

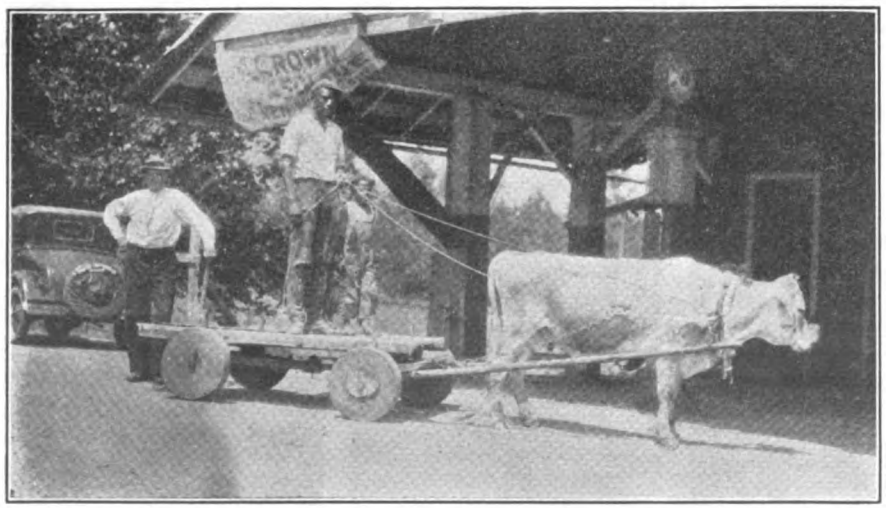
Director Greene states the policy of the rural rehabilitation as follows:

"Only farm families on relief who are anxious to become self-sustaining are considered. There is no intention to make the position of the relief families more attractive than that of their neighbors who are self-sustaining.

"Help is given in groceries, feed, fertilizer, and the like, and not in money; and the applicant is required to sign a note for all such assistance. He is required to work under the supervision and instruction of a competent supervisor who determines the kind and amount of each crop planted.

"As mules are high and unobtainable in Alabama and as feed is also lacking, the use of steers which can be obtained easily in most sections is favored.

"Before the end of the first season between 5,000 and 6,000 Alabama families will be enrolled in the rural rehabilitation program."



The use of steers is favored by the rural relief administration since they are easily obtainable in most sections while mules are high priced and scarce in Alabama.

THE biggest single sale of Mississippi sirup ever consummated closed when the manager of the Mississippi State Farm Bureau Federation, representing 60 organized county units, signed a contract with the Federal Surplus Relief Corporation, covering 177,000 gallons of sorghum and sugarcane sirup for distribution to relief agencies in the various States.

The county agents of the State have listed 150,000 gallons of sorghum and 520,000 gallons of sugarcane sirup with the State Farm Bureau. The Federal order will be allocated to the counties according to their supply, the counties having the largest surplus will receive the largest orders.

The sirup will be assembled at designated shipping points, inspected, and graded under direction of the county agents.

Managing the Farm and Home

The extension programs for farm management and for home management should be very closely related because they both have identical interests, says E. L. Moffitt, farm management specialist in Pennsylvania.

THE FARM as a place of business and the home are so closely tied together that they cannot be separated, and I cannot see a good reason for separating them. To me, farm management is the "art" of operating the farm business so that it will bring the greatest return for the labor energy used and the capital invested. It has to do with all phases of the business regardless of type; correlating them, fitting them together, and eliminating conflicts in the use of labor and capital. In other words, it is the complete organization of the farm in all its details—production, marketing, and business principles.

Home management is the complete organization of the home. It is concerned with the raising of the family, the spending of the income so as to get the greatest possible good from such expense, the health of all members of the family, the food supply and diet, the recreation, education, and general well-being of all members. It also has to do with the surroundings, the furnishings, and the comfort of the members. In brief, it manages or directs the whole life of the members of the family while they are not at work and are still within the home.

How well all these duties of managing the home can be done depends largely on the success of the farm as a business.

Far too often there seems to be a distinct line of demarcation between the two parts of the farm, insofar as those in one part knowing what is going on in the other part. This condition is frequently found in going over farm records.

Home Accounts

Several years ago we summarized a farm record and it was shown that a very good income had been made. The farmer wanted to know where it was since he was more in debt than he had been the year before. We suggested that possibly the fault lay in spending the income rather than in making it, and that he should also keep a record of what was done with the income, which meant keeping a home account. At the end of the next year when the books were summarized, he said that they found they were spending far more money in the home than they were making on the farm and that a complete reorganization of the home expenses was being made.

A good example of the same thing from another angle is a farm that I have been working with this winter. Last fall the father of this family died, leaving the mother and son to operate the farm. They are at a complete loss to know what was being done on that farm. The father kept all details to himself, most of his contracts and arrangements were verbal, and he did not tell the members of the family what he was doing. Now, since the entire responsibility is thrown on them, they hardly know which way to turn. All decisions in regard to the farm were made by the father, without any consultation with the other members of the family.

Another very definitely detrimental influence of this rather secretive method of doing things is well illustrated by what a farm woman told me a couple of years ago. I had given a talk on keeping farm accounts. After the meeting a woman told me that she was interested in a record on their farm, but after trying for 3 years to get her husband to keep the record and failing, she was about ready to give up. She said that her husband could not see the use in the record and that it was hard to keep. He was discouraged because one of his boys had a job in the city and another was going to do the same thing in the spring. I asked her when they tried to keep the record, and she replied that it was usuall the last thing they did before going to bed at night. I suggested that they try to keep it just following the evening meal when all members of the family were still at the table. At this time, nothing could interfere with its being kept and other members of the family might become interested. The following winter she came to another meeting in her county and reported that for the first time a farm account book had been kept for the entire year. It had brought about a better understanding in her family than she had thought possible. One boy had given up all thought of going to the city, and the other had given up his job to come back to the farm.

When the record had been kept before all of them, they learned more about the business than they had ever known. Before, when they had wanted money for themselves, they had been told that there was none for them and they could not understand why. Now they learned what things were costing and what all produce sold brought in. They learned that taxes and interest had to be paid as well as many other expenses. These two older boys decided, of their own accord, that they would stay at home and see if they could help reduce expenses and make the farm pay more.

Family Interest Aroused

From this beginning, they were consulted about important decisions, and it was not long until this time of keeping the record became a time of making plans, and each member of the family became interested and wanted to help. One of the boys asked for the privilege

(Continued on page 106)

California Farm Income Increased

THE producers of fruits, nuts, and vegetables in California, operating under marketing agreements established and placed in effect by the Agricultural Adjustment Administration, have added $5,500,000 to their income.

A sharp decline occurred in the farm value of the State's agricultural production between 1929 and 1932, and the total reduction was 50 percent at the start of the 1933 season. Approximately 67 percent of the agricultural income for the State depends upon this group of producers. California, as the largest producer of specialty crops in the United States, had already organized a voluntary proration program for production when the Adjustment Act was passed.

The marketing agreements and licenses have been issued at the request of producers, processors, and handlers, and are in the form of contracts between the Secretary of Agriculture and the parties concerned. They are designed to increase the price to the producer and to stabilize marketing conditions.

The agreements and licenses permit the processor to handle only a limited quantity of the production. This amount is determined by investigation and is set to meet the prospective demand for the item to be processed.

In 1932, less than half the crop of cling peaches was harvested, and for these peaches the farmers received $6.50 a ton which is scarcely more than the cost of picking and hauling. Contrast this with the $20 a ton they received for the no. 1 peaches which they marketed under the agreement in 1933.

The cling-peach canning agreement which became effective August 17, 1933, affected more than 5,000 producers and more than 305,000 tons of fruit. The farm value for this crop in 1932 was estimated at $1,739,000, while the value of the 1933 crop, under the agreement, has been estimated at $5,731,000. Benefits which can be traced directly to the marketing agreement are estimated at $2,750,000.

Other fruits, nuts, and vegetables have been placed under similar agreements at the request of the parties concerned. The agreement not only provides for a minimum farm price but sets up a minimum resale price which tends to prevent unfair competition and price cutting. Citrus fruits have also been marketed under the agreement plan with success.

Agreements have been set up on additional commodities at the request of producers, processors, and handlers.

BEEF CATTLE raisers and dairy farmers in many Mississippi counties are now utilizing the trench silo, a new, economical method of storing feed for winter use. During the past season more than 6,000 head of beef cattle were fed sorghum silage from 50 new trench silos constructed in 18 counties for demonstration purposes, according to reports from county agents, says Paul F. Newell, Mississippi extension animal husbandman. About 300 trench silos were in use on dairy farms during the past winter. Last summer, 16 farmers in Lincoln County alone, constructed trench silos.

As an indication of the growing interest on the part of cattlemen in the silos program, 40 agents have reported that they expect to assist farmers in constructing 250 new silos this summer and fall. These agents estimated that there are 1,683 commercial beef herds in their counties totaling some 90,000 head of cattle.

SEVERAL community clubs of farmers and their wives have been organized in Hardee County, Fla., for the study of improved agricultural practices. Extension work in this county was recently resumed under County Agent C. E. Baggott, who has scarecely had time to attend to all the calls for assistance in organizing these clubs.

Managing the Farm and Home

(*Continued from page 105*)

of keeping the record book the following year.

In this instance, the lack of knowing and understanding threatened to break up what those parents had spent their whole lives creating. When the bars of custom and misunderstanding were laid aside, peace, harmony, and good business came in to take their place.

Many times I have noticed, in the years I have spent in extension work, that there is a tendency to separate the men and women in their meetings. It seemed as though things might be said that the other sex "would not be interested in" or that they should not hear. Why shouldn't they be interested or glad to hear discussed the problems of farm or home?

There are numerous problems that are of vital importance to both farm and home. There is no reason why the homemaker should not know about the best varieties of crops, the care and management of all kinds of livestock, poultry, gardens, and orchards, the principles of management and cost accounts, or the laying of tile drains.

Likewise, there is no reason why the farm manager should not be interested in beautifying the home grounds, the flower and vegetable gardens, the rearrangement of rooms, the use of color in the home, either in house furnishings or in dress; nutrition for the family, child health, economics in the purchasing or making of clothing, lighting, or sewage disposal.

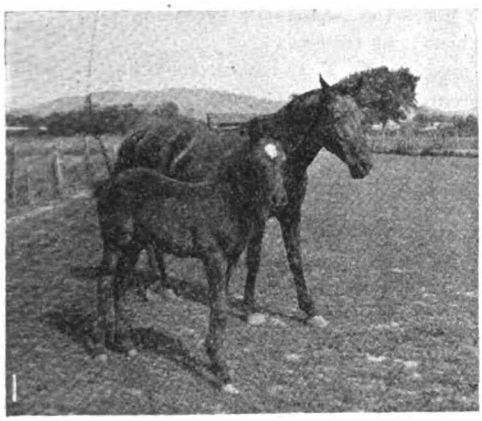
There is another large list of subjects that is of particular interest to both the homemaker and the farm manager in planning for the present and the future. Among these subjects should be listed investments; checking and saving accounts; mortgages; life, fire, and accident insurance; lease contracts; partnerships; inheritance laws; wills; records; scale of allowances for children on the farm; as well as a host of other things not usually brought up in family discussions.

I know it may seem unorthodox to many to discuss the mortgage on the farm, the size of the bank account, the amount of life insurance carried, or inheritance laws in front of the family. Those are the things that we usually sneak off by ourselves to think over and then discuss only with a lawyer or an agent and caution him not to say anything about them. Why shouldn't they be discussed with the family? Who is, or can be, more interested? A lack of knowledge of these subjects may bring great sorrow to those who are left when one of the parents dies. Such a condition often means a complete loss of many things that might have been saved had the entire family known about them.

I have attempted in this discussion to show why the interests of both the home and the farm business are the same. Since they are, I can see no reason why the program in home management and farm management do not bear a close relationship to each other and to farm life as a whole. It is not at all necessary that they carry the same projects but rather that each in its own way will emphasize the things that will accomplish the same thing—a better, a more complete, and an enjoyable life in the business and home on the farm.

Extension Activities in Florida and Alabama

Close-ups of extension work as seen by Photographer George W. Ackerman on a recent trip.



1. The horse is staging a come-back. This fine colt will later furnish power on an Alabama farm.

2. One of 172 silos constructed last year by farmers in Alabama in cooperation with the Extension Service.

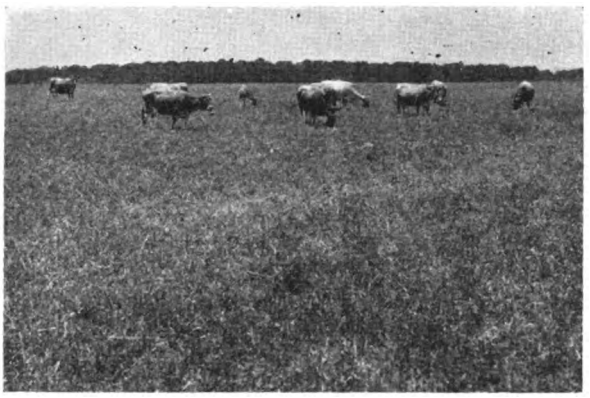
A 4-H club boy of Hastings, Fla., with his spotted Poland China pig given him by the wife of the Governor of Florida for outstanding club work.

3. Corn for home use planted on tobacco land in Gadsden County, Fla. This on acreage on which benefit payments were made.

4. A pine-tree planting which is controlling erosion on an Alabama farm. More than 7,000 such farm forests or woodland areas were planted last year in the United States.

5. A successful curb market in Tampa, Fla., established through the efforts of the county agent. This market is housed in a light, airy building owned by the farmers who sell graded produce of high quality.

Missouri is Building Better Pastures



"The greatest contribution to Lawrence County agriculture this year was made in pasture improvement", said A. W. Klemme, the county agent.

FOR the Missouri farmer better pastures have come to have a meaning far more inclusive than the mere improvement of existing stands of bluegrass or the elimination of brush and weeds from permanent pasture enclosures. A half dozen years of intensive work by the extension service of the Missouri College of Agriculture have brought Missouri farmers to a realization that pasture farming is reconstructive farming and that skillful management with a variety of forage plants can provide almost year-round pastures, thereby greatly reducing the cost of producing meat, milk, and wool.

The rapidity with which the results of this state-wide teaching are being translated into actual cash savings for farmers in every county of Missouri is due in large measure to the fact that subject-matter chairmen and extension project leaders are fully agreed on the program, and that several departments—dairy husbandry, field crops, soils, and animal husbandry—have jointly carried on the work of developing adapted crops and successful systems of management and demonstrating their value throughout the State. Cooperation from outside agencies has also been an important factor, the foremost instance of this help being the pasture-improvement contest put on annually by the extension service with cash prizes offered to individual farmers and county extension organizations by the chambers of commerce of the leading cities of the State.

The degree to which this advance in pasture management has actually benefited individual farmers can best be shown by quoting from county agents' reports for the last extension year. .

From southwest Missouri, A. W. Klemme, county agent in Lawrence County, reports as follows:

"The greatest contribution to Lawrence County agriculture this year was made in pasture improvement. It has been clearly demonstrated this year by the experience of hundreds of farmers following extension teaching that they can avoid the losses formerly suffered because of short dry pastures during the hot summer months. These men have successfully used Sudan grass and Korean Lespedeza as hot weather pasture crops. Our farmers are also greatly improving their permanent pastures by reseeding with mixtures of redtop, orchard grass, timothy, bluegrass, and Korean Lespedeza. Small grains, such as wheat, barley, and rye, have also come into general use in this county for late fall and early spring pasture.

"A survey made in this county by the Extension Service shows that 613 Lawrence County dairymen in 1933 used 9,400 acres of Korean Lespedeza for pasture. An additional 250 farmers grew 3,500 acres of Korean for seed, this product returning a gross income of $40,000."

From a south Missouri district, including Howell and Ozark Counties, District Agent Charles E. Rohde reports:

"By following extension recommendations for the improvement of pastures, 474 dairymen milking 5,688 cows provided sufficient drought-resistant pasture, including Sudan grass, Korean Lespedeza, and sweetclover, that they were able to get higher milk production in June, July, and August, maintaining the milk flow through this critical season. Conservative dairymen, basing their estimate on local cow-testing association figures, are convinced that succulent pastures throughout the summer months added fully $6,825 to the earnings of these 474 dairymen.

"Furthermore, 684 farmers provided sufficient fall, winter, and early spring pasture for their 4,332 cows. Pasture during these months reduced roughage requirements one-third to one-half ton per cow, thereby saving a total of $8,664 with roughage valued at only $6 a ton."

These conditions are typical of the southern half of Missouri, the region where summer drought is usually most prolonged and most destructive to ordinary bluegrass pastures, and where dairying is an important enterprise. In more northern counties it is equally evident from county agents' reports that better pastures have saved money for the beef cattlemen and have decreased the hazards of hog raising by increasing facilities for sanitation as well as better balanced feeding.

The State-wide results of the pasture work in 1933 are summed up briefly in the reports of extension project leaders as follows:

O. T. Coleman, speaking for soils and crops, says:

"Pasture management continued to have an important place in the soils and crops extension work during 1933, since farmers were quick to recognize the importance of a program that gives them a longer pasture season and a more abundant cheap feed supply. Leaders throughout the State have cooperated in establishing pasture demonstrations.

"The use of fall-grown grain crops, including rye, wheat, and winter barley was continued. These, with crimson clover and vetch, used in the southern half of the State, furnished pasture until winter, and in some places good pasture all winter. Such pastures also furnished alternate spring pasture.

"Demonstrations to show how Sudan grass and Korean clover can be used to successfully overcome the shortage in permanent pastures during the dry, hot summer months were used in many counties. The pasture-improvement contest has continued through its second year."

M. J. Regan, dairy husbandry specialist, who has charge of this project, says:

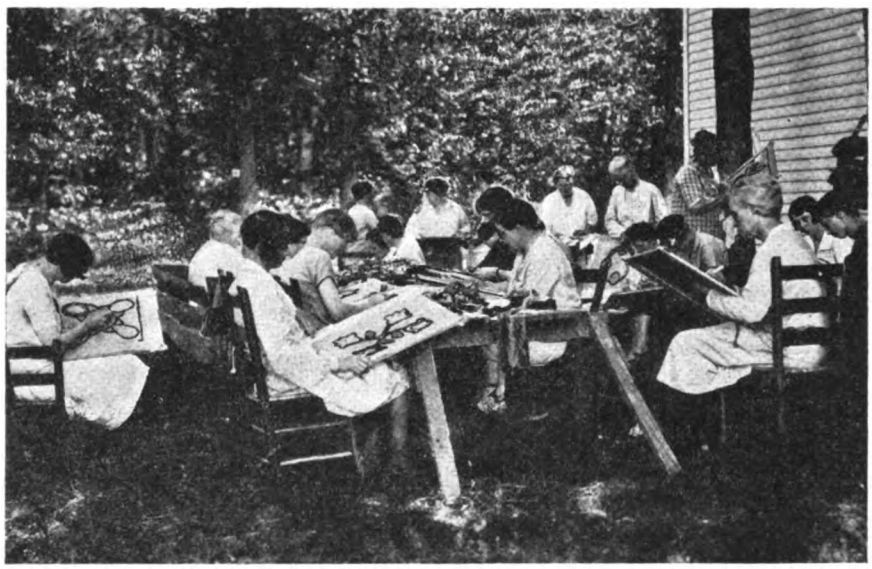
"Year-round pastures were emphasized in the dairy extension program during the past year as offering a dependable means of lowering costs with the least possible wear on both farm and owner. As a result of 38 meetings and demonstrations on pasture improvement, 3,226 farmers were reported as having adopted the practice of providing sufficient Korean Lespedeza, sweetclover, or Sudan grass to supply their herds with succulent pasture during midsummer and early fall. As a part of the same plan, 2,908 farmers grew wheat, barley, oats, vetch, or crimson clover for late fall and early spring pasture.

"The dairymen who have provided this succulent pasture over the greatest possible portion of the year have been able to reduce the feed cost of their butterfat an average of 5½ cents a pound."

Handicraft Featured at Kentucky Camps

MYRTLE M. WELDON
State Home Demonstration Leader, Kentucky Extension Service

HANDICRAFT is one of the important educational features of the homemakers' vacation camps held in Kentucky for the past 10 years. In every instance, we have correlated our camp handicraft with some extension project, making it contribute to the regular extension program. Since the home-improvement project lends itself particularly well to handicraft, many of the articles made contribute to the furnishing and decoration of the home. Although the home-improvement specialist has not always taught the camp handicraft, she has collaborated in the selection of the project and the preparation of material, insuring its correlation with the regular program in home improvement.



Handicraft hour in camp.

Our years of experience have shown that if we wish all homemakers to be interested in the craft project, it must meet the following requirements: The articles made should be capable of being finished and ready to take home in the time allowed for craft and should not encroach on time allowed for rest, recreation, and other activities; they should be inexpensive, attractive, and desirable, but not easily duplicated at the same cost elsewhere; the work should offer an opportunity for creative satisfaction and set a worthy standard; should be educational in nature, and last but not least, supplement the regular extension program.

Since the camps are state-wide and are attended by several hundred women, material has been bought directly from the manufacturer in large quantities or arrangements have been made for the manufacture of articles for the camp craft at a considerable saving to the campers.

A description of some of the camp crafts used during the past 7 years will illustrate how we have tried to meet the above requirements.

One summer, the women decorated serving trays. Our food specialist had found that few homes had trays suitable for serving a meal to an invalid. With this in mind, as well as a decorative accessory, the decoration of serving trays was chosen as a project. Undecorated, pressed steel serving trays, oval in shape, and about 20 by 14 inches in size were obtained directly from the manufacturer. These were decorated with a high-grade enamel paint. The finishing touch was a hunting, coaching, or Dickens print which was waterproofed with a clear, waterspar varnish. The cost of the completed tray was 25 cents, including paint, picture, and varnish, all of which were purchased at a discount for camp craft.

Another project was the making and decorating of desk sets for the home-writing unit. The set consisted of a portfolio with blotter, pocket for envelops, a letter box, a pen and pencil tray, and a small container for the ink bottle. These were constructed of strong cardboard covered with a heavyweight wrapping paper, decorated by batiking or mottling with dye and parchmentizing with paraffin. Pictures were also used for decoration. The selection of color and design was taught as well as construction. The cost was about 25 cents, but the women had learned to make an attractive home accessory that could easily be duplicated from materials at home which would otherwise be discarded.

The picture study and framing work was chosen to help meet a need that many of us had felt in our visits to rural homes; that is, the lack of pictures of quality well framed and hung. With this in mind, we procured about 18 reproductions of the old masterpieces of approximately 9 by 12 inches. By quantity buying, we were able to buy these at 30 cents each. A local art firm bought a close-out line of picture molding in plain brass finish, and made up the frames, including glass, for 20 cents each.

The camp work consisted of a study of these pictures. On the last day of camp a picture memory contest was held with a framed picture for the prize. Each camper selected her favorite picture, and harmonized the frame to the picture with a clear glazing fluid which acted as a carrier of the color. She then framed her picture, put on the backing, screw eyes, and wire. She took home with her a framed picture ready to hang, some knowledge and appreciation of a number of old masterpieces, and more information on framing and hanging pictures, all for 50 cents.

The making of dresser boxes for the bedroom was chosen the year after dresser arrangement had been a part of the home-improvement project. Simple arrangement had been emphasized with attractive container for such articles as brush, comb, nail file, powder, and powder puff, which too often clutter the top of a dresser. A trade school with a very fine wood-working department agreed to make wooden boxes 12½ inches long by 8½ inches wide by 3 inches deep with a hinged cover, pedestal feet and inside compartments for brush and comb, powder puff, rouge, and other toilet articles. The box cost 50 cents. By buying in quantity from a New York firm we were able to get Godey and French prints for from at 5 to 10 cents each. The cost of enamels, sandpaper, wax, and such materials was taken from the camp fund. Brushes

(Continued on page 112)

Fighting the Grasshopper

Concerted Effort to Control Grasshopper Menace in 18 States

GRASSHOPPER surveys made last fall showed an unusually heavy infestation of grasshoppers in a large group of States centering in the Dakotas and Montana which threatened to eat a good portion of the crops. Not only was the infestation alarmingly heavy, but the dominant type was believed to be a short-winged form of the Rocky Mountain locust. This insect is bad because it can fly hundreds of miles, and it lays its eggs in fields that have been cultivated instead of in waste places. The young hoppers are therefore, already to begin on the crop as soon as they are hatched. Congress realizing the seriousness of the situation, appropriated more than $2,000,000 ($2,354,893) to distribute poison bran in the affected States. This bill passed the Senate on March 13, 1934, and on March 14, the first bids were opened for bran and molasses.

The control plans were to poison the insects soon after they were hatched, while they were still too young to fly or damage the crops. This necessitated getting the poison bran out to the farmers by the middle of May. In about 30 days after the bill was passed the program was organized and poison bran was moving out to the farmers. Up to June 22, when most of the bait had been distributed, about 70,000 tons of manufactured bait had been sent out. The materials were bought on contract and then contracts were given to manufacturing plants for mixing. Inspectors were placed at each mixing plant to insure the quality of the bait. In making up the bait, more than 10,000 tons of cane molasses were purchased, and about 4,000 tons of arsenic, 20,000 tons of sawdust, and more than 42,000 tons of bran were used. There was not enough dry arsenic available for such a big poisoning job, so 161,365 gallons of sodium arsenite were bought to complete the required amount.

Headquarters for distribution were in Minneapolis, Minn., with the bait sent under reduced railroad rates directly from eight manufacturing plants to the county needing it. Each State desiring some of the bait organized a State grasshopper committee, of which the director of extension was usually the chairman, and made application for the bait. The money was allocated among the States according to the applications received.

The control work was hampered by the drought, especially in the Dakotas. The poison dried out so quickly after being applied that few hoppers were killed before the bait became unattractive. In many places 2 or 3 applications were necessary, when under ordinary conditions 1 would have been enough. When the young hoppers were hatched there was so little to feed on that they moved directly into the crops. Farmers, seeing their crops ruined by the drought, sometimes lost interest in the poisoning. After the rains of early June, a new interest was taken in the control work and there was still time to kill the young hoppers, which do not become adults in that area until the middle of June, so that a fairly good job of poisoning has been done throughout the worst infested areas.

The Big Job

Getting the bait into the State was only part of the job. Making the farmers realize the need, telling them what to do, and supervising the application was just as important. The State entomologist usually served as State leader in seeing that it was applied properly, while the county agents in the grasshopper counties held educational meetings, made farm visits, helped to locate bands of grasshoppers, wrote letters, prepared newspaper articles, and utilized every method at their command.

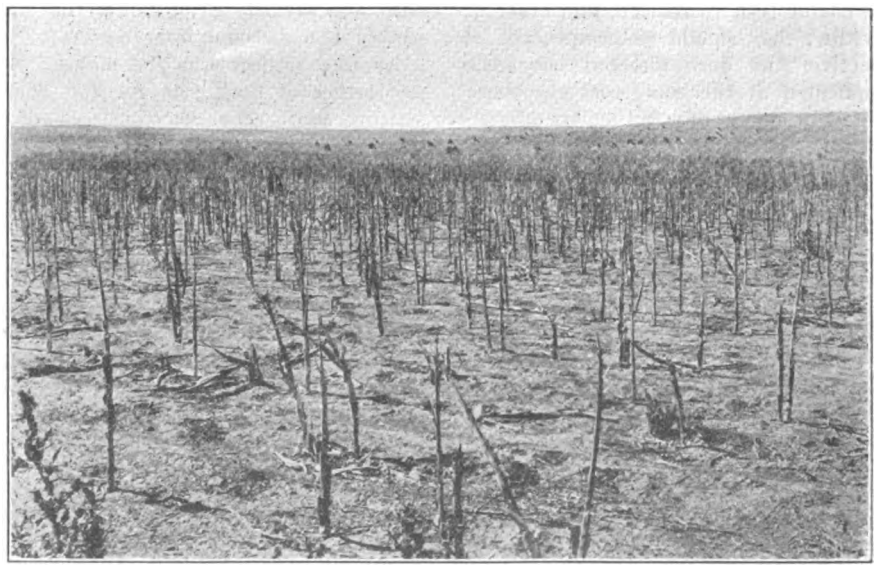
In South Dakota approximately 400 educational meetings were held with more than 30,000 people attending. In addition, training schools for volunteer township or community committeemen were conducted by the district supervisors with the aid of experienced county agents.

These leaders and committeemen were in charge of distributing the poisoned bait while the county commissioners took charge of trucking from the shipping point to various storage points within the county. It was up to each farmer, after he received the allotment to cooperate with his neighbors in keeping a close watch on the hatching of the grasshoppers and the broadcasting of the bait over the fields at the most effective time.

In North Dakota work on the program was begun early with about 125 educational meetings held in March. There was an average attendance of 100 or more at these meetings which were held preliminary to the organization of communities and counties for the control work. An efficient organization was perfected in this State similar to that described in South Dakota.

Lincoln County, Colo., is typical of hundreds of counties. The especially destructive grasshopper was found to

(*Continued on page 111*)



A South Dakota field of corn after grasshoppers visited it.

National 4-H Fellowships

THE TWO holders of the National 4-H fellowship, Esther Friesth, of Humboldt, Iowa, and Barnard Joy, of Ashland, Oreg. and Kingston, N.Y., have just completed a very busy year. This fellowship is awarded each year to one young man and one young woman, with excellent club records in leadership and achievement. It provides $1,000 for a year's study in the Department of Agriculture.

Miss Friesth is especially interested in child care and training and plans to enter this field. She has had an excellent opportunity to work with the Child Research Center of Washington and the Bureau of Home Economics and has prepared a thesis on teaching child development in 4-H club work. She plans to spend a busy summer judging at fairs and achievement days for 4-H clubs in Iowa.

Barnard Joy came to Washington on a year's leave of absence as club agent in Ulster County, N.Y. He has written a thesis on "Some Factors Influencing Length of 4-H Club Membership", and also studied at the University of Maryland, taking his master's degree in agricultural education in June. He has returned to New York to carry on the 4-H club work in Ulster County.

Esther Friesth.

Barnard Joy.

Both young people have made a study of Government organization, followed bills in which they were interested through Congress, talked with Congressmen, foreign diplomats, leaders of national organizations, and those in charge of the new Government set-ups. They chatted with the President and Mrs. Roosevelt and dined with the Secretary and Mrs. Wallace. They have visited historic shrines in and near Washington, have attended national meetings of importance and taken part in youth conferences. All of this has given them an insight into the whys and wherefores of government and a better understanding of national institutions and the problems they face.

The winners for next year, 1934–35, are Mildred Ives of Pasquotank County, N.C., and Edwin H. Matzen of Cerro Gordo County, Iowa. They were chosen from 43 applicants, 20 young women and 23 young men, from 28 States representing all sections of the country. Miss Ives grew up on a 90-acre farm near Elizabeth City and graduated from East Carolina Teachers' College in 1932. She has taken an active part in 4-H clubs for 8 years and is a member of the State 4-H Honor Club. She did a good job as emergency home demonstration agent in Bertie County last summer.

Edwin H. Matzen.

Mildred Ives.

Mr. Matzen is county club agent in Polk County, Iowa. He was graduated in 1933 from Iowa State College, where he majored in animal husbandry. His club record goes back 9 years and includes a fine leadership record.

This is the fourth year these fellowships have been awarded by the Payne Fund of New York City. Mary Todd, one of the first winners, is making an excellent record as home demonstration agent in Carroll County, Ga. Andy Colebank of Tennessee, whose specialty was dairying both in club work and in his study in Washington, is now working in the Dairy Division of the Agricultural Adjustment Administration. Of the next two winners, Margaret Latimer of South Dakota, took Mr. Joy's place as club agent in Ulster County, N.Y., during the past winter, and George Harris did graduate work in dairying at Ames, Iowa, on a scholarship he had won.

Club Enrollment Shows Slight Decrease

Tentative figures for last year's club enrollment indicate that the enrollment was 921,952 boys and girls distributed among 58,470 clubs. In 1932 the enrollment was 925,612 showing a decrease of 3,660 members in 1933. For the last few years the membership has increased from 35,000 to 60,000 annually. The loss in membership occurs in those sections of the country where the Agricultural Adjustment Administration campaigns have been most intense, thus making it difficult for agents to give the usual amount of time to club work.

Fighting the Grasshopper

(*Continued from page 110*)

infest about 700 square miles of territory here, and farmers quit farming to spread poison bran. This was done early in the morning, and throughout the day they were busy trucking the poison from the central mixing plant at Hugo, and riding horseback scouting the moving bands of grasshoppers. They found that as soon as the hoppers quit feeding in the mornings they started marching and often traveled a mile a day. The work was organized into community and county grasshopper-control committees under the leadership of County Agent Floyd Brown.

The 1934 battle against the grasshopper has been a major offensive carried on against great odds of time and weather. Though there will be heavy damage in some places, especially in the worst drought areas, in most sections the control so far has been excellent. The grasshoppers no doubt would have eaten everything if no effort had been made to control them. The Federal control program is under the supervision of Dr. P. N. Annand, the field direction under Dr. John R. Parker, and the distribution and mixing in charge of B. M. Gaddis. The States applying for and receiving free poison from the Federal Government were Arizona, California, Colorado, North and South Dakota, Idaho, Iowa, Kansas, Michigan, Minnesota, Montana, Nebraska, Nevada, New Mexico, Oregon, Utah, Wisconsin, and Wyoming.

IN 1933 home demonstration club women of Sebastian County, Ark., sold $16,647.42 worth of farm home produce through the Farmers' Curb Market at Fort Smith. The market has been in operation nearly 4 years.

New Motion Pictures

THE METHODS that are being employed by the Department of Agriculture, through the Bureau of Biological Survey, to preserve remaining species of wild animals and birds from further diminution are described in two sound pictures recently released by the Office of Motion Pictures. These two films, "Our Wildlife Resource" and "The Wapiti of Jackson Hole", combine beautiful scenic shots with instructive motion pictures of animals and game in their natural habitat.

The lecture for "Our Wildlife Resource", a 2-reel picture, is delivered by Paul G. Redington, former Chief of the Bureau of Biological Survey. This film contrasts North American wildlife of the sixteenth century with that of the present day. Various interesting species of game animals and birds, including the last surviving representative of the now extinct species, the heath hen, are shown in this film.

"The Wapiti of Jackson Hole", a 1-reel picture with lecture by O. J. Murie, biologist of the Bureau of Biological Survey, relates the story of the elk from calfhood to maturity, its life in the majestic mountains surrounding Jackson Hole, Wyo., during the summer and autumn, and its migration to the lowlands when the deep snows of winter make it necessary to seek food and shelter there. The aid administered at the Jackson Hole Elk Refuge by the Bureau of Biological Survey is portrayed in a striking sequence of scenes.

These pictures may be borrowed from the Office of Motion Pictures, Extension Service, United States Department of Agriculture, Washington, D.C., on payment of transportation expenses. They are available in 35 mm width, sound-on-film.

National 4-H Club Radio Program

Annual Theme: 4-H Club Work Influences the Farm and Home

Ninth Phase—Informing the Public Through Fair Exhibits, Tours, and Public Demonstrations

Saturday, September 1, 12:30 to 1:30 p.m., Eastern Standard Time

Our Team Demonstrations Inform the Public	4-H club girl from New Jersey.
Our 4-H Club Exhibits at the Fairs	4-H club boy from Nebraska.
4-H Club Tours Prove that "Seeing is Believing"	County or State extension worker from New Jersey.
Effective Visual Instruction	Reuben Brigham, United States Department of Agriculture.
Music We Should Know—Ninth Phase of the 1934 National 4-H Music Hour—Featuring Compositions by Berlioz, Dvorak, Drdla, and Sullivan	United States Marine Band.

Rural Rehabilitation Program Forges Ahead

(*Continued from page 103*)

agriculture. A great deal of care and study will be devoted to the selection of the members of this group.

A total of $75,000,000 has been appropriated for the purchase of submarginal land. Twenty-five million dollars of this amount will be spent outside the sections affected by drought. Families removed from this land must be taken into consideration and relocated on suitable land.

While this rural rehabilitation program is far-reaching in its activity and is comprehensive in its plan, it must build a program based upon sound economical and humanitarian principles. It is believed that the establishment of cooperative communities, with the families located on small subsistence farms, will not materially affect the business of farming. Only a small part of the family income would be obtained from farming, as the majority would be derived from handicrafts, trades, professions, or industry.

IN one week the Civil Works crew in New Hampshire cut down 4,774 worthless apple trees in the campaign against apple pests.

Farmers Join County Electrification Organizations

More than 5,000 farmers in nine northeast Mississippi counties have joined county electrification organizations formed recently under direction of the State Extension Service in cooperation with the Tennessee Valley Authority. Farmer members who live along a network of rural power lines will be furnished electric current at actual cost.

Approximately 1,000 miles of power lines have been constructed by the Tennessee Valley Authority which will be sold to the county organizations at actual cost and operated without profit.

State Extension Director L. A. Olson, designated M. M. Bedenbaugh, district club agent, to organize the associations. The nine counties were designated as Tennessee Valley Authority territory. Mr. Bedenbaugh went into each of these counties, called a meeting of leading citizens at the county seat, and explained the program. A survey of county roads was made at this meeting and names of volunteers were procured who would canvass the farmers living along the various roads to get them to agree to use electric current if a line was constructed through their community.

After the canvass was made and the agreements signed, a meeting was called of those who had signed agreements, and the county organization was perfected by the election of a president, vice president, and a board of from 5 to 9 directors.

The purchase and operation of the lines is being handled by the officers and board of directors. All electric current for a county will be purchased from the Tennessee Valley Authority at wholesale cost, through a single meter and then distributed by the association to its members at actual cost.

Handicraft Featured at Kentucky Camps

(*Continued from page 109*)

were the property of the home demonstration department. The cost of the box, including picture, to the camper was 60 cents.

Other projects undertaken at earlier dates were the stenciling of oilcloth luncheon sets, tray covers, and washstand covers; the decoration of magazine racks; and the making of shopping bags by decorating a strong fiber bag with chenille yarn.

THE CONSUMER AND ADJUSTMENT

CONGRESS provided the means for dealing with adjusted production in the Agricultural Adjustment Act. Its stated purpose was (1) to promote the prosperity of the farmer by returning to him a fair share of the national income, and (2) to foster national recovery by making the farmer as good a customer for nonagricultural industries and services as he was before the World War.

Consumer Demand Regulates Adjustment Program

The act states that it is the policy of Congress to approach parity for the farmer at as rapid a rate as is feasible in view of the current consumptive demand in domestic and foreign markets. In other words, consumer needs are to be the gage of the rate at which inequalities in purchasing power are to be corrected. That is, the whole agricultural adjustment program must be regulated by the consumer demand for agricultural commodities. It is evident that the act implicitly requires close study of and decisions based upon the actual or potential effect on consumers of every aspect of the program.

It is obvious that no power could raise and maintain prices of many important agricultural commodities whose carry-over stocks were several times normal until the surpluses had been reduced or eliminated. Furthermore, suddenly pushing up the price of certain commodities, which have been long depressed, before making adequate provision for control of production, would bring in new production from less profitable fields and result in new surpluses, which would make it difficult or impossible to maintain the desired level of prices and would thus defeat the purpose of the act.

Consumer-Producer Relations Important

It was also recognized that a hasty scaling up of prices would in some instances disrupt consumer-producer relations and would actually reduce consumption to an extent that would do more harm than good to agricultural producers. A reasonable relationship must be maintained between prices and effective demand. Raising prices too rapidly would reduce the purchasing power of consumers and impede national recovery.

Better Distribution of Consumer's Dollar Needed

Along with the crop-reduction program, the act authorizes efforts to obtain for farmers a larger share of the consumer's dollar. Part of the consumer's dollar now goes to support wasteful and unnecessary competition, duplication of selling expense, a needless multiplicity of services to consumers, dubious credit arrangements, and various unethical practices. Eliminating these wastes should mean better conditions for honest and efficient business, as well as better prices for producers.

Thus, the law provides the conditions for an agricultural industry in which the forces of production are so managed as not to outdistance the demand, and to increase the demand by redistributing purchasing power so that consumers can come more readily into the market. It is a gigantic job, requiring delicate skill in judgment and a technique of administration which we are only beginning to master.

R. G. Tugwell

Under Secretary of Agriculture.

SLIGHTLY HIGHER PRICES FOR DEPARTMENT FILM STRIPS DURING THE NEXT FISCAL YEAR GO INTO EFFECT JULY 1, 1934

NEW FILM STRIP >>>> PRICES

PRICES for Department film strips will range from 36 to 90 cents each, depending upon the number of frames. Most of them, however, will sell for 36 or 45 cents each.

There are 200 series now available with complete lecture notes.

◆ ◆ ◆

FOR SPECIAL SERIES, made from local photographs sent in by extension workers, the cost is only 10 cents per frame—2 cents under last year's price. This includes the negative and one positive print.

◆ ◆ ◆

THE CONTRACTOR for the fiscal year 1934-35 will be Dewey & Dewey, Kenosha, Wis., who has had the contract since 1932. *Send order, with payment, direct to contractor.* At same time send to the Department a request to authorize the sale. Orders will be filled as soon as the firm is notified of the Department's approval.

Write for authorization blanks and information about preparing your own film strip series.

EXTENSION SERVICE

U.S. DEPARTMENT OF AGRICULTURE

WASHINGTON, D.C.

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Extension Service Review

VOL. 5, NO. 8 AUGUST 1934

CLUB TRAINING PREPARES FARM BOYS AND GIRLS FOR THE DEMANDS OF THE FUTURE

ISSUED MONTHLY BY THE EXTENSION SERVICE
UNITED STATES DEPARTMENT OF AGRICULTURE
WASHINGTON, D.C.

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In This Issue

SECRETARY WALLACE gives us a glimpse in his article of the possibilities of restoring foreign markets for farm products. Restoration of foreign trade is one of the ways that will help farmers attain a better purchasing power. Proposals are already being drafted by various Government departments to be used as a basis for negotiation of reciprocal trade agreements with foreign countries. However, these operations cannot move rapidly for the problem of clearing away existing impediments to a healthy flow of international commerce is difficult.

KENNETH B. ROY, Arkansas extension editor, tells how the radio played an important part in the cotton adjustment campaign in his State. The broadcasts explained the cotton situation and reasons for controlling production, news flashes about the progress of the campaign, statements and comments of farmers, bankers, and others interested; and answers to questions received.

THE advanced training in homemaking being received by 12 girls who call themselves "junior homemakers" will prove valuable in helping them to shoulder their responsibilities in the home. These girls of Hampden County, Mass., are from 15 to 21 years of age, and four of them accept all the homemaking duties in their respective homes while the others have a large share of such duties.

TEXAS plans for the rehabilitation of her displaced farmers and former farmers now stranded in cities and towns. Director O. B. Martin of that State tells us about the building of work centers and the repair of houses so that these people can do some of the work needed in the community in exchange for a place in which to live and food to eat. People are thus given an opportunity to work gradually into future independence.

Contents

ATTACKING the farmer's dairy problems from the point of view of the farmer is a new plan being used in New York in its campaign to improve the efficiency of dairy herds through the use of purebred sires. Farmers are asked to study the local situation within a county to determine whether a long-time intensive breeding program may be an economically sound solution to the problem, and, if it is, to work with the county agent, assistant county agent leader, and dairy specialist in formulating the plan to be followed.

On The Calendar

National Recreation Association Meeting, Washington, D.C., October 1–5.

Pacific International Exposition, Portland, Oreg., October 6–13.

American Royal Livestock and Horse Show, Kansas City, Mo., October 20–27.

Annual agricultural outlook conference of Federal and State agricultural economists. Washington, D.C., October 29 to November 3.

National Grange Convention, Hartford, Conn., November 14–23.

Great Western Livestock Show, Los Angeles, Calif., November 17–22.

Association of Land-Grant Colleges and Universities, Washington, D.C., November 19–21.

International Livestock Exposition, Chicago, Ill., December 1–8.

Thirty-eighth Annual Convention of American National Livestock Association, Rapid City, S.Dak., January 9–11.

THE raising and marketing of turkeys and other poultry as a side line added more than $11,000 to the income of farmers of Anson County, N.C., last year. Advice given by J. W. Cameron, county agricultural agent, and Mrs. Rosalind A. Redfearn, home demonstration agent, on management, feeding, dressing, housing, breeding, and culling helped these farmers to market birds of high quality at better prices.

THE desire of the boy to be a fireman is being realized by the older boys who are in 4-H forestry club work in Fairfield County, Conn. These 4-H fire fighters follow a program of fire-control methods, trail and firebreak cutting, and fire fighting under the local warden. They are much in demand for fire fighting and receive the regular scale of wages paid volunteer fighters.

THE EXTENSION SERVICE REVIEW is issued monthly by the EXTENSION SERVICE of the United States Department of Agriculture, Washington, D.C. The matter contained in the REVIEW is published by direction of the Secretary of Agriculture as administrative information required for the proper transaction of the public business. The REVIEW seeks to supply to workers and cooperators of the Department of Agriculture engaged in extension activities, information of especial help to them in the performance of their duties, and is issued to them free by law. Others may obtain copies of the REVIEW from the Superintendent of Documents, Government Printing Office, Washington, D.C., 5 cents a copy, or by subscription at the rate of 50 cents a year, domestic, and 75 cents, foreign. Postage stamps will not be accepted in payment.

C. W. WARBURTON, *Director* C. B. SMITH, *Assistant Director* L. A. SCHLUP, *Acting Editor*

Extension Service Review

VOL. 5 WASHINGTON, D.C., AUGUST 1934 NO. 8

Reopening Foreign Markets for Farm Products

HENRY A. WALLACE
Secretary of Agriculture

THE PURSUIT of that foreign trade policy which I have called the "planned middle course" involves working on two fronts: First, some reduction in the size of our agricultural plant as a whole; and second, a reopening of foreign markets for our farm products. Thus far, sheer force of circumstances has compelled us, without losing sight of the foreign market, to concentrate our efforts upon reducing our farm plant. With the world's capacity for agricultural production, including our own, greatly expanded throughout the war and post-war era, and in the face of a general collapse of purchasing power for our farm products both at home and abroad, it was not a matter of choice but of sheer necessity that led us to the adoption of an emergency program of orderly retreat from surplus acreage. This program continues. It is designed to reduce our production to domestic requirements plus that amount which we can export with profit.

But the amount that we can export with profit need not and should not continue indefinitely at the pitifully shrunken level to which it has now fallen. Ten years ago—to go back before the peak of the inflationary period preceding the depression—we were exporting almost $2,000,000,000 worth of agricultural products annually. During the 5-year period, 1922–26, our agricultural exports averaged annually $1,954,000,000. By 1933 the value had declined to $694,000,000—scarcely more than a third of what it had been a decade earlier. To be sure, the shrinkage in quantity was not so great as this, but in large measure this was because our productive capacity was still expanded far beyond the point warranted by existing conditions of demand at home and abroad. In these circumstances the prices received were necessarily distress prices and not at all representative of costs.

It is this attack upon the problem of restoring foreign outlets for our farm products that I want chiefly to discuss. But before I do so, let me make certain things clear. First, I think it should be fully realized that these operations cannot, under even the best of auspices, move very rapidly. For the problem of clearing away existing impediments to a healthy flow of international commerce is just as difficult as it is important. We must attack it with all of the skill and energy that we can muster, but we shall be deluding ourselves if we suppose that progress can be rapid. It follows, therefore, that we shall have to continue our efforts to bring about a proper adjustment of production to the effective demand for farm products.

Thus far—may I repeat—we have had to concentrate our chief efforts on the internal program of readjustment of production to effective demand; and it is altogether clear that these efforts must continue. But there are at least signs that operations to restore foreign markets, which until now have been for the most part passive and defensive, are about to become active. With the setting up of new agencies to deal with various phases of the problem, and particularly with the enactment of the reciprocal tariff bill, we are now equipped to enter upon an active campaign for the upbuilding of our seriously depleted foreign trade. America is getting ready to choose.

Under the new Tariff Act the President is authorized to enter into trade agreements with foreign countries and *in connection therewith* to reduce—or increase—any existing tariff rate by as much as 50 percent. I especially stress the words "in connection therewith", because it has been erroneously assumed by some that the act authorizes the President, simply at will, to alter any rate by 50 percent, without reference to tariff negotiation with foreign countries. Not only must the changes in rates be limited to agreements entered into with foreign countries; but in addition, since the purpose of the act is to increase foreign trade, we must suppose that most, if not all, of the changes in rates will in fact be downward.

That the successful planning and execution of bilateral negotiations with a long list of countries will take time and patience is nowhere better realized than by those who are charged with this responsibility. But the task is being squarely faced, and rapid progress is being made in getting properly organized for the job.

Committees at Work

Heading up the work is the Executive Committee on Commercial Policy, an interdepartmental committee which has already been helping determine broad questions of commercial policy through-

Secretary Wallace says America must make a fundamental decision in regard to her foreign-trade policy. She can go nationalistic and become highly self-sustaining; or she can go internationalistic and try to win back her lost foreign trade, or she can take a third alternative which the Secretary calls a "planned middle course." It is this planned middle course involving the admission annually of perhaps $200,000,000 more of goods and at the same time the permanent seeding down or reforesting of some 25,000,000 acres of good plow land or perhaps 50,000,000 acres of poor land, which is discussed in this article.

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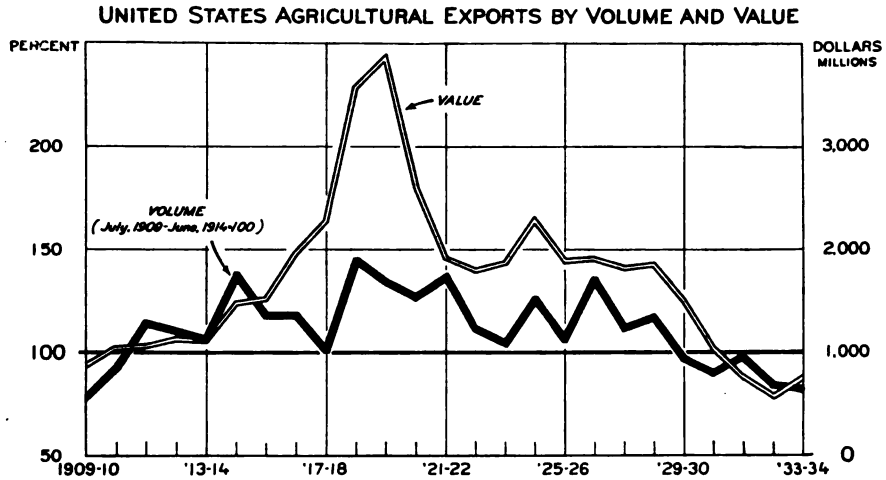


out the past year. Important questions of policy will continue to be referred to this committee. Immediate responsibility for action, however, will rest on two other committees, the Interdepartmental Committee on Foreign Trade Agreements, and the Hearings Committee. On the foreign trade agreements committee are representatives of the Departments of State, Treasury, Agriculture, and Commerce, the Tariff Commission, the National Recovery Administration, and the Special Adviser to the President on Foreign Trade. Temporarily, at least, this committee is under the chairmanship of Assistant Secretary of State Sayre. This committee will arrange for such general economic studies as may be necessary, as well as for studies relating to particular negotiations. It will also advise in selecting countries for negotiations, and have special interdepartmental committees working with it for each agreement which is in prospect. The hearings committee will be charged with carrying out section 4 of the reciprocal tariff act, which grants a hearing to persons interested in any of these foreign trade agreements.

This drive for the restoration of foreign trade has surely not come too soon. Everywhere, international trade has shrunk sensationally. In terms of volume, world trade in 1933 was reduced to approximately 70 percent of its 1929 level; in terms of value, to but 35 percent of its 1929 level. Of our own foreign trade the value declined from 9.5 billions of dollars in 1929 to 2.3 billions in 1933, a decline of approximately three-fourths. Moreover, our share in total world trade has diminished. Between 1929 and 1932 it fell from 13.83 percent to 10.92 percent—a very significant decline.

Whether or not this great shrinkage in international trade was primarily responsible for the depression, it was a contributing cause, and the complicated tangle of trade barriers which has subsequently come into being is one of the most serious impediments to world recovery. In previous crises, as the League of Nations has pointed out, there was never so great a shrinkage in the volume of trade, because a fall in prices resulted in a speedy increase in the volume of trade. In the present crisis, high trade barriers the world over have combined with other factors to prevent this outcome.

In any soundly conceived program for the upbuilding of our seriously depleted foreign trade, farmers in this country have much at stake. But it is not only a matter of restoring foreign outlets for farm products; it is a matter also of improving the entire economic well-being of the country and hence of increasing the demand for farm products at home as well as abroad.

Radio Helps Cotton Program

THE RADIO played an important part in the recent cotton campaign in Arkansas, declares Kenneth B. Roy, Arkansas extension editor. Two daily services were launched at the start of the campaign; one a daily manuscript for seven stations in the cotton sections of the State and the other a daily program from a Little Rock station given personally by various members of the extension staff.

The manuscript program was primarily a news broadcast. It was not the intention of those in charge to replace the Federal farm flashes, but rather to supplement the Federal service with a State news report on the progress of the campaign. This daily manuscript service was written as a popular presentation, including news flashes of the campaign; statements and comments of farmers, bankers, and others interested in the program; reports on progress of the sign-up in the counties; and concluded with answers to questions received. This service was stopped at the end of the sign-up campaign.

The daily broadcast from the Little Rock station was first started early in October as a weekly educational broadcast leading up to the campaign. This program set forth the cotton situation and reasons for controlled production. With the launching of the sign-up campaign the broadcast was made a daily feature, dealing with explanations of the cotton program and its various provisions.

The special radio service originating within the State was a very important factor in reaching certain groups of cotton growers who could not be contacted by other media.

Dan T. Gray, dean of the College of Agriculture, University of Arkansas, in a field trip into eastern Arkansas found that the radio had been the principal source of information for many tenants. He discovered numbers of landowners who were puzzled over their tenants' profound understanding of the program, not realizing that the radios in the plantation or community, stores, and garages were the noonday daily centers of interest when the Arkansas cotton campaign news digest went on the air from seven stations in the State.

"We are thoroughly satisfied that had it not been for these daily news broadcasts we would not have reached certain definite groups with complete information of the program groups which are untouched by the farm journal or local newspaper", was the comment of Mr. Roy.

ECONOMIC items of interest which will be presented to the farmers during the summer will consider adjustment of production and marketing programs. A summer sheep and wool outlook has been scheduled for release on August 2; poultry and egg outlook, on August 14; dairy outlook, on August 16; and beef cattle outlook, on August 27. These reports will give domestic and foreign production and demand situations, showing probable effects on American agriculture. The annual agricultural outlook conference of Federal and State agricultural economists will be held during the week of October 29 to November 3, at Washington, D.C.

Youth Votes for Cooperation

Delegates at the Eighth National 4-H Club Camp Consider the Subject

"COOPERATION is the art of working together" reads the first line of the delegates' report summarizing the morning conferences at the Eighth National 4-H Club Camp on the Department of Agriculture grounds in Washington. About 160 young people, representing 4-H club members from 40 States, attended the camp this summer.

This "art of working together" was the theme of the entire program. Secretary Wallace and other Government officials discussed the subject from the standpoint of the Government and farming as a whole. The delegates themselves, considered methods of cooperation in their community, in their club, and in their homes. Some of the examples of cooperation in club work presented by the delegates at their conferences are given below.

Selling on the Curb Market

Several years ago, before the marketing of farm produce became known to me, I thought it would be almost impossible to earn my own spending money for clothes and other personal items. Little did I realize what I could contribute to the family living. Not long after my mother started a curb market, however, I began cooperating with her in preparing vegetables, fruits, and flowers for market, and in selling the produce. After working with her for a while, she and I decided that I could take over one or two phases of the marketing for my projects.

In a very short time I learned that I could prepare and sell my own products at a very small cost. Flowers were my specialty. I soon began making enough profits to buy my books, clothes, and amusement. It has been a great relief to be able to make my own money.

My mother and I have worked together for 6 years with the thought always in mind that we are working for the good of the family, and we must work together. During this time we have earned $1,776 through curb-market sales. Other club members, seeing the good of cooperation and the benefits we have received, have cooperated with each other in sales and preparation of produce and have exchanged their ideas. Through the introduction of marketing farm products, cooperation has become a living reality in dollars and cents to club members, individuals, and the community.

—FRANCES HOWARD SULLIVAN,
Alabama.

Equipping a Clubhouse

In our community we have the "Frenchtown Boosters" and "Wide Awakes", the latter being the girls' club. Although these are in reality separate clubs, we feel and act together as one organization. This proved true when the old forsaken schoolhouse was given to the clubs for their use.

This building had one large room and two small dressing rooms. The dressing rooms were made into a kitchen. It was in a run-down condition and meant many hours of work to renovate as completely as we wished. The boys started work last fall by shingling the roof and putting in electricity as well as the fixtures. One of the men in the community offered his services and bossed the jobs. At noon the 4-H girls made sandwiches, cakes, and drinks, encouraging the boys in more ways than one.

The inside work was carried on all winter, even during the coldest weather. You may wonder what we had to work on. This is the story. We willingly accepted donations of any type, such as tables, chairs, rockers, and lamps. Every article was scraped down to the original wood and the necessary number of coats of paint were added to harmonize with the interior. We bought a second-hand set of furniture including a divan, rocker, and large straight chair for $7. This was upholstered, as well as several other sets which were donated.

The kitchen is red and black, even to the dishes, making a modernistic and pleasant kitchen to see and to work in.

Many Saturdays we cooked our lunch at the old schoolhouse and worked all day. The boys worked on the ceiling and walls, while the girls made curtains, wall hangings, and did various paint jobs. The girls' leader, Marion L. Frye, certainly deserves our hearty thanks for her leadership and helpful ideas in this project. Innumerable times she called for us at school and always furnished transportation home for as many as the car would hold. Every person in the community became interested and helped in any way possible.

One of our outstanding examples of cooperation was shown by a local nursery. One of their landscape gardeners offered his services by drawing the ground plans as well as donating choice nursery trees and shrubs. Our State commissioner of agriculture also donated many of his trees and shrubs which greatly added to the beauty of our clubhouse grounds.

You may wonder by this time how we obtained money to buy our paint, putty, and other materials. This was also through cooperation of our community members. We conducted a series of whist games at the homes of the 4-H members. We had excellent attendance and much interest was shown. The final whist was held at the new (old) clubhouse and how we worked to have everything finished and in readiness for that night. How proud and happy we were to have our community cooperators delighted with our accomplishments. The grand prize of the series was a coffee table, which the winner gave back to us expressing her interest in our work. Another last-minute surprise was the donation of a grand piano.

I cannot think how cooperation could be better illustrated than in the renovating of our clubhouse. Ever since the commencement of our project we have been one body working together for a common purpose, obtaining beneficial results in every direction.

—NORMA JAMES, Rhode Island.

The Jackson County 4-H Fair

For the past 13 years Jackson County, Mo., has held a county-wide 4-H fair. It is entirely a 4-H project. Premiums are offered in 70 classes of home economics, poultry, and livestock. There are also contests to determine who shall go to the State 4-H round-up. The climax of the 2-day fair is the announcement of awards and the candle-lighting ceremony at the close of the second day.

The premium list, ranging from $200 to $600, comes from the voluntary appro-

priations of the county court, business men, and various organizations in the county, farmers, leaders, and the club members themselves.

The young people's extension organization is now holding a county-wide tennis and croquet tournament, the net proceeds of the event to be contributed to this fair.

The fair brings to the attention of many boys and girls and their parents, demonstrations of approved practices as well as teaching sportsmanship and all the other phases of club work.

The splendid cooperation of club members, both in raising money for the fair and in exhibiting their projects, is enough to warrant the fair's success.

—Fred J. Beune, Missouri.

A Community Egg Show

As an extra activity of my community 4-H club we sponsored what is known as the Remington Community Egg Show. It goes without saying that such an enterprise could not be planned and executed without the whole-hearted cooperation of the community.

We are located in a general farming district. Poultry is not a specialty, but the poultry enterprise is operated on a large enough scale to require some special attention to the production of a quality product.

The egg show is an activity of the entire 4-H club of the community. The show is divided into four classes—high school, graded school, community, and town. These major classes are subdivided into two sections — white and brown egg divisions. There are eight prizes given in each section and a grand sweepstake silver loving cup given for the best dozen eggs in the entire show. There are no exhibitors' fees, and the eggs are at the disposal of the management at the end of the show.

On the last evening of the show an entertainment is put on by the people of the community. One feature that commands considerable attention is a stunt contest in which the various schools of the community participate. The winner of this contest is awarded a silver loving cup. This cooperative movement has benefited our community in giving an opportunity for human contacts and recreation, fostering pride and loyalty in our work, and bringing economic gains to many exhibitors.

—Russell Lehe, Indiana.

Girls Given Advanced Training

BECAUSE of their desire to know more about that "heap of living that it takes to make a home", a group of Hampden County, Mass., girls—"junior homemakers", they term themselves—have organized what is a unique club in the history of Massachusetts 4-H club work.

"Junior homemakers" is an excellent name, since four of the group accept responsibilities for all, and the others a large share of the homemaking duties in their respective homes. There are 12 in the group at present, and their ages range from 15 to 21.

"Our purpose in organizing", says Sally Bradley, assistant 4-H club leader of the Hampden County Improvement League, "was to give these girls more advanced training along the lines of homemaking than they would receive ordinarily in their regular 4-H club projects." The program includes such subjects as maintaining the health of the family, budgeting the family income, economical buying and preparation of food, selection and making of clothing, household arrangement and room improvements, simple home decorations, entertainment in the home, and similar problems.

Some of the individual stories of these young homemakers indicate the need for such a club.

The first story is of a girl, 16 years of age, in a family of eight. She is the second oldest and has the entire responsibility, since there is no mother in the home. Besides all these responsibilities she is a leader of a 4-H club of other girls in the community.

The second, a girl 15 years of age, is the third oldest in a family of seven. In addition to taking a large part of the responsibility in her own home, since her mother is in poor health, she takes in tourists during the summer and takes care of children in other homes. She is a freshman in high school and also is an assistant leader of a 4-H club.

Another, 20, is the fifth oldest in a family of eight, and also is a 4-H local leader. The mother is in poor health, so the girl takes a good share of the responsibility in the home and, in addition, works 8 hours a day in a garment shop.

One, 16 years of age, fourth oldest in a family of seven, is a sophomore in high school, takes part of the responsibilities in the home, entertains tourists in the summer, and is a member of her church club.

A 17-year-old girl, the second oldest in a family of four, is a senior in high school. Her mother, a nurse, is frequently away from home, so the girl takes a large part of the responsibilities besides taking care of children for the neighbors. She is also an assistant leader of a 4-H club.

Another, 21, is the next to the youngest in a family of seven, and, in addition to doing some work at home, takes entire charge of another home which has a family of three children. She also leads a 4-H club.

A girl, 15, in a family of nine, is a junior in high school and takes a large part of the responsibility in her own home.

The eighth, 16 years of age, is the youngest in a family of four, is a sophomore in high school, and takes full responsibility in the home, since the mother works away from home.

Another, 16 years of age, the youngest in a family in which there is no father, takes a big share of the responsibility in the home and attends high school.

One, 16, second oldest in a family of six, helps her older sister in caring for the home in which there is no mother, attends high school, and takes care of a neighbor's children.

The twelfth girl is 21, is the oldest in a family of six, is fully responsible for the home, since there is no mother, but does have the help of a younger sister. She also finds time to teach piano lessons and lead a 4-H club.

The junior homemakers' club of Hampden County, Mass., learning about the economical buying of food and household necessities.

All of these girls are members of other 4-H clubs, some being members of clothing clubs, some of food clubs, and similar types of work conducted by the county extension service.

It is the earnest purpose of these junior homemakers to learn of the problems which confront a homemaker and to make a real home, even against the odds shown by a survey of the conditions under which they work.

Texas Considers Rural Rehabilitation

O. B. MARTIN
Director, Texas Extension Service

Although the rehabilitation of farm families now on the land is the first consideration of the Division of Rural Rehabilitation and Stranded Populations, of the Federal Emergency Relief Administration, the program also calls for the rehabilitation of displaced farmers and former farmers now stranded in towns and cities. The development of community work centers, community farmsteads, commodity exchanges, public-works projects, and subsistence gardens as a means of providing an opportunity for relief families subject to rehabilitation are included in the plans. Director O. B. Martin here discusses the problems and possibilities of the work in Texas.

WHEN 4 million boys and young men were called away from their work and their homes to take up the soldier's life, readjustment was necessary. Mobilization was quickly accomplished. Demobilization, diffusion, and rehabilitation had to follow through the years. These did not come in regular and steady order. Economic conditions intensified the movement from country to town. The swing of the pendulum brings us back to a movement from city to country.

Our Government is using its resources, its facilities, and its money to hasten adjustment and reconstruction. Plans for centralizing colonies near big cities are being developed. Earnest men and women are working upon plans for gardens and small subsistence farms. Even if these enterprises are successful, they will probably take care of only a small percentage of our people who are in immediate need.

It is clear that plans must be worked out to help relocate many good families whose grown-up members were raised upon farms and who desire to go back to the very neighborhood from whence they came. These people have learned to do things which their brothers and sisters back on the farms cannot do so well. Manifestly, it would not be the wisest and best thing to take them back to the farms and expect them to immediately take up farming. The question is whether they can be taken back to make contributions along the lines in which they are best trained and qualified. These selected settlers can find a great deal to do in the way of their skill and efficiency. Their labor can be used in such a way as to increase the market for farm products in the various communities without increasing the general surplus. In fact, it will be a decrease. It will be consumption at the source.

Plans for Housing

Boys and girls have gone to the cities and have learned to work in food, iron, steel, textile, leather, and other resources. Through no fault of their own they are now stranded and are looking to the Government for relief. What is the logical plan for working this thing out? Let us look at some of the places in the country where they might go. For example, here is a neighborhood in which there are 10 or 12 vacant houses, perhaps with the roofs leaking and the windows broken out. It is proposed that this relief money be paid to people who need relief, people who will repair these houses, provided the landowners are willing to give them occupancy for a year. Doubtless there are thousands of our most thoughtful citizens who would be willing to do that. There are some who would be willing to build houses and rent them upon such conditions with the privilege of purchase. Of course, in such cases the amount of labor provided on a new building would have to be about the same amount, on the average, as the repairs on old buildings would cost.

Then it is proposed where the people in the communities want it and where they want these good people to live amongst them to have the relief agency use their labor in building a work center on the school grounds or upon land deeded to the public. This building might be just an added room to the schoolhouse or on the school ground, or it might be more elaborate with provision for recreation, games, and other activities in which the whole community has a part. Some of the work centers could emphasize one enterprise and some another, but there are certain general ideas which would run through them all. The most useful of ordinary tools should be supplied in all of them. The community house should be equipped with as many sets of carpenter tools and paint and varnish brushes as there are new settlers. These buildings should contain also sets of meat-cutting tools because there is a lot of work of that kind all over Texas. Then I would add tools for tanning and working leather. Other suggestions are in order.

Handicrafts Are Important

The work of the women should not be neglected. There should be necessary facilities for all their home demonstration activities, including equipment for making mattresses, comforts, and rugs. I would have one large room with lockers built into the walls all around it, and have some rooms left vacant, for the present, to be used to carry on the handicrafts which will be added from time to time through the wise suggestions of the thoughtful citizens in each neighborhood In smaller anterooms, I would have cookstoves, canning retorts, sewing machines, and an ice box similar to the one recently designed by the United States Department of Agriculture, which will hold several good sized animal carcasses. I think I would have the space under the roof ceiled for storing some of this equipment.

The new settlers will be kept busy for a few weeks building this clubhouse. Then I think it would be a wise and proper expenditure to let them construct at public expense some model pantries, smokehouses, sanitary toilets, and other needed rural home improvements. These might be awarded to the men, women, boys, and girls in the country who have been the best demonstrators along particular lines. For instance, the best pantry demonstrator might receive some nicely constructed shelves for her own home, and the men in the neighborhood who had done the best meat work might have a smokehouse built as a demonstration to all the others.

It is easy enough to see that when one woman gets a pantry a number of others would be willing to hire these carpenters to build pantries for them, if they can pay for them with canned goods, jams, jellies, and preserves. Other men will want some smokehouses if they can pay for them with meat. The same idea will run through all the products on the farm. If some show skill enough to make a cedar chest, some woman who is skillful in working with rugs or comforts would

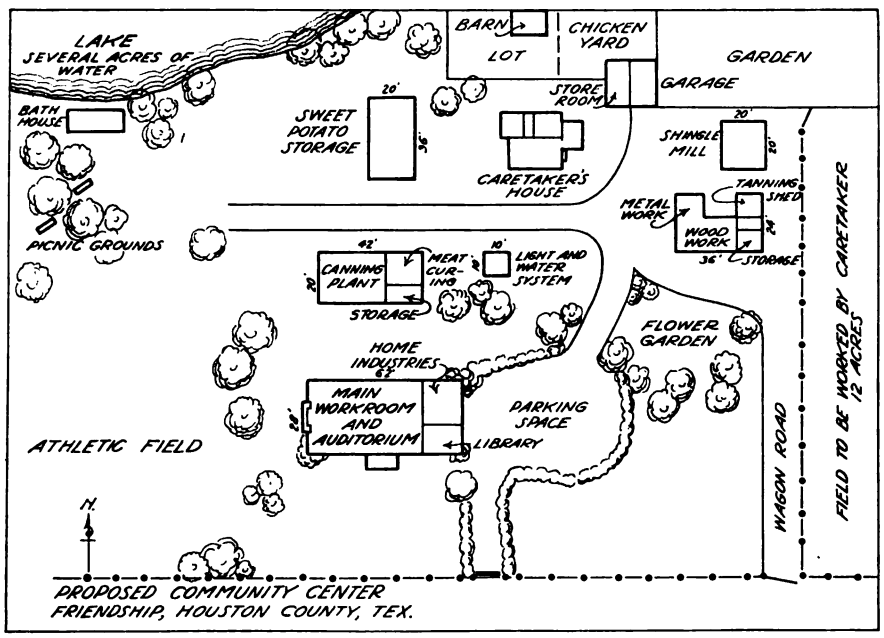
be glad to make an exchange. If some of the men know how to tan and also how to make harness or chaps, they won't have any difficulty in getting value received in money for the products which farmers have to sell. The same thing holds with women who have been making gloves and bags, and who have even been upholstering chairs and refinishing furniture. It is not necessary to elaborate this idea. Practical people will carry it further. Outbuildings and fences have been neglected during the depression, and there will be plenty for the new settlers to do if the older settlers produce enough for the exchange.

Sufficient to say, the relief funds will be used to pay for the clubhouse and all its contents. It is a community interest and for the general welfare. Relief funds should be used for something like a month's labor upon the residence to be occupied by the people moving in. It is contemplated also that fixed wages by the day to a limited extent may be paid to farm men and women who have already shown their ability and who are capable of giving instruction along certain lines at the community houses. In fact, men and women from city or country who can do useful and helpful things might well get per diem and mileage to go to certain selected communities and inaugurate such things. Provision should be made also for the temporary employment of college specialists who have unusual ability to develop certain activities and enterprises.

Our people, both white and colored, have already gone far in this direction. Every activity has been tried and tested and is in present use in farm communities. The progressive attitude of our farm people has been proved. It indicates that this idea can be expanded and utilized in a great developing plan of rural rehabilitation.

Work Centers

Taking the suggestions above, the Relief Commission has stated that Texas communities would be aided in establishing rural work centers and accepting into community citizenship families who could be housed and had a reasonable opportunity to work into future independence. A community in Houston County called, appropriately enough, Friendship, was the first to make detailed plans to accept the offer of the relief commission. These plans are depicted in the accompanying drawing and include arrangements for community recreation as well as houses and tools for special activities. By the time this is printed Friendship Village may have its work center in operation, and other applications, now on file in Austin, may have been approved and work on them begun.



At the twenty-fifth annual farmers' short course at Texas Agricultural and Mechanical College to be held the first week of August a model work center completely equipped and in operation will be shown on the campus. The more than 5,000 persons from all parts of Texas, who are expected to attend, will be able to go back to their own communities and explain to their fellow citizens the advantages of relief by infiltration.

Reformation will have to begin at home and in the neighborhood. Anybody who will look into the future can see that present methods of dolesome relief cannot continue very long. If manhood and womanhood are to be rescued from mendicancy, inertia, and ineptitude, it will be necessary for purposeful activities to be started in places where talent and ingenuity can be fostered. People can go back to the country and redevelop it upon a modern basis.

Relief Canning of Drought Cattle

Relief canneries are now getting under way in many States to preserve about 1,000,000 cattle bought by the Agricultural Adjustment Administration in drought-relief counties. The work is done through the cooperation of the State Extension Service and the State relief administration. Extension workers usually take the responsibility for canning methods and the relief administration for supervising the building, equipment, and personnel, and paying the bills. Workers at the canneries, with the exception of the supervisors, are recruited from the unemployed. The finished product is distributed to relief families and carries a special label stating that it is not to be sold.

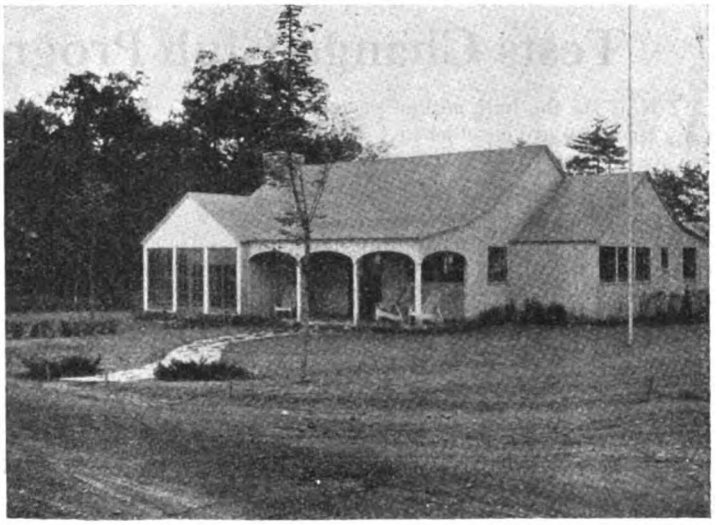
About one-half of the cattle for canning are being shipped into the Southern States to be fattened. These will be canned as the facilities become available.

Training meetings for those in charge of the work in each State have been held in Texas, where 19 relief canneries were set up last year and 3,000,000 cans of beef put up in 30 days. More than 33,000,000 cans of beef will probably be put up by these relief canneries this summer and fall. Mildred Horton, State home demonstration agent in Texas, who contributed much to the success of the Texas project, has been assisting in formulating plans for relief canning on a national scale. Alfred G. Smith is in charge of the work for the Federal Emergency Relief Administration.

4-H CLUB members led the way to a new enterprise and a new source of farm income in Schuylkill County, Pa. The boys and girls were the first to start growing celery. They found that to grow it successfully it must be irrigated, as one club member demonstrated by pumping water into trenches between the rows. Some producers still use this method while others have installed overhead systems. One producer in the county now puts out 70,000 plants, 10,000 or 15,000 of which are ready for the early August market.

The House That Faith Built

Laying the cellar wall. More than 20 tons of concrete and 150 tons of rock and gravel went into the foundation. All the work of hauling and mixing was done by the older club boys.



The 4-H clubhouse made for and by the club members of Massachusetts. A garden will be laid out in front of the sun parlor and further planting will be done later.

IN THE setting of every stone and the nailing of every board that went into this 4-H clubhouse on the campus of the Massachusetts State College went the love and devotion of Massachusetts 4-H club members for George Farley, their club leader for so many years. Mr. Farley says this is the house that faith built. All the work has been done by 4-H club members. Last summer at one time or another more than 50 boys worked on the building 10 hours each day, receiving for pay only their meals and lodging. There were from 6 to 10 boys on the job all the time. The architect gave his services because of the interest of a former club member who heard Uncle George Farley tell about his plans for a 4-H clubhouse in a radio talk. The smallest gift was a penny from a youngster, and the largest a check for $160 sent by the Hampshire 4-H Service Club. Most of the gifts have been small and represent the interest of 4-H club members who made their donations in all sorts of ways. Thirty people paid a dollar for the privilege of driving a nail in the building.

Mr. Farley says the house is built around the hearth representing the 4-H club girl's ideal of home. From the sun parlor she can look out to the Berkshire Hills on one side and the Holyoke Range on the other, giving a "wide view of field and meadow fair, of distant hills, of open sky." In time a garden will be laid out near the sun parlor, and already a tree has been set out, which will eventually be a "high tree above its open gate."

As if an omen of good luck, the center stone of the fireplace, which is made of field stone, was found to have the likeness of a frog, which is the symbol of 4-H clubs in Massachusetts, and reminds 4-H club members of their motto "Hop to it."

Native Lumber Used

The building is of native pine outside and sheathed in native pine inside. It is perfectly equipped to feed 36 people and to house almost any kind of 4-H club meeting. Every piece of equipment and furniture has an interesting history and significance. On the porch floor is a map of the State with each county represented by a historic stone from the county. The clubhouse will be used as headquarters for club work during Farm and Home Week and can be used by individuals or clubs for tours, rallies, demonstrations, house parties, or just plain visits. Mr. Farley hopes it will be used during every week in the year and will help to formulate a fine ideal of home for the young folks of rural Massachusetts.

When the building and its surroundings are completely furnished it will be a monument to the faith of a 4-H club leader with vision and to the love of the 4-H club members with whom he has labored.

4-H POULTRY CLUB members in New Jersey found the special 4-H carton in which they packed 24,803 dozen eggs to be worth 6 cents on each dozen eggs. They received 31 cents, on the average, for eggs marketed in the carton and an average of 25 cents for those marketed in a plain container. Their eggs have also brought premium prices over the New York market, varying from $0.033 per dozen on medium-sized eggs to $0.047 on large-sized eggs during 1933. What caused this difference? "Members have learned practices in the marketing of eggs of superior quality that developed confidence on the part of the consumer", says J. C. Taylor, associate extension poultryman. All eggs are graded and packed according to definite standards by the producing club members.

A COUNTY agent in every one of 95 counties was the proud announcement of the Tennessee Extension Service on June 25. Home demonstration agents are in 42 counties and 17 counties have assistant agents. It is the first time in the history of the organization that there has been a county agent in every county of the State.

IN northwest Arkansas, 90 farmers' improvement clubs have recently been organized which meet once each month to discuss agricultural problems.

Tests Change Club Program

WHAT do the half million or more girls who are enrolled in 4–H club work learn?

The College of Agriculture, University of Illinois, decided to find out, and it soon unearthed so many suggestions for the improvement of girls' 4-H club work that new projects were developed, old projects were revised to put more emphasis upon certain phases of subject matter, and plans for leaders' training schools were changed.

The test was designed to measure the effectiveness of subject-matter teaching through girls' 4-H club projects and was taken by 1,500 girls of club age, about half of whom were club members. Answers to the questions indicated directions along which club work might be developed.

It was apparent, in relation to a number of goals, that results from some phases of subject matter were not satisfactory. To be specific, clothing-club members appeared to know more about construction of garments than about fitting. Members of food clubs knew more about food values, and less about principles of cookery. Analysis of divisions of subject matter covered by various projects raised the question as to whether the divisions were logical. It was still felt, however, that succeeding years of work should present material which would follow the probable development of club members along lines covered by the project and that problems increasing in difficulty from year to year of the project should be offered.

Since need for emphasis along definite lines in presentation of subject-matter material was apparent, the outline of a long-time plan was made to meet the need. Subject-matter goals as set up for each project were considered critically. It was decided that some were too extravagant and so impossible of attainment in the time given to the project as to be discouraging to leaders and members. For each season's work fewer and more specific aims were set up. All clothing and foods projects were rewritten with revised lists of goals in mind. Record books were changed. Those now in use are designed to furnish the club member with a review of the more important phases of her project as well as a record of work done. A handbook was prepared for 4–H club members. This handbook contains some subject-matter information that may be supplemented from year to year. As other phases of subject matter are developed in coming seasons, the new material will be the subject for emphasis at subject-matter training schools.

Club members were invited to the subject-matter schools which have been held for leaders each year. This practice will be continued. For projects in which enrollment was not large enough to warrant a subject-matter school in each county, district schools were arranged. These will be continued, subject-matter specialists holding them when possible and emphasizing information that is considered fundamental.

Experience and contacts with older girls within club age, as well as indications given by the test, had shown a need for projects that might be of special interest to the older group. Ten new projects were developed which deal with varied subjects suggested by a questionnaire sent out to older club girls. In their preparation were used suggestions made by Margaret Latimer, national 4–H club fellowship student, in her thesis, Planning a Program of Extension Work for Older Farm Girls. Enrollment in these projects is limited to members 17 years of age and older. It is believed that by thus limiting membership, a different type of project can be planned that is better adapted to the needs of older girls.

In the rewriting of old projects which formerly had been offered in 4 consecutive years, a division was made. Three years of beginning work have been planned in clothing and foods and 3 years of advanced work. Also three new 1-year projects have been prepared. By these, comparisons may be made with regard to the quality of work done and the interest shown in 1-year and 3-year or long-time projects.

Results of these changes are still to be seen. The achievement test helped to determine the direction they took. It furnished a large part of the impetus for the outline of the long-time plan, details of which it will direct still further.

—Cleo Fitzsimmons,
Specialist in Junior
Club Work, Illinois.

Local Leader Responsibility Larger

DUE to a decrease in the number of counties in Tennessee employing county agents the past 3 years, there has been a slight decrease in the total number of club boys enrolled. The enrollment in 1931, 1932, and 1933 was 22,378, 21,997, and 21,562, respectively. In contrast to this trend, the average enrollment per county each year has increased. The average enrollment per county was 276, 293, and 299, respectively.

But each year during this period county agents have been called upon to devote more time to seed-loan work, the Agricultural Adjustment Administration, and correspondingly less to club work. Each year it has been necessary to ask the community to assume more of the responsibility for the success of its club work.

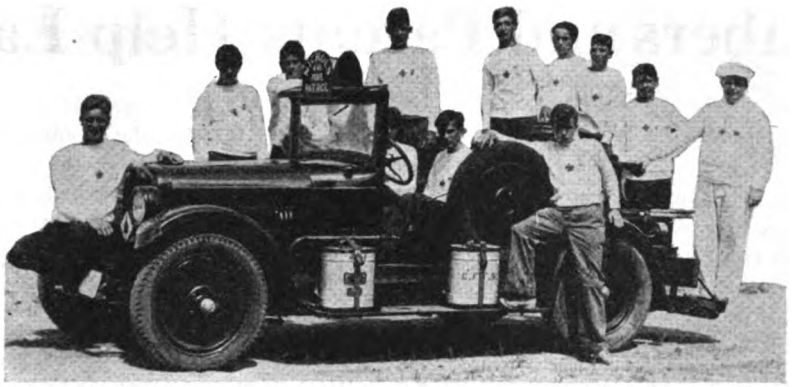
In many places the success of club work in 1934 will rest largely on the people within the community, for county agents are extremely busy with the adjustment program. And why shouldn't the community assume this responsibility? The community will profit more by actually doing the work under the general guidance of the county agent than to have it all done by the county agent, provided he had the available time.

Last year there were 1,189 communities with organized clubs, and 1,053 of these had active leaders. With 20 new counties employing county agents in 1934, there should be over 1,200 active leaders. No doubt the average enrollment per county will be less this year than last, but the State enrollment should be greater.

The county agent is still the authority on club work in his county and has not lost any interest in its success. He will continue to devote as much time and thought to it as possible, and his office will supply club members with the necessary bulletins, letters of instructions, and report forms. In an effort to lighten the load on county agents, however, and to give leaders some definite assistance, the names and addresses of club leaders from a majority of the counties have been assembled at our State office, and instructions go out to them every 3 or 4 weeks. Not only have the leaders been asked to take more active part in club work, but all club officers and older members who have had one or more years of experience are urged to fit themselves in as team members for the success of their entire club.

If boys will take advantage of their opportunities in this program, and if local leaders will continue to devote their available time to various club activities, the enrollment can be increased and the standards can be raised.

—G. L. Herrington,
State Club Leader, Tennessee.



4-H Forest Fire Fighters

PERHAPS Fairfield County was the first section in Connecticut to take up forestry work with boys because it is no longer agricultural but does have thousands of acres that "something ought to be done with." At any rate, the project outline was welcomed by the county club agent, J. R. Case, as one with appeal as well as intrinsic worth. Its reception in the community where it was first introduced was enthusiastic.

The work undertaken was a hardwood thinning demonstration, followed the next spring by some evergreen planting. The father of two of the club members gave the freedom of his woodlot and has not had to cut any firewood since. The boys learned how to use and care for the ax and saw, became familiar with the valuable native species, and got a taste of work, so that the next fall they went to work with a will.

Clubhouse Built

The second year there were two groups making possible interclub visits and rivalry. Plane-table surveying, elementary forest mensuration, and records on tree growth in thinned and unthinned areas were undertaken. Collections of leaves, seeds, wood samples, diseased trees, and insects were begun. No club being complete without a clubhouse, one group erected a slab shelter and for inclement weather developed a cave in an overhanging ledge.

The older boys became interested in fire fighting, and followed a program of fire-control methods, trail and firebreak cutting, and fire fighting under the local warden. The larger fellows soon were on the list of paid fire fighters, and one summer took their crew to the State fire warden's field day, bringing home all the ribbons. Since no "regulation" fire can be located except from a tower, a 30-foot structure was erected on a high point.

Several of the boys found a market for fence posts, cedar stock for rustic work, fireplace wood, bean poles, and dahlia stakes. Others were interested in wood utilization, and a study of this in one community resulted in the organization of a handicraft club.

The club tour was a most important feature of the program. They began with a 1-day trip to nearby State parks and forests and points of historical interest. The next year the boys were out overnight and saw the extensive North Eastern Forest Nursery and visited a most interesting mill which made a specialty of utilizing native woods. The next year a 3-day trip took the group into Massachusetts, Vermont, and New Hampshire. Last spring they held a week-end camp with J. A. Gibbs, Connecticut extension forester, attending, and here the fellows had a chance to do some trail making, mountain climbing, fire fighting, and specimen collecting.

The original club, the Easton Rangers, put on such a nice demonstration of the value of hardwood thinning that the town set aside a 12-acre plot for a town forest, the first in the county. This group has also won the Sutton trophy for being the best all-round 4-H club in the county, and at last year's State exhibit erected a splendid booth telling of their project work, which won first place. The Connecticut Park and Forest Association has for a number of years presented awards to outstanding 4-H forestry club members of the State and Fairfield County has consistently sent in one or more for the honors.

Fire-Fighting Patrols

The most spectacular work was done with fire-fighting patrols and the boys were most fortunate in having the enthusiastic support of the State forest fire warden and his entire force. The older boys are very much in demand for fire fighting and receive the regular scale of wages paid volunteer fighters. The patrols, trained under local wardens, have taken part in county and State contests, and, needless to say, they have the youth, speed, and enthusiasm which, coupled with training and some little experience, puts them in the lead every time.

No less than four second-hand autos have been "baptized" with red paint and christened 4-H patrol wagons during the past year, and it looks as though another year will see as many more emerge from various tool sheds and garages. The finest piece of apparatus is a fast car equipped not only for forest fires but with a chemical tank and line of hose that make it of value in combating chimney fires, to which it usually precedes the regular wagon manned by grown-ups.

This forestry work has a great appeal to boys, as it takes them into the great outdoors; they learn how to take care of themselves in the woods and they achieve certain skills they would not otherwise have a chance to acquire. Under good supervision or local leadership the boys have demonstrated worthwhile practices, and right at the present time, when the conservation of natural resources is being stressed, it is a most favorable time to push 4-H forestry club work. The financial return may not be great, at least to the individual member, but beyond doubt the 4-H forestry program will prove of great benefit to the boy, the community, and the forestry movement.

RECREATION in small towns and rural districts will be one of the principal themes discussed at the Twentieth National Recreation Congress in Washington, D.C., October 1–5, 1934. The varied activities, including arts and crafts, drama, music, sports, camping, nature study, and hobbies, that constitute well-rounded recreation programs will be reviewed in section meetings. At general sessions such topics as constructive economy in Government, recent social trends and their relation to recreation, cooperative services on the part of education and recreation agencies, adult education, National Government service through recreation, and other broad themes will be presented. The effects of the depression and of National Recovery Administration policies will also be discussed.

Club Members and Parents Help Each Other

The part which parents play in the success or failure of 4-H club work is discussed by a local club leader and the value of 4-H club work to a family during the depression is discussed by a club girl, both of New Hampshire.

Parents Encourage Club Members

FOR several years I have been closely connected with club work for rural boys and girls, more recently as a leader of a local club of girls. I have three children of my own who will enroll in club work when they are old enough. I shall encourage them, for I have found that the success and happiness of a club member depend to a great extent upon the cooperation of the parents.

I began my 4-H career by joining a sewing club. Not liking sewing, I soon lost interest and would perhaps have dropped club work had not my wise parents intervened. Dad, knowing my love for the outdoors, helped me with a garden, and mother taught me how to can. I feel sure my enthusiasm would have waned if my folks had not been keenly interested. Dad always found time to help and advise me, and mother was never too busy to help with club reports or compose a new club song.

Five years later I started teaching a rural school in Dunbarton, N.H. Club work was just beginning in that community, and it was my privilege to assist in leading the club there for 2 years. I began to appreciate what my folks had done for me and to notice how some parents cooperated and how some did not.

One father seldom allowed his boys to attend 4-H meetings, claiming it was foolishness and that he could teach his boys farming better than any club. These boys lost interest, not only in the club but in the farm. Today they are all in the city, glad to be away from a place where there is all work and no play.

Another boy came regularly to club meetings, was given encouragement at home and time to attend club activities. Today he is ably assisting in the management of his father's farm, having completed 10 years of outstanding club work.

After teaching 2 years in the rural school, I became assistant club agent in Hillsboro County, N.H. In this field even more than before, I saw the value of parental backing. I remember one mother who wanted her daughter to join the club and urged the girl to complete the work. Other members lost interest and dropped out; each year others started but few finished. But this mother kept her girl's interest alive. Her father took her to county meetings. Soon she was old enough to lead a group herself, which she has done very successfully. A few discouraging words and lack of interest on her parents' part would have robbed this girl of a splendid club career and a real enjoyment of home duties.

Soon after marrying and making my home in Hudson I again took up local leadership. Since then our club group has grown from 10 to 50. To give due credit to the parents would take more space than I am allowed. I can enumerate only a few specific cases but fully appreciate them all.

One mother who is expert at sewing has acted as project adviser for the last few years. She has made the girls feel free to run in at any time and get advice. She has assisted them in choosing materials, styles, and colors. This has been a real service to the club and has formed a closer bond of friendship between her daughter and herself.

Another mother kindly acted as our 4-H club cook for the week without charge. Several mothers have taken care of my small children while I took the club girls to camp. Twice when I have been sick for some time other parents have opened their homes for meetings so that club work could go on.

When parents do not urge their children to attend meetings, these children soon lose interest, feel left out, and complain because they do not win trips, and often drop out. We try to keep them in but can do little without help, or at least interest, in the home. Three parents that I know have insisted that club work be well done before their children join other organizations. This teaches them to do one thing well rather than several poorly.

The dads have helped us, too. One dad awards a "best sports" prize annually at camp which arouses much interest and friendly competition.

During our 8 years we have taken approximately 50 trips, and the dads and mothers have furnished the cars. These trips have not only been great treats to the members but in many instances have given the parents a new vision of club work and its possibilities.

These incidents and many similar ones show how much parents can do to encourage their children. One of the greatest aims of club work is to better conditions on the farm and in the home. The closer the bond and the greater the cooperation between dad and son and mother and daughter, the nearer we will come to reaching our goal.

—Mrs. Harold French,
Hillsboro County, N.H.

Club Members Help Family Budget

You can imagine how club work might help our family when I tell you there are 14 of us, 10 children and 4 adults. I am 16 years of age, the third oldest.

We live in the fishing village of Seabrook, located on New Hampshire's 18 miles of seacoast. Men in our town used to be fishermen, but for the past few years there hasn't been enough work for them all, so many had to go to a city 5 miles away to work in the shop. My father is one of these men.

My brothers and sisters, who are old enough, and I shuck clams to earn money to buy our clothes. It takes 4 hours to shuck a gallon of clams and earn 30 cents.

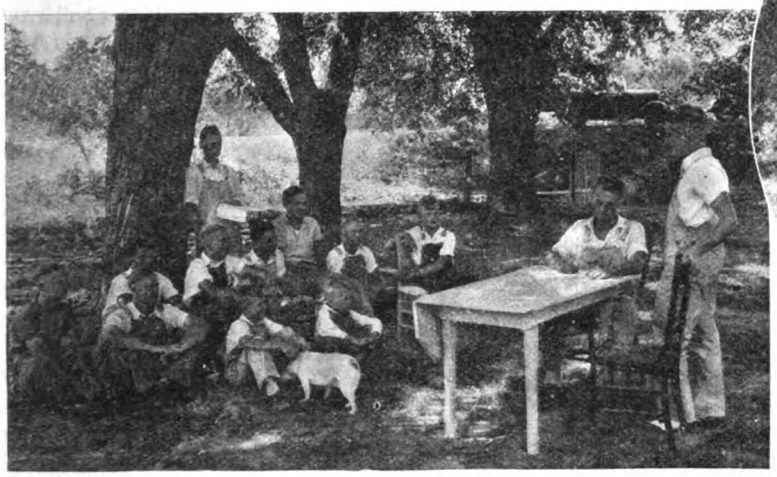
I first entered 4-H club work in 1926. Since then I have taken 8 years of clothing, 6 of food, 2 years of canning, and 1 year of room improvement. Two of my sisters have taken clothing, food, and canning, and my four brothers have done forestry, shop, poultry, and garden.

When our family began to feel the depression the most, it was then we realized the real value of 4-H club work to our family budget. I had to make use of what I had learned throughout my 4 years of club work. I darned, patched, and made over clothes for the younger children. I took dresses I had outgrown and remodeled them to fit my little sisters. I found enough material around the house, with what had been given us, to make pants for my brothers. By ripping up and washing old coats I was able to make the younger children jackets and coats. There was enough money to buy cloth, from which I made shirts and blouses for the boys and dresses for myself and older members of the family. I

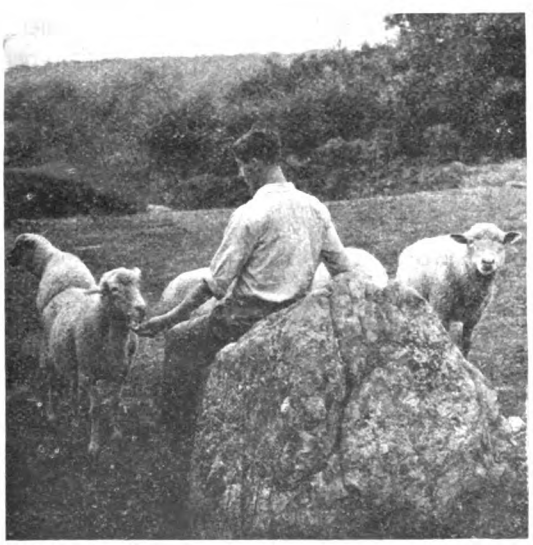
(*Continued on page 127*)

4-H Club Work Carries On

Over Half of States Increase Club Work in 1933



NEARLY 922,000 boys and girls were enrolled in 4-H club work in 1933, and nearly 666,000 completed satisfactorily their club activities. There was a decrease in the enrollment of about 3,400 boys and 200 girls below 1932. Nearly 3,700 less boys completed in 1933 than in 1932 and 135 less girls. With the many interruptions to the county agents' regular work due to the emergency adjustment programs, the slight loss in enrollment and completion proves that the 4-H club program has an important part not only in the minds of extension workers but in the minds of parents and farm boys and girls. . . . More than one half of the States increased both their enrollments and completions, but a few States had a decrease which entirely offset the increase obtained elsewhere. Even in the areas where the production-control campaigns were most active, the majority of the States increased their enrollment and completions, which would seem to indicate that ways and means can be provided to maintain club enrollment in spite of other emergency activities. However, enrollment figures in many States were completed before adjustment campaigns had become most active, so that the 1934 records may give a truer picture of the status of club work.



A Farmer's Dairy Program

A COUNTY campaign method for the improvement of efficiency in dairy herds through the use of purebred sires has been carried on during the past year in New York State. It has not been of the old type. It is a new plan in which the understanding of the dairy farmer is sought, where the problem facing the farmer is a matter of first consideration, and is attacked from the farmer's viewpoint.

"The record of results that have been accomplished is not the important factor in this fine plan of work", says H. W. Hochbaum, in charge of extension work in the Eastern States. "It is the fact that the problems of the farmer have first been analyzed by himself to determine his own needs. He has not been given a 'pill' to take; he has been given a diet to think over, to understand, and when convinced of its importance to him, to act upon."

The entering wedge of the plan is a conference meeting with the dairy farmers of a county who are asked to make a study of the local situation and to determine if, over a long period of time, the area is adapted to the growing of dairy-herd replacements. They make a study of the dairy problem within the county. Milk production, sales opportunities, butterfat records, and the need for quality animals are among the factors studied. The question is raised whether a long-time intensive breeding program may not be an economically sound solution to the problem of raisers. If the group decides that the major factor in the county dairy problem is the breeding and rearing of "quality" dairy cattle, a committee is appointed. This committee works with the county agent, the assistant county agent leader, and the dairy specialists in formulating a comprehensive plan for the county.

Meeting Local Situation

These plans vary considerably in meeting the local situation to fit the needs of communities within counties. Surveys are made by townships and farms to indicate the number, conditions, and the records behind the dairy bulls in the district. Some counties have determined the butterfat records and production records of herds. This survey serves as a starting point and as a measure for accomplishments.

This very thorough survey of conditions within the county serves as concrete evidence of the basic problem, the need for a campaign.

Presenting Facts

Meetings are held at which the facts are presented to the farmers, leading business men, and such professional men as might be interested in the movement. The chairman of the committee presents the report of the survey, concluding with a clear picture of the dairyman's problem.

Open Meetings

The meeting is open, and farmers are invited to bring in their own individual problems. The small herd owner is treated with as much consideration as the commercial herdsman. Solutions are presented which are within the reach of the little man, as for example, to get a bull whose dam has a production record higher than the best cow in his present herd. Emphasis is given to the need for keeping this bull until some record is obtained of the production of his daughters. Then the farmer can compare the daughters of this bull with the records the dams of such cows have made.

Instructive Letters

Special contact with the dairymen of the county is made through a series of letters prepared by the county agent and the specialist. Items on the construction of a bull pen, the care and management of the herd sire, or hints to guide in the selection of a herd bull are included, with notes on local experiences and needs. Such material goes to the farmer each month.

One or more 2-day cattle-breeding schools are held in each of the counties. These schools are now conducted in the various communities by the county agent and the committeemen. The tour method has been particularly effective in the teaching and demonstration of herd improvement. Dairy herd-improvement association testers have been given special training in the work of herd improvement and have thereby been able to give valuable help. These men have also supplied the county agents with monthly lists of bulls for sale or sold, with 400-pound or better records in butterfat production. This is a most helpful service.

The tangible results of the program to date are satisfying. New York State now leads all States in the number of sires proved by lactation records. Nine bull associations have been organized among the premier breeders; approximately 300 herds are now in the process of proving bulls with dam and daughter production records; more than 1,400 dairymen are enrolled in 13 county better-bull campaigns, all of whom are pledged to raise or purchase "better bulls"; more than 150 bull pens and breeding racks have been built, and approximately 500 mimeographed plans and 25 bull-pen models distributed; successful better-bull tours have been conducted; bull sales lists were distributed and these listed only those bulls whose dams have records of 400 or more pounds of butterfat; forty-five 2-day breeding schools have been held with a total attendance of approximately 4,500 dairymen; and more than 50,000 letters soliciting cooperation and carrying the message of the principles of breeding were distributed this past year.

Campaigns

Thirteen counties launched campaigns at the beginning of the year, four of them for the fourth consecutive year. Thirteen county agents have just completed a 3-day intensive training school at the college, studying subject matter and methods. That the work of organizing the programs may be done carefully and thoroughly, only four new counties are added each year. A liberal allotment of specialist help is provided each county for the first 2 years.

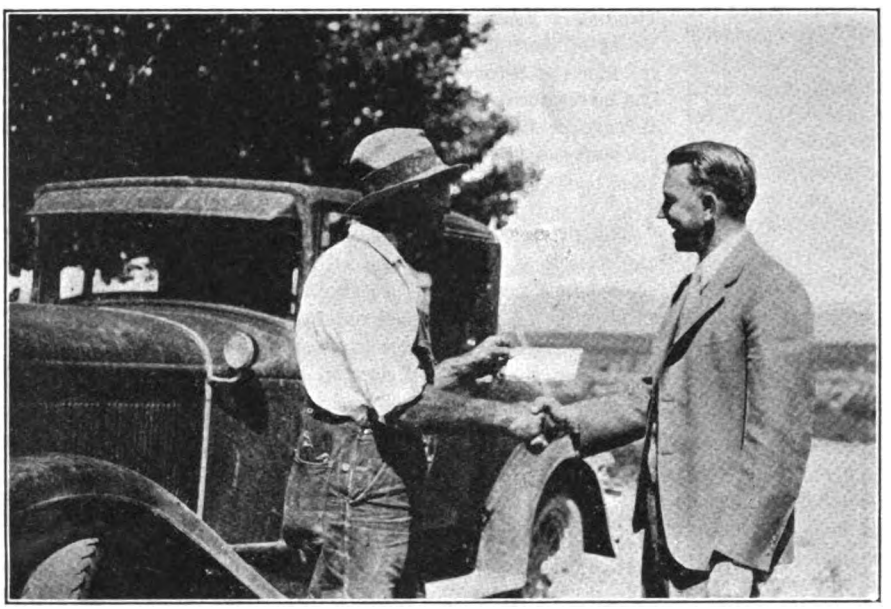
The campaign has had a slow, steady growth, and the effectiveness of the program increases as experience is gained by working in a few more counties each year.

Much of the credit for the success of the program during the past year must go to the county agents and the dairy committeemen. Many of the larger results are yet to be seen. However, the number of men who are expressing a willingness to cooperate in the plan must be an index to the popularity of the project.

VERMONT 4-H dairy club members have a 5-year plan. It starts with the dairy calf and ends with the young man or woman established in dairying. The work progresses from selection, care, and management of the calf to the study of available markets, cooperative effort, and the problems of supplying the market, as well as the management of two or more dairy animals.

Save Seed for Spring Planting

"THE SERIOUS effect of drought over a wide territory makes it imperative that growers and grain and seed dealers give attention this year to reserving in their locality a sufficient supply of seed of adapted varieties for next spring's planting, and when possible providing surplus seed for extremely dry areas where little or no seed will be produced. It is feared that farmers may be tempted, and in many cases forced by conditions to sell or feed locally grown grain adapted to their conditions to the point of depleting the dependable local seed supply. The 25 million dollar seed conservation program will not provide for more than a small part of the seed needs of the drought area and there will be a need for the full cooperation of the agencies that usually conserve seed from harvest to planting time—primarily the farmer, crop-improvement associations, seed growers, and local elevator operators", says J. F. Cox, Chief of the Replacement Crops Section of the Agricultural Adjustment Administration and chairman of the seed conservation committee.



REAL money for corn and hogs! G. L. Linscott, treasurer of the Lyon County (Nev.) Corn-Hog Control Association receives the first regular corn-hog check in the United States. This was the first check payment of a contract without the early payment rider. County Agent Otto Schulz, who serves as secretary of the local association, smiles his congratulations

Committee Appointed

The procurement and distribution of the Government-owned seed will be under the direction of the committee recently appointed by Secretary Wallace and Administrator Davis. The plan which is now receiving consideration is the setting up of county committees with a membership taken from the existing production-control associations and others as may be necessary to efficiently handle the plan named by the county agricultural agent. Apparently the plan will be to have the local committee in drought areas, cooperating with the county agent, place its request with the proper State authorities and obtain an allotment at cost. The local organization will handle the sales without profit, in cooperation with local distributors. As the supply which the committee will be able to hold will be limited, allotments will be made by the Department of Agriculture in the drought counties. Farmers who are unable to purchase seed may receive financial aid from the Farm Credit Administration, relief organizations, or other interests.

Col. Philip A. Murphy, Chief of the Commodities Purchase Section of the Agricultural Adjustment Administration, has been appointed by Secretary Wallace as the Secretary's special agent authorized to purchase seed according to the general plan which has been approved by the Secretary. Captain Webster, of Colonel Murphy's organization, has been assigned to the Minneapolis headquarters to set up the procurement organization and will purchase seed upon the recommendation of the seed stocks committee, storing such seed in bonded warehouses at points where needed at regular storage rates.

Those appointed to the seed conservation committee to guide the program with Mr. Cox are C. W. Warburton, Director of Extension Work, who has a rich experience in seed-loan work and emergency seed procurement; Nils A. Olsen, Chief of the Bureau of Agricultural Economics, whose staff will have charge of the grade inspection of the grain recommended for purchase; Col. Philip A. Murphy, of the Commodities Purchase Section of the A.A.A.; and K. A. Ryerson, Chief of the Bureau of Plant Industry; or F. D. Richey, assistant Chief of that Bureau. Mr. Ryerson has delegated M. A. McCall, chief cerealist, and S. C. Salmon, principal agronomist, to this work. Mr. Salmon has been named chairman of the seed stocks committee to locate supplies of adapted seed grains and to recommend their purchase to Colonel Murphy's organization. Other members of the committee are John H. Martin, of the Bureau of Plant Industry, and Carl A. Waalen, of the Bureau of Agricultural Economics. O. S. Fisher, extension agronomist, and L. C. Burnett, of the Iowa Experiment Station, are serving with Mr. Salmon on the committee in developing a cooperative program with the State extension and experiment station agronomists.

EACH regularly enrolled Ohio 4-H forester receives free of charge 1,000 trees, which are donated by the State department of forestry. The trees must be used for reforestation and must be planted as a forestry project. More than 1,500,000 trees have been distributed in this manner since 1926. For the most part, the trees have been red pine, Scotch pine, and black locust. Several 4-H clubs have made plantings of seed from black walnut, oak, ash, and tulip poplar trees.

Tuscarawas County clubs led the State with 79,000 trees planted, while numerous counties report planting over 10,000 trees in the forestry project. More than 1,000 members were in the 4-H forestry clubs during 1933.

Trees are also distributed to vocational agriculture students on the same basis. The schools in Washington County planted 76,000 trees.

Poultry Adds to the Income

Farmers in Anson County, N.C., in cooperation with their county extension agents, have developed a side line that added $11,010.80 to their income in 1933.

EVERY farm family has some side line which adds to the family income. It may be that the farmer's wife makes a little butter or markets a few dozen eggs to buy some flour or a new dress. In Anson County, N.C., farm families have found a side line and worked out a marketing plan that really pays. It has not been an over-night development but a steady growth under the direction and suggestions of J. W. Cameron, county agricultural agent, and Mrs. Rosalind A. Redfearn, home demonstration agent.

For many years the extension program has been working toward the development of better poultry and a satisfactory marketing system. As a result there are now many fine poultry flocks in Anson County, but the most remarkable growth made recently has been in the production of turkeys. Better feeding methods and management have increased the turkey production in Anson County four times. Many farms, where only 15 or 20 turkeys were raised each year, are now producing between 150 and 200 birds. The turkeys, for the most part, are all of one breed, the Mammoth Bronze. In one community within a radius of 3 miles, 2,000 birds can be found.

Marketing Plan

The county-wide marketing plan which has proved so satisfactory is simple and easily worked. In the early fall a file is prepared in the county agent's office of all producers who wish to take part in the cooperative marketing plan. This file contains the number of birds, the age and condition of the fowl, and the time each farmer would prefer to sell.

Contacts with the market are established through old customers, by a certain amount of advertising which has accompanied past shipments of birds, and by word of mouth. Customers are told of the available supply and quality. A price is established to agree with the prevailing market price.

Uniformity of quality in the birds shipped has been one of the best advertising agencies that could have been selected. This factor has played an important part in securing new customers. Many orders come in by phone and telegraph, and the office file of the producers has materially aided in filling this type of order.

Orders are prorated among the various producers throughout the county. Notice is given of the date and hour the fowls are to be delivered at the curb market. Producers who are unable to make delivery on that day are requested to notify the office by return mail, so that the order can be reallocated. This procedure makes it certain that an order will be filled without shortage.

Selected Birds

The producer is given a slip showing the weight of his birds and all birds are placed in a pool lot. Then the birds for filling the order are selected according to specifications. If birds of poor quality are found they are returned to the producer. The dressed birds are packed in clean, paper-lined barrels, fitted in snugly to prevent damage during shipment. Special Anson County tags are placed on each barrel. The total weight of the shipment is taken and the invoice mailed the day the turkeys are shipped. The payment for the birds is deposited in the local bank in a special account and rechecked to the producers who took part in the shipment after a small deduction has been made for necessary expenses such as paper, barrels, telegrams, or telephone calls. When the volume of business or the order specifies live birds such shipments are made. Carload shipments of live turkeys or chickens are advertised throughout the county by the county paper, by letters, and by posters.

It is true that much of the success of the project has been due to the high quality of birds that have made up the shipments. The county agent lists the following items which have helped maintain this standard.

1. Personal contacts with the producer on the farm, at meetings where instructions are given in management, feeding, dressing, grading, and other items such as housing, breeding, and culling.

2. By the use of correct methods of killing and dressing the birds.

3. By personal supervision in the filling, packing, and shipping of orders.

4. Through contacts with the customers. Their suggestions have aided in the success that has been attained.

5. Promptly meeting the demands of specific orders for dry-picked, live, or dressed and drawn turkeys or chickens. It is believed a poor policy to argue with the customer, regardless of our convictions in the best way to prepare the turkeys for market.

6. We want the producers and buyers to know each other and every opportunity is given for their meeting. Visits are made to the customer's place of business by groups of farmer-producers whenever possible. Seeing the satisfied buyer, the condition of the birds on the market, and the cold-storage handling of the birds is an inspiration to the producer to maintain and improve the quality of the turkeys produced. It acts as a lesson in the value of cooperative marketing.

During the 1933 season Anson County farmers shipped cooperatively $11,010.80 worth of produce. The largest single day's shipment of turkeys was on December 19 when 700 turkeys weighing 8,893 pounds, dressed, were shipped.

Histories Are Valuable References

Two histories, which should be valuable to extension workers, teachers of vocational agriculture, and others interested in agriculture are still available by purchase from the Superintendent of Documents. These books, entitled "A History of Agricultural Extension Work in the United States, 1785–1923" (Miscellaneous Publication 15), at 75 cents, and "A History of Agricultural Education, 1785–1925" (Miscellaneous Publication 36), at $1, were written by the late Dr. Alfred Charles True, Director of the States Relations Service and specialist in States Relations Work, and published in 1928 and 1929, respectively.

Orders should be sent direct to the Superintendent of Documents, Government Printing Office, Washington, D.C. Remittances should be made in the form of postal money order or certified check.

A NEW department of rural organization and marketing has been established in the College of Agriculture at the University of Georgia. Courses in marketing, credit, prices, economics, land utilization, adjustment of production, and management will deal with these subjects as they affect the farm and the farmer. J. William Firor, at one time a county agent, will be head of the department. During the past several years he has been agricultural economist at the University of Georgia.

Training Local 4-H Club Leaders

FOR YEARS it has been found difficult to provide definite training in subject matter for local club leaders. Nebraska is attacking this problem in 4-H girls' clubs by using the cycle plan. Assistance from the State office is given in subject-matter training at 2-day leader-training meetings given in each county. The work is divided into clothing, cooking, and room-improvement projects with 2 years of work offered in each. This cycle provides that in a period of 6 years, each project will be given to every county with more subject-matter assistance from the State office than was formerly possible.

The State is divided into three sections, the northeastern, western, and southern to minimize travel time and expense. All counties in each of these sections are offered the same cycle project. In counties having county home demonstration agents, two projects are offered, a beginning and an advanced one. Thus in 1934 a county in the western section might offer 4-H girls' clubs an advanced clothing project, Winter Clothes for the 4-H Girl, and a beginning cooking project, Hows and Whys for Young Cooks. If clubs cannot or do not wish to carry the regular cycle project, optional projects may be chosen. These are offered without special leader subject-matter training from the State office. These optional projects are 2 years of health work, canning or hot school lunch, 1 year of elementary cooking, sewing, or repairing.

The six-cycle projects now being given are called: Hows and Whys for the Young Cook, Meal Planning and Preparation, Summer Clothes for the 4-H Girl, Winter Clothes for the 4-H Girl, The Room a Place to Live in, and Problems in Room Improvement.

"After using this plan for 4 years we find that a more complete home-economics training is given when the club member completes the cycle than when she chooses her own projects", says Allegra E. Wilkens, assistant State club leader. "The quality of all lines of work has been improved. The leaders appreciate the more detailed subject-matter assistance and because of this are more willing to undertake the duties of a 4-H club leader. Since goals are set for completing the entire cycle, we find in Nebraska that it also tends to keep girls in club work for a longer period."

Similar plans are in operation in Iowa and several other States. Iowa this year is adding a new phase of work, called Home Efficiency in lieu of a better name. Mrs. Bakke, State leader in girls' club work, states: "An Iowa girl can be an active 4-H club member for 9 years from her twelfth birthday to her twenty-first birthday. Under our present scheme of project rotation an Iowa girl has 2 years of clothing, 2 years of home furnishing, 2 years of nutrition, and 2 years of home efficiency, or a total of 8 years. After completing the 8 years she can repeat her clothing work. In the 8 years intervening the specialists will have improved and changed the subject matter given so that the 4-H girl will be getting new up-to-date material.

"Before deciding upon a definite scheme of rotation, local groups were prone to much change of project", continues Mrs. Bakke. "Now we find our club groups reluctant to give up any project. There is an almost State-wide appeal each year for another year of the project studied."

F. C. Meier, who has recently accepted an appointment with the Eastern States group of the Division of Cooperative Extension. Mr. Meier's first appointment with the Department came in 1915 as a plant pathologist. Previous to his present appointment, Mr. Meier has been active in barberry eradication work. Mr. Meier is known throughout the extension field for his work as extension pathologist.

Club Members and Parents Help Each Other

(*Continued from page 122*)

have made and repaired all of my own clothes ever since my first year of club work.

The past two summers I have canned everything I could get. For weeks the past winter and winter before, we practically lived on the canned and stored fruits and vegetables in our cellar. The 100 or more jars of jelly and jam was used on our bread, instead of butter. For 7 weeks while my father was on strike, we lived well on our canned stuff. Some of the other strikers' families were eating little more than dry bread.

My four brothers plant and care for a large garden. Their crops have been large enough to last our family until spring. Our potato supply for a year is about 40 bushels; the boys raised 35 of these last year. We used the last of them last month. The boys took forestry, too, last year and as a result helped to supply the family fuel by cutting wood at halves in a nearby town. They managed to cut enough to last through the hard, cold winter.

I also do quite a lot of the family cooking. The winter of the depression I made out menus using the food we had canned and bought only a few necessary supplies. Neither agriculture nor home economics is taught in our town schools; so if it had not been for club work, my brothers and sisters and I would not have learned how to do all these things. The canning especially has helped out, because few people in our community know how to can.

The year our leader moved 3 miles away, we had only a few club meetings because it was difficult for the members to go so far, especially as some of us had to go 5 miles to high school. The following year I organized a club of smaller girls and for 3 years I have taught these girls how to cook and can from the knowledge I received from my club work.

I am sure that all this work would not have been done by my brothers and sisters and myself if we had not been in 4-H club work. I am glad and so are all my family that I joined the 4-H club and found out what club work was and how it could help us all. I urge every eligible boy and girl to join a 4-H club and find out for themselves what it is and how much it can mean.

EVELYN DOBSON,
4-H club girl,
Rockingham County, N.H.

4-H BOYS and girls attending the Vermont State camp honored their State club leader, Elwin L. Ingalls, on the anniversary of his twentieth year in that capacity. Credit was given to Mr. Ingalls by Dean Hills, who engaged him as club leader in 1914. A present to Mr. Ingalls of $50 was used to establish a scholarship to be known as the "Elwin L. Ingalls 4-H club scholarship" and to be awarded each year to a worthy club member attending Vermont University. In making the presentation Dean Hills urged that each club member add 5 cents to the fund.

New Motion Pictures

Home Demonstration Work in the Western States, a two-reel film recently released by the Office of Motion Pictures, is designed to give a general idea of the scope of home demonstration work in the West and to show how this work results in improved homes and a more contented farm population.

Opening with scenes illustrative of the "dream" of every progressive farm woman—a beautiful home—the film goes on to exemplify work on various major home demonstration projects, such as food and nutrition, child development work, the neighborhood leader plan, clothing a farm family, and keeping household accounts on the yearly budget plan.

Especially interesting are scenes showing how home demonstration agents have taught farm women to make the most of available materials during the lean years of the depression. These scenes include exemplification of various branches of handicraft, such as making rugs, refinishing and reupholstering furniture, making footstools, and cleaning and dyeing rugs.

This picture is one of a series of pictures on home demonstration work now in the course of preparation. It may be borrowed in either the 16 mm or 35 mm width upon application to the Division of Motion Pictures, Extension Service, United States Department of Agriculture, Washington, D.C. No rental is charged, but the borrower must pay the transportation charges from and returning to Washington.

A RECENT study made by R. A. Turner revealed that 2,335 former 4-H club members were enrolled in the State agricultural colleges of the 13 Central States. This was 31.36 percent of the total enrollment in agriculture and home economics in these schools.

National 4-H Club Radio Program

Annual Theme—4-H Club Work Influences the Farm and Home

Tenth Phase—4-H Club Members are Learning to Market

Saturday, October 6, 12:30 to 1:30 p.m., Eastern Standard Time

Our 4-H Club Members Increased Their Profits Through Marketing High-Class Products	4-H club boy from Kentucky.
What I Have Learned About Marketing from 4-H Club Work	Former 4-H club girl from Connecticut.
4-H Farm Management and Account Clubs	State club leader, Connecticut.
The Cooperation of Bankers and Business Men With 4-H Club Work	C. L. Chambers, United States Department of Agriculture.
Music We Should Know—Tenth Phase of the 1934 National 4-H Music Hour, Featuring Compositions by Zimmerman, Verdi, Strauss (Johann, Jr.), Strauss (R.), and Bizet	United States Marine Band.

New Portfolios Issued

In the May issue of the Extension Service Review were illustrated several portfolios on home improvement, namely, A New Deal for Old Furniture, Built-in Storage Spaces, Rug Designs, Rug Equipment and Materials, and Making Hooked Rugs. New portfolios have now been prepared on Window Curtaining (in two parts, showing types of curtains and how to estimate materials), Slip Covers, and Living Rooms (also in two parts—one illustrating furniture arrangement and groupings, the other, kinds of wall treatments). These portfolios are for loan only and are sent without charge to extension workers and teachers of home-improvement courses in colleges and universities. Arrangements for borrowing them should be made by writing to the Bureau of Home Economics, United States Department of Agriculture, Washington, D.C.

The popularity of these portfolios and the limited number of duplicate sets necessitates limiting to 3 weeks the time that any one person may use the material. For this reason it is advisable to make requests several weeks in advance of the time they are desired, and also to give several choices of dates to insure a reservation in the event that portfolios are not available for loan during the first period.

Johnnie Simpson, a Negro farmer in Jackson County, Fla., spent 6 years in 4-H club work. He is shown cultivating corn on a part of the 60-acre farm which he is successfully operating.

ON July 14 the Farm Credit Administration announced that it had passed the $1,000,000,000 mark in making more than 400,000 farm mortgage loans to farmer-borrowers throughout the country. The administration says that about 90 percent of the loans went to refinancing existing farm indebtedness. This refinancing has reduced the interest paid by farmers about 20 percent and has saved many farms from foreclosure. The loans have not increased the indebtedness of the farmers and the terms of repayment have been made systematic over a period of years.

Secretary Wallace to 4-H Club Members

As I look out at the world from here in Washington, it seems to me we will see even greater movements taking place during the next 10 years than in the past 10 years. A safe and sensible outcome will depend upon the young people.

We are all children of transition. You and I are living during the stress and strain of adjustments to a new era. But we are laying the foundation for an era which we hope will bring greater social justice and greater happiness to all. It is a great adventure, more exciting perhaps than many of you realize.

As we work toward the future, we live in the present and must endeavor to do our work in a vigorous happy way from day to day, remembering always that we are not working to out-compete our fellows—that is not the essence of it—but to compete with the best in ourselves. That is the spirit I hope we can build up in the future. Give the best that is within yourself and it will be enough. It will take the best that is within ourselves to contribute to the smooth working of the whole social organization. If 4-H club boys and girls give their best to this effort, then they will have contributed as much as any other organization in the United States.

From Secretary Wallace's talk to delegates at the Eighth National 4-H Club Camp, Washington, D.C., June 14

4-H CLUB SONGS

THE singing of club songs is an effective way of building up club spirit. Illustrated songs hold the attention of club members, add to the enjoyment of club meetings, and aid leaders in directing the singing.

FIVE series containing 12 songs most popular among club members are now available for purchase in the form of film strips or for loan in the form of glass slides.

Series 233 illustrates:

(1) America the Beautiful; (2) Dreaming
(3) A Plowing Song; (4) Home, Sweet Home

Price of film strip, 45 cents

Series 254:

(1) A Song of Health; (2) The Star-Spangled Banner

Price of film strip, 36 cents

Series 267—(1) The 4-H Clover and the Rose; (2) The Country's Faith

Price of film strip, 36 cents

Series 288—(1) 4-H Friendship; (2) 4-H Ceremonial Song

Price of film strip, 36 cents

Series 326—(1) A Song of the Open Country; (2) 4-H Field Song

Price of film strip, 36 cents

For a complete catalog of film strips with prices and directions for purchasing, write to
EXTENSION SERVICE, U.S. DEPARTMENT OF AGRICULTURE, WASHINGTON, D.C.

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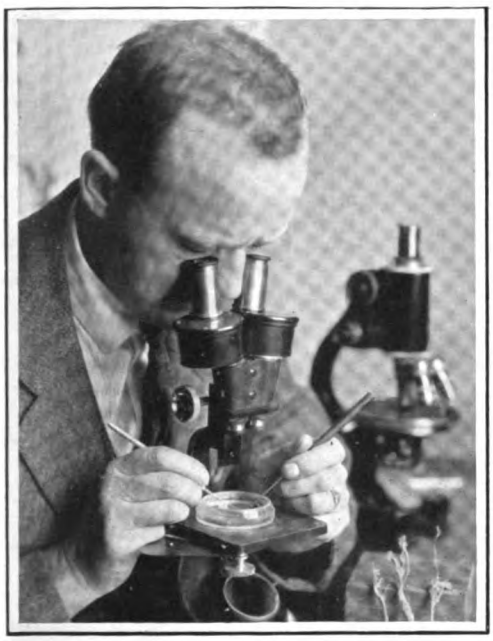

Facts from the laboratory are put to practical use on the farm by the extension agent. Here the scientist studies the alfalfa stem nematode and the county agent applies the results of the study to the practical control of this parasite.

FROM > > LABORATORY TO > > > FARM > >

ISSUED MONTHLY BY THE EXTENSION SERVICE
UNITED STATES DEPARTMENT OF AGRICULTURE
WASHINGTON, D.C.

FOR SALE BY THE SUPERINTENDENT OF DOCUMENTS, WASHINGTON, D.C. - - - - SEE PAGE 2 OF COVER FOR PRICES

In This Issue

ILLINOIS in 1928 launched an agricultural adjustment project in which research and extension agencies have cooperated actively in analyzing the farming situation and making pertinent facts available to farmers that would help them to decide intelligently what adjustments to make in their farming operations. Something of the background of this project, how it has been developed, and the results that have been obtained are explained in the article entitled "A Long-time Adjustment Program."

SECRETARY WALLACE discusses the possibilities and difficulties in exporting farm crops. He points out that opportunities for increased export of particular commodities vary widely. He sees good possibilities for improving our foreign trade in cotton, fruit, and tobacco, but believes wheat and pork products to be in a less favorable position with reference to export possibilities. He thinks, however, that our tariff bargaining program may be of considerable help in increasing foreign demand.

PARENTS, teachers, home demonstration agents, county nurses, and the children themselves are cooperating in the endeavor to improve the health of children in Virginia and South Carolina. Hot school lunches play an important part in the campaign for better nutrition. The gains in weight and health of the children show that the efforts of those aiding in the work have not been in vain

RURAL life in Louisiana is more attractive to citizens since they organized 383 active community organizations. By uniting their efforts to common aims and goals they have obtained good highways, better schools, rural parks, choruses, orchestras, dramatic clubs, and athletic teams, according to Mary Mims, extension rural sociologist.

Contents

DIRECTOR RAMSOWER of the Ohio Extension Service, says that extension workers must attack research in a new and vigorous manner and ask themselves such pertinent questions as "Are we doing the right things in the right way? What projects that have long found places in our programs may safely be abandoned? Are we driving hard at basic needs of people or merely skirting the fringes? These are general fields in each of which there are scores of specific problems calling for painstaking studies."

On The Calendar

Ak-Sar-Ben Livestock Show, Omaha, Nebr., October 28–November 3.

Outlook Meetings, Bureau of Agricultural Economics, Washington, D.C., October 29–November 3.

National Grange Convention, Hartford, Conn., November 14–23.

Rural Homemakers Conference, Washington, D.C., November 16.

American Country Life Association, Washington, D.C., November 16–19.

Great Western Livestock Show, Los Angeles, Calif., November 17–22.

Association of Land-Grant Colleges and Universities, Washington, D.C., November 19–21.

International Livestock Exposition, Chicago, Ill., December 1–8.

Fifth Annual Session of the National Cooperative Extension Workers' Association, Chicago, Ill., December 6.

Tenth Annual 4-H Club Baby Beef Show, Union Stock Yards, Nashville, Tenn., December 12–14.

Thirty-eighth Annual Convention of American National Livestock Association, Rapid City, S.Dak., January 9–11.

FARMERS in New Hampshire have found that by harvesting their hay in June they obtain first-class roughage to feed their livestock. To improve their hay they turned under poor hay fields and reseeded them to alfalfa and clover. The annual legumes which are now being raised also help to increase the production of milk.

EVERYONE is interested in whether the food supply will be ample for the winter months and what the advance will be in the cost of living. Nils A. Olsen, Chief, Bureau of Agricultural Economics, and Louis H. Bean, Economic Adviser, Agricultural Adjustment Administration, tell us what they believe will be the probable future trends in living costs and food supplies.

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A Long-time Adjustment Program

Research and Extension in Illinois Contribute to Agricultural Adjustment

Dean H. W. Mumford who devised and launched the agricultural adjustment project in Illinois in 1928.

NEW as it may seem to some, the "Back to grass and forage" movement in Illinois really started as far back as 1876—58 years ago.

That year there were laid out on the campus of the College of Agriculture, University of Illinois, the Morrow plots, which have since become the oldest experimental soil plots in the United States.

This year farmers of Illinois are retiring approximately 1,500,000 acres of former wheat and corn land from normal production under the Agricultural Adjustment Administration program. This is a striking figure. What is even more striking is to try to estimate how much corn and wheat land they would have had to retire in adjusting their production if it had not been for the Morrow plots and other long-continued teachings of the College of Agriculture, University of Illinois, and its extension service.

The Morrow plots were laid out at a time when the rich prairie soils were still thought to be of everlasting fertility. Consequently the common practice in those days was continuous cropping with corn alone or with corn and oats. How acute the agricultural adjustment problem would be today if this practice had been continued remains for all to guess. Fortunately, the Morrow plots were successful in demonstrating the evils of soil mining. They were just as successful in demonstrating the value and merit of good crop rotations, including legumes, in maintaining soil fertility, and in adjusting agriculture to more balanced systems of production.

The Morrow plots at the College of Agriculture, University of Illinois, which really mark the beginning of the agricultural adjustment effort in that State. Laid out in 1876, the plots have stood for 58 years as a striking demonstration of the evils of soil mining while at the same time demonstrating the value and merits of good crop rotations, including legumes in maintaining soil fertility and in adjusting farming to more balanced systems of production. Begun at a time when rich prairie soils were still thought to be of everlasting fertility, the Morrow plots have consistently foretold many of the present agricultural problems. How many thousands of farmers have seen and studied the lessons cannot even be estimated.

Farming Type Areas

Far from being a State of continuous corn or corn-oats croppers, Illinois has so adjusted and specialized its agriculture that today there are eight distinct farming type areas in the State. In each of these areas farmers for years have been adjusting and balancing their cropping systems, changing their varieties to grow higher quality crops, alternating their methods to reduce production costs, and otherwise following the teachings of the agricultural extension service.

These adjustments, changes, and shifts have been stimulated by the farm accounting project of the University of Illinois, College of Agriculture. This project has now passed into its twentieth year, and there are now in the files of the college's farm management division a total of approximately 20,000 individual farm records. Out of the study of these records have come reliable guides for adjustments and changes which will make farming more profitable and more efficient in each of the different farming-type areas.

That farmers have followed these guides is indicated by the fact that the wheat acreage, for instance, dropped from a total of 4,103,000 acres in the peak year of 1919 to 1,721,000 acres in 1933, before the Agricultural Adjustment Administration program took effect. The average annual acreage for the 5 years from 1929–33 was 396,200 acres less than the average annual acreage for the 5 years from 1910–14, a 17 percent reduction.

The State's alfalfa acreage jumped from a total of only 89,000 acres in 1919 to 337,000 acres in 1933, an increase of 248,000 acres, or more than 277 percent. Soybean plantings for hay advanced from 12,000 acres in 1919 to 278,000 acres in 1933, an increase of 266,000 acres, or more than 2,216 percent. The acreage of soybeans in Illinois for all purposes in 1934 is estimated at 966,000 acres, an increase of nearly 400,000 acres over 1933. Total annual legume hays at the same time have increased from 72,000 acres in 1919 to 456,000 in 1932, or a gain of 384,000 acres.

Comparing acreages during the 5 years of 1929–33 with those in the prewar years of 1910–14, it is found that the average annual acreage of such surplus crops as corn and wheat, together with oats, rye, and buckwheat, was 1,461,000 acres less during the past half decade than in the so-called "normal days" before the World War. What is just as striking is that during the same time Illinois farmers made an increase of 1,413,000 acres in the average annual acreage of such soil-building, legume crops as alfalfa, sweetclover, cowpeas, and soybeans.

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Some of these legumes, now among the most important crops grown in the State, were new and relatively untried 25 years ago. They would not be the success that they are now and agriculture would not be as well adjusted as it is had it not been for the research work and extension teachings of the College of Agriculture, University of Illinois. Such work not only has kept surpluses from being higher than they otherwise would have been; it has helped overcome shortages in crops like alfalfa hay.

Soil Fertility

Seed for at least some of these results was sown in the very early work of the late Dr. Cyril G. Hopkins, who worked untiringly for the Illinois system of permanent soil fertility, including the rotation of crops to include legumes and the application of limestone, manure, and phosphate. One of the earliest teachings of the college was that 25 percent of the cultivated farm land should be in legumes if a balanced, permanent system of farming is to be maintained. When this goal has been reached, the problem of making agricultural adjustments will not be as acute as it has been.

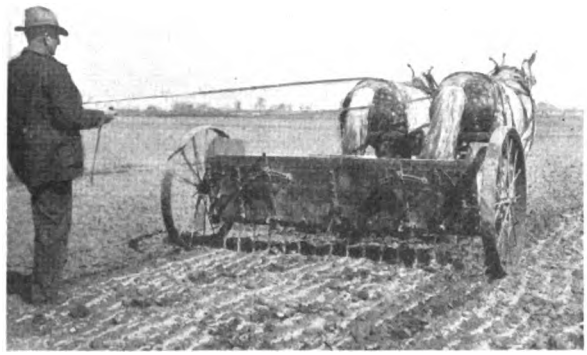
Added impetus was given to the early adjustments when the experiment station of the College of Agriculture, University of Illinois, revealed that soils of the State were generally lacking in alfalfa bacteria, without which the greatest of all forage crops cannot be grown successfully. At the same time the college pointed out that the bacteria of the common rank-growing sweetclover could be used for alfalfa inoculation, but that limestone was needed on the acid soils before the nitrogen-gathering bacteria could live and flourish on the roots of the leguminous plants. On the strength of an extension service program covering liming and inoculation, Illinois became one of the ranking States in alfalfa production, with 337,000 acres devoted to this crop in 1933.

It was in 1928, however, that a definite course in planned agricultural adjustments began to take form in Illinois. At a conference of farm advisers, vocational teachers, and advisory committees of the college and experiment station on June 20 of that year, Dean H. W. Mumford proposed a series of conferences to be held in various parts of the State for the purpose of discussing certain advisable agricultural adjustments.

Combining Enterprises

Among the objectives of these conferences, he pointed out, should be to determine what combinations of crop and animal enterprises will yield the greatest returns from land, labor, and capital, under the existing geographical and probable near-future economic conditions; to determine what specific changes in production methods will profitably increase the returns of an area, and to determine the most effective procedure of bringing about the best utilization of land for crops, pastures, and forests.

The various departments at the college immediately began the collection and preparation of data relative to the objectives set forth by Dean Mumford, and in October the adjustment conferences were held in the eight principal farming-type areas of the State. These meetings were followed by a series of outlook conferences held in the spring of 1929 at which the adjustments were again discussed in light of the changing economic conditions. Similar regional outlook conferences have been held each spring since that time.



During the past decade and a half, Illinois farmers have applied more than 7,000,000 tons of limestone, making it possible for them to grow more than 850,000 acres of sweetclover and nearly 300,000 acres of alfalfa annually.

Of the lessons learned in these initial efforts, one of the most important was that education and extension work must necessarily go along with adjustments. From the first it was evident that a number of local and individual problems had to be cleared away before certain changes could be made in cropping systems. Illinois farmers needed additional information on soil testing, liming, inoculation, adaptable varieties of replacement crops, the use of acid-tolerant legumes, utilization of new crops, and production and harvesting problems.

With the aid of field testing kits, extension specialists from the college and farm advisers carried on educational campaigns relative to the need for liming certain soils and to show farmers how to determine which fields were sweet enough for the production of alfalfa, red and sweetclover. This work, together with earlier efforts, has made Illinois a leading State in the use of agricultural limestone. During the past decade and a half, Illinois farmers have applied more than 7,000,000 tons of limestone, making it possible for them to grow more than 850,000 acres of sweetclover and nearly 300,000 acres of alfalfa annually, in addition to the more common red clover.

While liming makes crop adjustments easier, the desire to make adjustments has brought about an increase in liming. C. M. Linsley, soils extension specialist at the College of Agriculture, University of Illinois, is of the opinion that as a result of the Agricultural Adjustment Administration wheat and corn-hog programs, 1934 may become another good year in the application of limestone.

Soon after planned adjustments got under way in Illinois in 1928, the experiment station announced the development of a simple field test for available phosphorus. Since it was known that certain legumes must have minimum amounts of phosphorus available in the soil before they can do their best, this new field test came to the aid of many farmers in their adjustment efforts.

Lespedeza

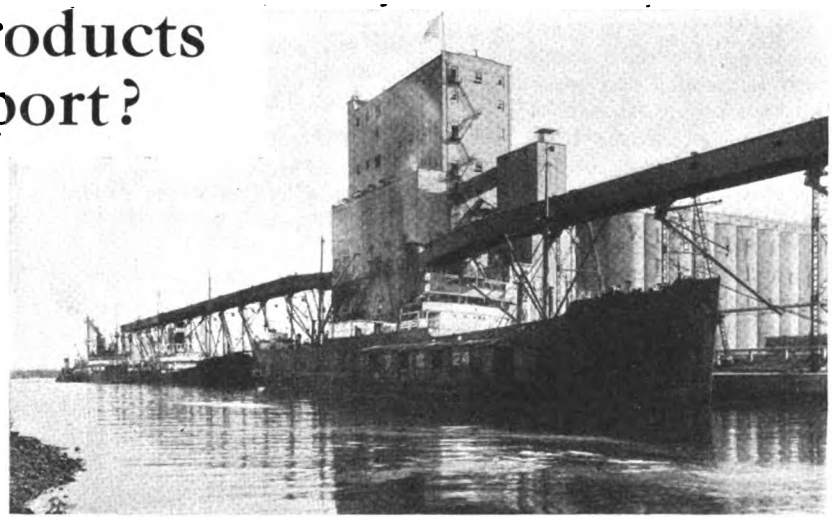
In areas where the soil is normally too acid for the production of alfalfa, sweet and red clover, and where farmers were financially unable to apply the necessary limestone, the agricultural college brought forth 11 years' results on lespedeza. The information included the varieties best adapted to certain sections of the State, as well as the designations of certain counties where satisfactory results could not be expected from the lespedezas tested so far.

The acreage adjustments that have been underway are at least partially responsible for Illinois becoming the leading soybean State in the Union. Fifteen years ago there were only 14,000 acres of soybeans in the State, whereas in 1934 there were 966,000 acres. In other words, during those years Illinois farmers adjusted their acreages of wheat, corn, and other crops so radically that the acreage of soybeans was multiplied

(*Continued on page 142*)

What Farm Products Can We Export?

HENRY A. WALLACE
Secretary of Agriculture



Loading boats with wheat for export at Baltimore, Md.

WHAT ARE the possibilities of restoring foreign markets for farm products, and for which products are the chances most promising?

Past performance does not necessarily tell us what future performance will be. Earlier trade figures must therefore be used with reservations. Because we were able to export nearly 2 billion dollars' worth of agricultural products annually in the predepression era—at a time when our exports were being inflated by over-zealous foreign lending, the implications of which, in terms of increased imports of goods and services, we were unwilling to face—it does not follow that we can expect to export as much in terms either of quantity or value in the future. Even the importation of a larger quantity of goods than we have heretofore been willing to import and the revival of foreign lending of a more judicious type may not suffice to restore the purchasing power of foreign countries to the artificial level to which it was hoisted during the earlier period of reckless lending. Moreover, it is virtually certain that some of the trade that has been lost is permanently lost, either to competitors in other exporting countries or to producers in the importing countries. Some of the expansion of agricultural output that has been artificially stimulated in the importing countries seems likely to persist. Nevertheless, with proper reservations, it is worth while looking at the earlier trade figures to see what our past performance has been.

Last month Secretary Wallace discussed the general situation in regard to reopening foreign markets for farm products. He described what he calls the "planned middle course" which involves a foreign agricultural policy somewhere between an intensely nationalistic and an internationalistic policy. Continuing this theme in the following article the Secretary reviews the facts and the possibilities for an export market for each of the principal export crops.

Previous Exports

In 1922–26 we exported annually almost 2 billion dollars worth of agricultural products. Of this total, nearly half went to the United Kingdom and Germany, the former taking 30.6 percent, the latter 14.8 percent. Another 30 percent was distributed between France, Italy, Japan, Canada, and Netherlands, in ratios ranging from 7.1 percent for France down to 4.7 percent for Netherlands. In 1933, when the total value of our exports of farm products was but a third of what it had been in 1922–26, the distribution of the trade remained broadly similar to what it had been previously, except in the case of Japan, whose share increased from 6.0 to 13.1 percent. It is clear, therefore, that while Japan, China, and a number of other countries outside of Europe cannot be overlooked, the great potential outlet for our farm products remains, as it has always been, the industrial countries on the other side of the Atlantic. To the United Kingdom alone we sent some $597,000,000 worth of agricultural products annually in 1922–26, but only $192,000,000 worth in 1933. To Germany we sent $288,000,000 on the average in 1922–26, but only $103,000,000 worth in 1933. If, by making it possible for foreign countries to buy more and to pay better prices, we can restore even a substantial part of this lost trade with the United Kingdom, Germany, and the others, farmers in the United States will surely be tremendously benefited.

Opportunities for Increased Exports

With respect to particular commodities the opportunities for increased export vary widely. As regards some, our competitive position seems to have been permanently weakened; while as to others it appears to be well sustained and merely awaiting a revival of foreign purchasing power and the granting of freer access to foreign markets.

For our greatest agricultural export, namely cotton, it is chiefly a matter of purchasing power rather than of trade barriers. In this case the significance of the tariff bargaining program upon which we are about to enter arises from its relation to world economic revival as it affects the European cotton textile industry. In contrast to our other agricultural exports, cotton has been directly restricted by trade barriers in only one country, namely Germany, and it is not yet clear whether the German restrictions will reduce the consumption of cotton, or whether they are merely intended to promote a policy of hand-to-mouth buying. On the whole our cotton exports have been restricted by the low level of consumers' incomes in foreign countries rather than by trade restrictions. Tariff bargaining, insofar as it increases world trade, will increase world business activity and purchasing power and hence will strengthen the foreign demand for cotton. In spite of some signs of expansion of cotton growing in areas outside the United States, our great comparative advantage in the growing of this crop will enable us to share heavily in any revival of demand.

Exports of Fruits

More direct are the possible benefits of tariff bargaining for our other important export crops, since most of them are subjected to serious trade restriction. The opportunities, of course, vary considerably with the commodity. Among those in a more favorable position is fruit. Trade barriers affecting fruit have had but little effect on production in the importing countries. In many cases our fruit exports have been subjected to restrictions simply as luxuries especially suitable for revenue taxation, or else largely excluded by countries anxious, for financial reasons, to cut down the total of their imports. Despite such restrictions our exports of fresh fruits have held up remarkably well in quantity; but a moderation of existing restrictions would greatly improve the prices received for them.

For tobacco, also, the possibilities seem good. It is true that Government intervention has resulted in a marked increase of production in a number of countries to which we were formerly large exporters, as for example Italy. Nevertheless we continue to possess important advantages in the production of certain types of tobacco. And as high duties, together with other forms of import restriction (especially restriction by Government monopolies—a form of restriction not beyond the scope of our recently granted tariff bargaining authority) have been an important factor in the export situation, it ought to be possible to secure concessions of real value to our tobacco growers.

Serious Obstacles

Because both pork products and wheat have been up against mountainous trade barriers, we should expect these commodities to be particularly promising items for tariff negotiation. But the obstacles are serious.

On the whole, they appear less serious for pork products than for wheat. This is partly because our comparative advantage in pork production has held up rather better than in wheat, this notwithstanding efforts of both importing and exporting countries to develop their pork industry. Probably more important, however, is the fact that foreign trade restrictions in the importing countries, especially in such important markets as the United Kingdom and Germany, have substantially restricted consumption by decreasing imports more drastically than they have increased their domestic production. By tariff negotiation, therefore, it may be possible to increase our exports to these countries without displacing any great amount of domestic production.

Prospects for Wheat

For wheat the prospects are less favorable for two reasons. The first and more important reason is the increasing comparative advantage of the newer countries. This has little relation to trade barriers; though the tariff preference enjoyed by the British Dominions in the British market should not be overlooked. The other reason is the likelihood that those importing countries that have reached or approached self-sufficiency in wheat supplies will be reluctant to retreat very far from their present position. For this reluctance the reasons are both economic and military. Self-sufficiency in wheat is something to which these countries seem to attach peculiar importance. In the greatest importing area of all, the United Kingdom, the situation is different. For the measures adopted by the British to encourage domestic production have done little to discourage consumption, and while encouraging some expansion of production, have nevertheless left the country dependent upon imports for most of its supplies. Hence there is little that can be done through tariff bargaining to increase total British imports of wheat, and probably not much that can be done to increase our share of the trade; though abandonment of preference to the Dominions would help to some extent.

On the whole it is clear that our tariff bargaining program offers large possibilities in the way of increasing the foreign demand for our agricultural products. What will actually happen remains to be seen.

THE people of Ridenhour township, Stanly County, N.C., have given volunteer labor in the construction of a community building. The county furnished the material, and now the township has a real community center.

MEMBERS of the Weynorcomass Club, a 4-H club of Norfolk County, Mass., recently arranged a unique program at their high school. A "broadcasting" studio was set up, with microphones and loud-speakers, and the program numbers were presented by members of the club. Musical numbers interspersed with "recordings" gave it a real radio atmosphere. It served as training and experience in radiobroadcasting. Members of the club were in charge of the monitor and controlled the volume and tone of the various selections.

4-H Market Day Tour

More than 600 4-H club members of Lane County, Oreg., were the guests of the citizens of Eugene while they were on their annual market-day tour. This market-day tour has been established for several years and has become one of the annual highlights of the 4-H activity in the county.

Recreation and education are well mixed in the program of the tour. The boys and girls are divided into small groups directed by competent leaders. A show was put on for their special benefit at a local theater as their first entertainment. Following this, they visited local markets, stores, industrial plants, and other points of interest. A mock trial at the courthouse, with club members serving as the jury, was enacted by a group of local attorneys.

Many of the most outstanding citizens of the town were introduced to the group, and they expressed their desire that the tour be successful. Special attention was given to the boys and girls by the personnel of the various establishments visited.

Five hundred half pints of milk were donated by the farmers' creamery for the free luncheon which was served at the cafeteria of the fruit growers' association.

Every minute of the day was crowded with new sights and interesting educational features. The program was under the direction of the local business organization in cooperation with the county club agent, R. C. Kuehner.

The tour is not only an interesting recreational activity, but it also promotes learning through the explanation of the various business operations given during the trip. It also demonstrates the management of various types of business and how each one fits into and is a required part of the community life. The club members learn how farm commodities are handled on the market including the processing and selling of such material as it goes through channels of trade.

The tour does much to promote a cooperative and friendly feeling between the citizens of Eugene and the rural youth of Lane County.

FIFTY-ONE of the 64 parishes of Louisiana are now being served by home demonstration agents, following the recent appointment of 12 new agents, announces Ellen LeNoir, State home demonstration agent.

Research in Extension

H. C. RAMSOWER
Director, Ohio Extension Service

"During the 20 years of extension work in agriculture and home economics under the Smith-Lever law and subsequent acts," says Director Ramsower, "administrators, supervisors, and workers generally, both Federal and State, have been so busy with routine details, with blazing new trails in this new adventure in education that little time has been found for serious study and research in the many fields of activity included within the scope of our work. Each day of each worker has been filled to overflowing with a number of important things. County extension agents have been content to meet the pressing problems each day and year brought forth. Specialists have sought to help county workers with their immediate problems. Consequently, little time has been available for systematic study of our fundamental extension problems." In this significant statement Director Ramsower discusses some of the problems and procedure involved in undertaking a systematic study of extension work.

THERE has been a great deal of what we might call practical research in extension work. As each careful worker reviews the results of the past year and contemplates the work of the new year just ahead, he scrutinizes the content and method of his program and makes such changes as experience dictates and circumstances permit. Administrators and supervisors, both Federal and State have been continually alert to new things to be done and to new ways of attacking both old and new projects.

But this is not enough. We must attack research in a new and vigorous manner. We must delve into both the content and method of our programs and plans. We must ask and prepare ourselves to answer such questions as these: Are we doing the right things in the right way? What projects that have long found places in our programs may safely be abandoned? What fields that have been virtually untouched should now be expanded or newly created? Are we driving hard at basic needs of people or merely skirting the fringes? Are methods long pursued carrying us forward in the direction of worthy and fundamental goals in the field of education or do we sacrifice the long-time goal for immediate results? These are general fields in each of which there are scores of specific problems calling for painstaking studies.

How to get these studies made is a problem of major importance. There are at least three methods of attack. First, staff members on the job may have their work so arranged as to provide time to pursue specific problems in research. Second, workers may be granted leaves of absence for special study of worth-while problems. Third, full-time workers may be employed to do nothing but research in extension.

The first plan should receive more attention than is now the case. Many staff members now on the job have a research turn of mind. They should be encouraged to pursue studies of minor problems. True it is extremely difficult for them to find time to do systematic work apart from their regular tasks—perhaps quite out of the question for county extension agents. It can be done, however, for a few State staff members with some careful planning and with proper encouragement from administrators.

The second plan, granting leaves of absence for study, is highly desirable. It is to be hoped that this practice can be greatly extended as time goes on. Many workers on leave want and should be permitted to take regular course work. Many have no leaning toward research. Those who have, however, should be encouraged to select a problem and under graduate school guidance carry it through to some final conclusion.

The third method, employing full time research workers, will in the end result in the highest type of work. If one such person were employed he could not only do research himself but could direct studies made by other members of the staff.

Of course the question of use of funds for research is always involved. Some States, no doubt, have offsetting State monies that can be used for this purpose. There should be no question raised if a regular staff member devotes a liberal portion of his time to research. It is a part of his task to study problems in the field of content and method. Furthermore, we must work to establish the principle of leaves as a legitimate part of a worker's program to be paid for from extension funds. Surely there are strong arguments for such procedure.

In Ohio we have made a little progress in the study of extension problems. For some years we have been able to grant leaves with full pay through an academic year for from 4 to 6 members of our staff each year (now temporarily abandoned during the period of financial difficulties). This plan unquestionably resulted in great good to the staff. A few were able to make some worth-while studies in the nature of course papers, special problems, and thesis problems for master's or doctor's degrees.

Members of the State staff have been encouraged and some have found time both to pursue some regular course work while on the job and to carry on some more or less extended problem studies under the direction of some member of the graduate school faculty.

In order to stimulate some study on the part of all members of the State administrative and supervisory staff a graduate course in special problems was approved by the graduate school. Under the direction of the Director of Extension, any member of the State staff could register for this course, select a special problem for a period of one or more quarters, and in the end receive graduate credit for work done.

In order to secure the benefit of the advice and criticism of others, those registered in this course met with the director for one 2-hour period weekly. Plans and progress made were reported by each member. During one entire year, Dr. W. W. Charters of the Bureau of Educational Research met with us to hear reports and direct our thinking and planning on the many problems presented. From 10 to 15 persons registered for this course. It was very difficult to find time to work on the problems selected but many succeeded in turning in some very fine reports.

(Continued on page 134)

A California County Marketing Institute

DURING the month of December 1931, following 2 years of rather disastrous returns to pear growers in California, and Lake County in particular, considerable discussion was overheard at farm-center meetings and other gatherings that something ought to be done about marketing. "The Agricultural Extension Service and our experiment stations have taught us how to produce better and more fruit to the acre, but we need to know more about marketing and distribution", was the oft repeated statement.

Capitalizing on this frame of mind that the growers, shippers, and the general public was in, a meeting was accordingly called by County Agent L. C. Barnard at the agricultural extension office to which were invited 30 prominent county-wide growers, shippers, and packers, regardless of their affiliations with the county farm bureau or the agricultural extension service. At this meeting a well-prepared plan was presented for the holding of a full day and evening marketing institute at the county seat the following March, using university and State marketing and economic specialists as well as outstanding representatives from the various shipping and packing companies represented in the county. Those in attendance were enthusiastic in their approval of such an institute and immediately set up the necessary organization and groups of committees to prepare for the first annual marketing institute for northern California.

In order to get the full cooperation and loyalty of the shipping concerns and the growers whom they served, about one-half of the speakers invited to speak at the 1931 institute were State representatives of fruit companies operating in Lake County, representing both cooperatives and independent concerns.

Much valuable time was devoted to thoroughly publicizing this meeting through the University News Service, radio, local papers, and in neighboring counties by means of attractive quarter-card posters. The fruit companies, growers' organizations, and farm-center meetings were also very important in disseminating information relative to the institute.

A large number of leading growers and representatives of cooperatives and non-cooperatives were in attendance at the first meeting from Solano, Colusa, Yolo, Sonoma, San Francisco, Alameda, Santa Clara, Sacramento, Mendocino, San Joaquin, and Lake Counties of California.

As a result of the success of the first meeting, equally successful meetings were held in March of the years 1933 and 1934. This meeting has now become an established annual event expectantly looked forward to each year by all agencies concerned including both the growers and fruit-shipping companies.

As a direct result of the 1932 institute, plans were formulated for a pear-marketing curtailment program for California which this year has progressed to such an extent that the pear growers of Oregon and Washington are cooperating with California pear growers in trying to work out a marketing agreement for the Pacific coast pear industry, in cooperation with the Agricultural Adjustment Administration.

Research in Extension

(Continued from page 133)

Some of the problems studied were as follows:

1. Keeping the public informed. A study of methods used by county extension agents in keeping different groups of people informed about the programs in the counties.

2. Types of county committees most effective in carrying on home demonstration work.

3. Types of group organizations of 4-H clubs in Ohio and ages of members involved.

4. 4-H club activities of 4-H club members in Ohio.

5. Factors which determine the proper size of a State staff for extension work. An activity analysis of subject-matter specialists.

6. Activities of local 4-H club advisers in Ohio.

7. How can the subject-matter divisions in home demonstration work be correlated to make a more unified whole?

8. Trends in community development in Ohio.

9. A study of the structural organization of extension service with particular reference to its functioning in the county and local community.

10. An analysis of the activities of county agricultural agents.

The methods used in attacking these problems are shown in the study of an analysis of the activities of county agricultural agents made by O. C. Croy, assistant State club leader, and B. B. Spohn, district supervisor. The problem was to find out the activities in which county agricultural agents now engage and in doing this provide a method whereby the agent can determine the breadth of his own activities and a basis for the construction of a curriculum for the training of agents.

The plan of investigation included (1) a list of the activities of agents of 24 counties as given on the monthly narrative reports for one year. These counties were selected because they represented the different types of agriculture in the State, (2) a list of activities of these agents as given in the annual narrative reports of 1 year, (3) a list of activities made up by interviewing these agents, (4) a collection of literature on agricultural extension work which has to do with the duties of agricultural agents, (5) information from deans of agricultural colleges on any study of activities of extension agents made or being made in their institutions, and (6) a master list of activities made up from the above sources.

Though the investigation has not been completed, the master list has been prepared and checked with one county agent and all literature dealing with activities of county agents has been collected and is on file. The master list has served as a guide for teaching in the two courses in extension methods and in addition the study has shown that extension terminology is not well defined and that the activities of agents are extensive rather than intensive.

Mr. Spohn and Mr. Croy spent many hours with Dr. Charters in outlining and studying this problem. This experience was extremely valuable to them and through them to the entire group participating in these studies. Extension workers are not skilled in the study of problems. Procedure followed here can be used in attacking many problems in extension supervision and administration.

May I add here that the Federal extension office should be commended in its efforts to study various phases of extension organization administration and results. It should be encouraged to expand its work in this field. Likewise, each State should continue and enlarge its work in studying extension problems in a systematic way. Such work must be done if we are to make substantial progress in the field of extension education.

Hot School Lunches

Home Demonstration Agents in Virginia and South Carolina Aid in the Movement for Healthier Childhood

Virginia

THE health and nutrition campaign which was organized in Amherst County, Va., under the auspices of the home demonstration agent, Mary F. Claytor, and the county nurse, in the fall of 1933, was divided into two well-defined sections. The first, better nutrition and school lunches; the second, that of corrected defects and improved health habits. The nutrition work was entirely the responsibility of the home demonstration agent. Plans for the campaign included demonstrations in one-room schools. Four schools of very different types were selected. In each school the hot lunch was worked out in a different way though results were similar.

Shady Glenn is a small school in a very remote section of Amherst County. The school is located in the mountains 5 miles from a highway and about 20 miles from a railroad station. The inhabitants of this community have had few opportunities to learn better nutrition and it has been very hard to obtain adult cooperation, but the school children and the teacher have accomplished a great deal.

In the early fall the home demonstration agent met the older boys and girls and assisted with the canning of soup mixture for the hot lunch. Later a similar day was managed by the teacher. Through this effort a substantial part of the food for the hot lunch was procured. This food was supplemented through the assistance of the relief director who gave two orders a month for canned milk and meat. These orders were O.K.'d by the home demonstration agent and the food was sent directly to the school. Hot lunches were served every day during January, February, and March.

In addition to the fact that a better type of food was made available to these school children, there has been a great deal of training and teaching along the line of better nutrition. The teacher, has correlated her subject matter, teaching nutrition as she teaches reading, writing, and arithmetic. Even the little children in the first grade were encouraged to make A B C booklets allowing each letter to represent a food which should be included in the diet.

Lunch hour in a Virginia school serving a hot dish.

The children have entirely overcome the habit of coffee drinking. Through the efforts of the home demonstration agent and the teacher they have learned the importance of the leafy vegetables and are asking for them to be included in the home garden. The menu in this school consisted of hot soup or cocoa and was served every day during January, February, and March.

Because of the marked increase in attendance the superintendent of schools has lengthened the school term by 1 month, and for the first time in the history of this school, an 8-month term has been allowed. This was accomplished because the improved physical condition of the children resulted in a better school attendance.

Because the work at Shady Glenn is perhaps most outstanding, the school was awarded a prize of $5, which will be spent for permanent hot lunch equipment.

The agent made 5 visits to each school. Each time she gave an illustrated talk or demonstration on some nutrition topic.

The results in the other three schools were similar but not so far-reaching. At Coolwell the money was raised through the assistance of the parents, and all the food and hot lunch equipment was bought by a committee composed of the teacher and school children. The home demonstration agent advised this committee.

At Maple Run there was 100 percent cooperation from parents, who sent food in glass jars. This food was heated at the school by means of a water bath. The jars were put into a large boiler at 11 o'clock. At 12 o'clock the jars of hot food were passed to their owners.

At Allen's Creek the home demonstration club sponsored the nutrition work and provided a well-equipped lunch room. Sugar and cocoa were also provided by the club, and milk and vegetables were sent by individual parents each day. Through a definitely worked-out plan, either cocoa or soup was served. The teacher considers the hot lunch work of great value and reported an average gain by the pupils of 2½ pounds. The highest gain made was 6 pounds. The average gain for the entire group of 135 children included in the 4 schools was 2¾ pounds. The highest gain made by any child was 6¾ pounds.

The county nurse assisted in weighing and recording weights of these children. She did this as she went about her work of correcting defects and improving general health habits. Her report of medical examinations and corrections of defects is very good.

South Carolina

Practically every county in South Carolina has responded to the need for better nutrition among rural school children by providing a hot dish for the school lunch. A concerted effort toward this end was begun a year ago in July when the plan for State-wide organization of hot school lunches in the rural schools

(Continued on page 143)

Forage and Hay for New Hampshire

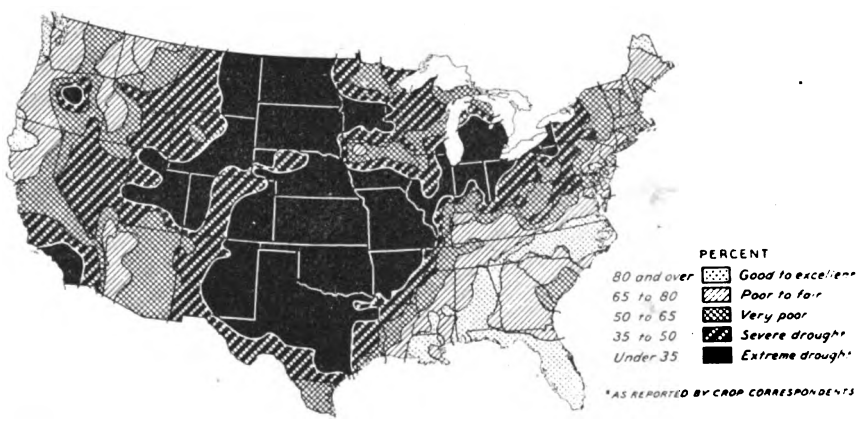
WHEN New Hampshire farm land "goes back", trees and brush, not grass, are the result. Grass hay was once the most profitable crop the State produced, but that was before the day of tractor, truck, and automobile, and before dairying became a high-pressure agricultural industry.

Today the slogan in New Hampshire is not the national cry of "back to grass and forage." Rather the goal is "ahead to forage and better grass hay."

Turning under poor hay fields and reseeding to alfalfa or clover was the recommendation prior to 1930. Almost 9,000 tons of alfalfa were harvested from 3,900 acres in 1930.

Emphasis shifted to annual legumes in 1930 because of the dairy emergency, their acreage jumping from 1,848 acres that year to 6,523 in 1933. The added yield is estimated to be worth $80,000. During the same interval the alfalfa and clover acreage continued to pile up.

SAVE HAY AND FORAGE



The unprecedented drought which blanketed the center of the country will be felt most keenly in feed and forage crops. The map shows the pasture situation on August 1, 1934. The supply will be adequate for all needs, if efficient distribution is made. A determined effort is being made by extension agents to secure such distribution. Farmers everywhere are garnering and conserving all available hay and forage, including straw, wild hay, corn fodder, or stover. In many parts of the country, good fall and winter pastures are helping to compensate for damaged summer pastures, and preparations are being made for early maturing feed crops in 1935. Farmers in the East and South and other sections having good quality hay or forage are saving it in every possible way for shipment to the drought States.

The hay of a decade ago and earlier was satisfactory for horses, but it never made much of a splash in the milk pail. It us usually cut during July. Research has shown that if it is harvested in June, it makes first-class roughage and actually boosts the milk flow. One farmer who kept records found that he got more milk on an early cut hay ration, yet he saved $74 on his grain bill during the barn-feeding season.

The drive for better grass hay was begun in 1929 and is estimated to have added $40,000 a year to the value of the crop.

amounting to 5,000 and 10,000 acres, respectively.

The cumulative effect of about 8 years of extension work has been to double the State's legume acreage, making a grand total of 21,500 acres.

"Thar's gold in them thar acres". Gilbert Thompson, Stratham, old-time grower, might well say of his alfalfa fields. He harvested 64 tons of hay from 11 acres in 1933. His alfalfa crop brought him $1,732 in 1932, or $165 per acre. He spent $12 per acre the next season for fertilizer. One and one-half acres had been seeded to the legume for 10 years; 9½ acres for 4 years.

This "mine" in 1934 "ran out", however. A severe prolonged cold spell following sleet, smothered many legume fields in the State, necessitating replanting and delaying further returns for at least 2 years.

Long-neglected pastures were the bulls-eye for another campaign shot in 1929. Twenty demonstrations were laid out throughout the State to give visible evidence of the value of top dressing old worn-out grazing areas with chemicals. As a result, farmers fertilized 239 acres of their own in 1930, and 814 in 1931. Practically no fertilizing had been done previously.

Tight money and none at all have geared down the pasture-improvement work but not farmers' appreciation of its value. With Boston under a Federal milk license which is reported to have returned northern New England dairymen $1,500,000 more from March 15 to June 30 than in the same period a year ago, pasture improvement may get underway again with something of the stride of 1930–31. Five New Hampshire farmers outstanding in this work were featured on the annual farmers' week program this summer in the move for a revival.

New permanent pastures are also being developed with a mixture of sweet-clover, white Dutch clover, Kentucky blue grass, and timothy.

THREE sales have been held, one each week, since the Gloucester County hog auction was established in New Jersey. Virtually all the hog producers in the county have cooperated in the auction which has handled 1,279 animals during the first 3 sales. Not only has the auction secured higher prices for the hogs, but it has given the producers cash at the time of the sale. Buyers and producers alike have found the auction advantageous.

THROUGH scientific research there is being evolved a plan to release one of the "frozen" assets of New Jersey farmers. J. W. Bartlett, dairy husbandman, says that it will aid dairymen to improve their herd management and increase their income per cow. Rich pasture land is this "frozen" asset, and the key to unlock it is fertilizer applied in conjunction with better pasture management.

Relief Measures Bring Permanent Improvements

MUCH of the emergency drought relief work now being carried on will have very definite effects upon the long-time agricultural programs of extension workers. Some of this relief work is based on the rich experience of extension workers gained in their efforts to solve the difficulties faced by rural people. Many phases of the work will be of permanent value to extension programs and will contribute to the betterment of farming operations. The allotment of National, State, and local funds has greatly facilitated relief work. Funds from the 525 million dollar Congressional appropriation are being allotted to relief agencies cooperating in the work, which has resulted in the establishment of many projects of permanent value.

Extension workers with their background of rural experience have been of great aid in forwarding these projects. The United States Department of Agriculture, the Federal Emergency Relief Administration, and the Farm Credit Administration have extended their aid in the relief work individually and cooperatively. These organizations have been allotted money from the Federal relief fund amounting to approximately $150,000,000 by August 1.

(Above) Government-owned drought-relief cattle in the Kansas City stockyards ready to be shipped to pastures in Southern States. The average shipment of "relief" cattle to Kansas City was about 12,000 head per day during the height of the cattle buying of which 4,000 were cut out for shipment to the Southern States for grazing———(Right) Farmers loading water from Idle Hour Lake, Altamont, Kans. Beginning the latter part of July, about 12,000 gallons of water were hauled each day for livestock from this lake, which was originally built as a recreation and fishing lake. The electric rotary pump is furnished by the Kansas Emergency Relief Committee and manned by relief workers. Some of the farmers hauled water 8½ miles for their livestock.

United States Department of Agriculture

The United States Department of Agriculture, through the Agricultural Adjustment Administration, the Extension Service and the various subject-matter bureaus and offices, has actively cooperated with other relief agencies.

The Agricultural Adjustment Administration in cooperation with the Federal Emergency Relief Administration and its Federal Surplus Relief Corporation has been purchasing, shipping, slaughtering, inspecting, and canning beef from animals purchased in the drought area. Veterinarians from the Bureau of Animal Industry have been inspecting animals for Government purchase and for eradication of tuberculosis and Bang's disease. Animals unfit for human food have been condemned on the farm. The program calls for continuation as long as the emergency exists. A similar program pertaining to sheep has been announced. The preservation of the better breeding cattle for restocking in the drought area will result in the general improvement of herds within the region.

Extension workers have supervised the establishment and operation of canning centers financed by relief funds. Many of these centers were in operation at the time the cattle buying started. The small units which have been set up in more than 20 States may be carried over into less pressing times to serve as community canning and recreational centers. Additional canning operations are being carried on by contract with commercial canneries.

The Agricultural Adjustment Administration has made every effort to speed up the benefit payments of the commodity reduction programs. In the case of the wheat payments a 1-cent increase was made in the second payment. Benefit payments have been of very great aid to farmers who have seen their usual source of farm income wilt and dry up under a scorching sun. This program has in a way served as a form of crop insurance. Extension workers have been depended upon to do the educational work necessary to carry the adjustment plan to the farmers.

The recommendations of the replacement crops section of the Agricultural Adjustment Administration have been followed on over 90 percent of the land operated by cooperating farmers. The planting of these recommended pasture crops, cover crops, and erosion-preventing crops on the rented and retired acres has contributed to the emergency feed needs created by the drought. The restrictions on these acres were amended so that they might be used to alleviate the feed shortage. In the future more land may be used to produce these dependable feed supplies.

The seed conservation committee, appointed by Secretary Wallace and allotted $25,000,000 of relief money, is to obtain seed for use in those areas depleted of available seed supplies by the drought. Experienced men of the Bureaus of Plant Industry and Agricultural

Economics are seeking adapted supplies and are recommending their purchase. The Department of Agriculture has sent an expedition into the edge of the Gobi desert in search of drought-resistant grasses.

The Forest Service is cooperating with other organizations in plans for reforestation and erosion control on marginal agricultural lands. The plan for the huge shelter belt reaching from the Canadian border into northern Texas was developed by this service. An executive order has been signed allotting $10,000,000 to the shelter-belt project from the general relief fund. The money will go into a permanent constructive plan.

Federal Emergency Relief Administration

Relief operations were facilitated by this established organization. A means of reaching State and local authorities was in operation at the time the drought emergency became serious.

The work projects under the direction of the Federal Emergency Relief Administration have been enlarged and new work created. Men employed by the administration are now creating new water supplies, damming streams, hauling and piping water, and further conserving available water supplies. Other work has also been provided for the support of farm families within the drought area. During July and August over $33,000,000 was expended on work projects in the States most affected by drought. Much of this money went into activities which will have future value to the communities as well as alleviating present emergency conditions.

The Federal Emergency Relief Administration in cooperation with the Agricultural Adjustment Administration announced a feed conservation program in mid-August. It contemplates the purchase of surplus roughage supplies for use within the drought areas. In addition, work projects are being planned to clean up stunted corn and other crops which might be abandoned. Recommendations are being made in the use of trench silos, the conservation of shredded fodder in bales, and the use of certain straws to further add to existing feed supplies.

The expense of shipping, slaughtering, and canning the cattle in the relief cattle buying program is being financed by the Federal Emergency Relief Administration and its Federal Surplus Relief Corporation. Plans have been announced for handling sheep in the same manner.

The Federal Emergency Relief Administration's program for the rehabilitation of rural and urban families has been organized on a long-time plan.

In order that foundation herds of livestock might be preserved in the most severe drought areas the Farm Credit Administration has extended its loan facilities within the region. The first of the feed and forage loans were disbursed early in July and during the following 6 weeks more than 60,000 such loans were made to farmers and stockmen. Local county committees have handled these emergency loans, operating under the regional offices of the Farm Credit Administration.

Loans were made for the purchase of seed for fall planting of wheat, rye, and barley. Other loans were made to enable farmers to ship suitable breeding animals to pasture and to pay rent for such land during the drought period.

Emergency Conservation Work

The Civilian Conservation Corps has been in operation for more than a year, working upon projects of permanent nature. The men employed in this corps have been fighting forest fires and planting trees on burned-over and marginal land. Measures to affect water and soil conservation have been their chief work, gullies have been dammed, terraces built, and windbreaks planted. Much of the work of the organization has been in cooperation with the Forest Service of the United States Department of Agriculture.

Permanent Results are Important Feature

Although conditions exist throughout the drought States necessitating immediate relief action, the relief work has been planned along permanent lines. Such activities as cattle buying are aiding the immediate situation in several ways and its effect on future cattle production will be felt for many years in the improved herds established by restocking from the better type breeding animals, conserved under the plan. Such projects as reforestation and erosion control will prove of value in later agricultural development. They have furnished relief work in an emergency, but are also filled with possibilities for the future.

A NATIVE shrub is to be used in the ornamental plantings about every home in Parsons, Tucker County, W.Va. The civic clubs of the town have adopted "Flame Azalea" as the town plant. It ranges in color from the lightest yellow to deep maroon and is very plentiful in that region.

A Community Center

KINGSTON, Mass., is rapidly realizing and developing the recreational opportunities offered by what many citizens had considered a "white elephant."

On December 20, 1926, the citizens of Kingston dedicated the Reed Community House. The facilities offered by the building were neglected until November 9, 1933. At this time representatives of the various organizations within the community met to consider recreational activities for the community. This meeting was arranged by Miss Mary Dean, local home demonstration agent, as one of a series on recreation with Miss Mary Pozzi, extension specialist in community recreation and organization.

At Miss Pozzi's suggestion a survey of the recreational resources of the community was made. It was found that there were 20 adult and youth organizations using a variety of meeting places.

The expense of maintaining the so-called "community house" was taxing the town $2,500 each year. The town has a population of 2,500 and if it were costing each citizen a dollar a year, an effort should be made to see that they got their money's worth.

An application was made to the Federal Emergency Relief Adminstration for funds to support a physical director for the house and community. A program of activities was completed 4 months after the original meeting and placed in effect. The program was completed and carried activities which would be of interest to all the organizations in the community. The committee in charge of the program development meets once a month and sponsors new activities which it believes will be of service to the people of Kingston.

Cooperation between the various organizations using the center has made possible a rapid development during the time since the program was established.

Adequate grounds about the building add greatly to its value in out-of-doors recreational activities and the equipment and space within the building make a variety of indoor programs possible.

ALABAMA home demonstration clubs prepared the material for the July issue of the Alabama Farm Bureau News. In fact they were the news. The issue gives worthy recognition of the year's activity of the home demonstration clubs of the State, and the leaders of this organization. The entire issue is turned over to the farm women, their organization, and their achievements.

Drought and Food Prospects

The Food Situation

NILS A. OLSEN
Chief, Bureau of Agricultural Economics

IN spite of the great drought of 1934, which probably did more damage to crops and pastures than any other drought in our history, the people of the country will have ample food supplies in the coming months. The great diversity and extent of our farm lands make it possible to supply the Nation's food needs in the face of such a drought.

To determine just how much of a food supply was on hand and how much would be available during the coming winter, the Bureau of Agricultural Economics prepared a food balance sheet showing the probable supplies of food grains, meats, dairy and poultry products, fruits, and vegetables.

As to food grains, there is no shortage of rice, but the wheat crop is very short, totaling only 491,000,000 bushels. But as we already have on hand 290,000,000 bushels of carry-over from previous years, this gives us a total supply of 781,000,000 bushels. Normally we use only 625,000,000 bushels, so there is no shortage in wheat.

We will not have the abundant supplies of meat during the coming year, that we had last year. The drought pinch is most severe on feed grains, hay, and pastures giving our farmers only two-thirds the usual amounts of hay and grains to feed their animals. This condition will cut down the production of livestock products. Our most careful estimates indicate that there will be available about seven-eighths as much meat and lard as we had on the average in the past 5 years. The decline will come in the first half of 1935, for now and in the next few months farmers will have to sell for slaughter the animals they cannot feed through the winter.

Supplies of dairy and poultry products will be less than last year. On scanty feed the best dairy cows cannot produce very much, therefore, even the record cow population now on hand will yield smaller supplies of milk than we have been accustomed to. Already milk production is 3 or 4 percent under last year. It will continue to drop until pastures come again next spring. That probably means that less butter and cheese will be produced. We start into the fall season with about one-sixth less dairy products in storage than in the average recent year. On the other hand, stocks of poultry meats are one-seventh above average, and eggs slightly above, but it is inevitable that poultry and egg production will decline.

Fruits and vegetables will be fairly abundant outside the drought country. The home gardens in the drought area are ruined, and the housewives there will not be able to put as many cans of food away as they usually do. But commercial vegetable production for sale as fresh and stocks of canned vegetables are expected to be one-seventh larger than last year. Fresh fruits, taking all varieties together, will be less plentiful than last year but no serious shortage is in prospect. Supplies of canned and dried fruits will be only slightly under normal.

The problem this winter will not be of food shortage but one of bringing the afflicted farm families through the winter and leaving them equipped with seed and livestock to carry on in the future; of moving great quantities of foods and feeds from the places of abundance to those of scarcity; and of seeing to it that farm and city families whose buying power has been wiped out do not starve. This is the problem on which we are working with all the facilities at our command.

The Cost of Living

LOUIS H. BEAN
Economic Adviser, Agricultural Adjustment Administration

AS A POSSIBLE indicator of probable food prices and general living costs during the next 12 months, we have made a study of the behavior of price 10 years ago, during 1924–25 when conditions were broadly similar.

Ten years ago changes in our supplies of farm products were somewhat similar to the greater changes in our supplies in prospect at present. The world supply of wheat, the domestic crop of corn, and the slaughter of hogs were sharply reduced. However, forage crops were not nearly so seriously affected as this year.

Farm prices of certain groups of commodities are expected to advance this year. Ten years ago prices of the same groups advanced sharply. At the end of the season grain prices paid farmers were 40 percent above prices paid at the beginning of the season. Meat-animal prices were 33 percent higher; poultry prices 20 percent higher.

But those important rises in farm prices 10 years ago were accompanied by much smaller advances in total retail food costs and a still smaller rise in the general cost of living. The retail cost of foods during that year advanced about 9 percent. But the other living costs, such as clothing, household goods, fuel, and light came down a trifle, and the net result was an advance of only 2½ percent in the total cost of living.

Price changes this year may not exactly follow those of 10 years ago when the situation was generally similar with respect to the food commodities affected. The general economic situation 10 years ago was of course much better. There was no great unemployment problem. At that time, with business, employment, and wage earnings increasing, a relatively greater advance in retail markets was possible than when a large part of the working population is unemployed or on relief.

Another fact to consider is that 10 years ago there was no governmental agency as the Agricultural Adjustment Administration with power to restore balanced production and with the power and intention to protect consumers against unwarranted advances in food prices.

Still another important factor is that there is no reason for advances in other living costs simply because food prices advance. As a matter of fact, there is a growing attitude among more and more business men that a much higher level of industrial activity might be attained by lowering prices to consumers of industrial products, and this should tend to keep living costs down.

We are gathering other facts constantly and applying them to this study of probable future trends. At present my own personal judgment can be summed up as follows:

While the 1934–35 price developments may not follow exactly the 1924–25 pattern nor show changes of the same size, there is no reason for expecting at present more than a rise of a few percent in living costs by next summer due to increased food prices—a rise that should be amply taken care of in most cases by increased employment and greater wage earnings.

Credit Association Fills Local Need

The Windom Production Credit Association is one of about 660 production credit associations serving farmers in all parts of the United States. How this association was organized and how it functions is here described for REVIEW readers by W. P. Kirkwood, extension editor in Minesota.

PROCEEDING on the theory that the satisfied customer is the best advertisement, the Windom Production Credit Association, serving Jackson and Cottonwood Counties in southwestern Minnesota, has made a place for itself among the farmers—and the bankers, as well—in the area it serves. In a report received from its secretary-treasurer, G. W. Schaffer, dated July 7, the association had 140 loans outstanding, all of the borrowers being "satisfied customers"; had 25 other loans pending; and a possibility of 50 additional applications awaiting the movement of fall crops. Had it not been for the drought, Mr. Schaffer believes, the volume of business done by the association would have been much greater. The Farm Credit Administration, St. Paul, Minn., reports that the loans extended by the Windom Association to 130 borrowers, up to June 30, amounted to $97,586.

"The farmers of the two counties realized, says Mr. Schaffer, that additional credit facilities were essential and decided that cooperation with the Federal Government would be wise." They, therefore, proceeded under the guidance of a Government representative to organize an association, giving much thought to the selection of a board of directors, who would command the confidence of the territory, and who could place the project before the public in a satisfactory light.

The organization having been set up, a publicity campaign was entered upon, which was carried on through the newspapers of the two counties and included both advertising and news items. It also called for personal letters to mortgage debtors whose mortgages seemed desirable to the association, as shown by the records of the office of register of deeds. Information was also given through talks at farm bureau and township meetings and through the use of news material received from the Production Credit Corporation office in St. Paul.

A flood of applications resulted, showing that the campaign had been completely effective in placing the association before the farmers of the two counties. The outcome was not only the good will of the farmers, but also that of the local banks of the territory. "At all times," says Mr. Schaffer, "we have cultivated the good will and friendly feeling of local banks in order that they might know that our intention was to cooperate and not interfere with their program. We believe the banks' friendly relations have meant much to our success."

The association's officers have found the farmers very greatly interested in the opportunity to do business at home, and the interest rate of 5 percent makes a strong appeal. Mr. Schaffer quotes a letter from a farmer which is typical. "We appreciate an arrangement by which we can talk our business over. It is impossible for us to write regarding our difficulties, and wait for a reply." The allowance of a fund to be used in closing small loans immediately is also expected to prove very satisfactory.

Altogether, the Windom association reports an efficient service, satisfactory both to its board and to its patrons.

4-H Boys at Clemson College

THIRTY-FOUR former 4-H club boys, representing 15 percent of the senior class and 19 South Carolina counties, graduated at Clemson College June 5, 1934. Thirty-three percent of the graduates in the School of Agriculture were former club members; 2 percent in the School of Vocational Agricultural Education; and 16 percent in the School of Textiles. There were 4 graduates in the School of Engineering and 1 in the School of Chemistry. All the entomology graduates, 67 percent of the dairy, 57 percent of the agricultural economics, and 50 percent of the animal husbandry graduates were former 4-H club members.

Among these college graduates who were former club members were State prize winners; winners of trips to the National Boys' and Girls' Club Camp, Washington, D.C.; and to the National Club Congress and International Livestock Show, Chicago, Ill.; and a winner of the Moses trophy. Sixteen percent of these clubsters were listed for honors at the Clemson College Third Annual Scholarship Day May 1, 1934.

According to Dan Lewis, State club leader, these club boys have an average of approximately 3 years' enrollment. Their total gross receipts in 4-H club work amounted to $19,263.55, with a net profit of $7,290.11, or an average of $214.41 per boy—a nice nest egg with which to enter college. The boys were in the club from 1 to 8 years, and they grew calves, bees, cotton, corn, peanuts, potatoes, and sugarcane for their demonstrations. Some of the dairymen of the group already have small herds of dairy cattle as a result of their club work, two of the boys having more than a dozen purebred animals each.

As cadets at Clemson College, these former 4-H club members held responsible positions in the various college organizations. Their zeal for 4-H club work is still very keen. Space forbids quotations from all of them, yet that of Capt. Carlyle Clayton, who majored in horticulture, is very typical. With 6 years of 4-H club experience this young man, when asked a few days ago what club work had meant to him, replied: "4-H club work has been of immense value to me in that it was the first thing to call my attention to the beauty, pleasantness, and enjoyment to be found in rural life and in nature. The training I received under the 4-H club leaders has served me well, especially during my college days. Club work aided me in keeping my ideals high, my hands active, my mind alert, and my body strong. May 4-H club work increase in its scope and interest, and may its leaders continue the valuable training and encouragement they are giving farm youth."

CONSUMER members of several New Jersey women's clubs will be given an opportunity to see how farm produce is handled in local markets. A tour has been organized which will include several of the outstanding marketing activities of the State.

Louisiana Communities Organize

"WE HAVE but two heritages; the blood which flows in our veins, and the community we live in, and we can better our community heritage", says Mary Mims, extension rural sociologist and community organizer in Louisiana. Citizens of rural Louisiana in 383 active community organizations have discovered how many seemingly big improvements can be gained for themselves and for their sons and daughters by applying their united efforts to common aims and goals. Paying farms, comfortable homes, good highways, better schools, rural parks, choruses, orchestras, dramatic clubs, athletic teams, and many other good things of life mark the progress of the organized communities.

There were 52 community houses in Louisiana before Civil Works Administration funds become available, and now more than 200 commodious buildings house the various community activities in the State. Typical of these organizations is the one at Evergreen in Avoyelles Parish. During the 6 years that this community has been organized, it has missed holding only three of its monthly meetings. The people have built good roads; terraced their farms until Evergreen is one of the best terraced communities in the State; built a community canning house equipped with electric lights, running water, and modern canning equipment (90 men gave one day's work on the building); an agricultural teacher has been obtained for the school; a lovely home-economics cottage has been added to the community equipment; a baby clinic has been organized; and the church and school grounds beautified. Evergreen also boasts a senior and junior chorus, a senior and junior quartet, and two rythmic bands. The improvements on the school grounds, which would have cost the school board about $1,000, were done for less than $100 by the community. These improvements include a lighted recreational court and a fenced and graded school yard.

Cotton Donated

The fathers of the community donated 1,870 pounds of cotton for the community and school library fund. A book-mobile route was established throughout the summer. Reports indicate that not only do the school children read but also everyone in Evergreen reads.

The community scores high in sanitation and health work. All the people were vaccinated for typhoid last summer after a case was reported in the community. This was the only case of typhoid in the community.

Among the first objectives on the program are a full barn and a full pantry. The secretary's report shows a sufficient supply of corn, potatoes, sweetpotatoes, peas, peanuts, hay, sorghum, and cane sirup stored to supply the community's food and feed requirements. The pantry shelves are amply supplied with thousands of quarts of preserved fruits and vegetables, pork, and beef.

The grade of chickens has been improved, and in 5 years they aim to have a good breed on every farm. Eighteen farmers visited a trench silo to study its worth; there are now six silos in the community. Twenty-eight farmers visited a vetch plot in Arkansas to determine the value of this plant as a soil builder; hundreds of pounds of seed have been planted this year for cover crops.

Fundamentals of Community Life

Louisiana community organizations recognize four fundamentals in community life—the necessity of making a living, the right to good health, attractive civic life, and wholesome recreation. When a community decides to organize, a meeting of the whole community is held. It is assumed that everyone belongs to the community organization; the only way to lose membership is to move from the community. At this meeting two specific economic goals are chosen by the men, such as more terraces or more pastures. The women also pick out two goals to improve the homes of the community. One health goal is set up; one job of civic improvement is undertaken; and some step taken to furnish wholesome recreation for the community. At the end of 2 years, if progress has been made on this temporary program, they begin to build a long-time permanent program for that particular community. All extension work is done through these community organizations, the agents acting as advisers and helpers in formulating the program and putting it into execution.

Each community meets once each month, hears the reports of progress on the program of work, what the home demonstration clubs have accomplished, what the 4–H clubs are doing, how the agricultural projects are progressing, and the work of any other organization functioning in the community. Each meeting includes an educational demonstration and an opportunity to play and have fun together. There are no constitution and bylaws and only three officers—the chairman, cochairman, and the secretary. The activities are many and varied.

The Louisiana Library Commission has offered reading certificates to those who will read 12 books of recognized worth. Two thousand community citizens got their certificates at the short course this summer. About 225 communities offered a story hour for the little folks once a week during the summer season.

Community Day

In Natchitoches Parish where there are 23 organized communities, a community day was celebrated at the Parish Fair. Each of the 23 communities sent a chorus to compete on community day. In the afternoon all sang together in a single chorus 4,000 voices strong. A competent musical director in the parish became interested and gave 3 weeks of his time visiting the various communities and training them in preparation for the gala occasion.

The community work has uncovered much latent talent. In Hurricane community, Claiborne Parish, a tenant farmer was made chairman of the community. The organization was a very active one and soon built a clubhouse as a center for their many activities. In order to produce plays and pageants, a canvas curtain was bought for $12.50 which the chairman offered to take home. The curtain was returned when they were ready to hang it with a very fine picture of an old mill upon it. Everyone was delighted and surprised for the curtain was really lovely, and no one had ever heard of the chairman's talent for painting. The fame of the curtain spread, and groups of people began to come from Homer, the parish seat, to see it. It is now one of the prized possessions of the community, and its fame draws many visitors. This man is happy in his community work; he has written a play for presentation by the community players, and assisted in the picture work at the folk school which the community holds for a few days each summer.

The community idea has taken hold in Louisiana, and there seems to be no limit to what can be accomplished by the active cooperation of all members of the community in working toward common goals.

Better Babies Club

A Better Baby at 7 months of age.

LAST fall, the county council of home-demonstration clubs of Logan County, Ark., organized a better babies club. This was the result of 3 years of work by the local leaders in nutrition and the home demonstration agent, assisted by the extension nutritionist, Gertrude E. Conant. One hundred and six babies and preschool children are enrolled in the club.

The growth of interest in better babies was due largely to the work of one of the local leaders, Mrs. Dan A. Hall, of Paris, who has been untiring in her efforts to get mothers interested in modern methods of child care and training. She has been named chairman of the club. She keeps a record of all babies enrolled, sends child care and training literature to each mother, and receives reports each month on the children's development. She is on the lookout all the time to see that no mother or prospective mother is neglected.

In 1931, Miss Conant held a series of local-leader meetings in Logan County at which leaders were given lectures and demonstrations in pre-natal care and feeding, diet of the child from infancy to school age, and training the child in good food habits. These training meetings were attended by 31 local leaders. This club is making its influence felt in every community in the county.

The same baby as pictured above at 16 months of age. He is the son of Mrs. Dan Hall, chairman of the Better Babies Club.

THE 86,000 Negro farmers of Texas are aiding in the solution of their problems with the cooperation of the extension workers. Regular programs of work have been developed by these farmers and their wives.

During 1933 over 12,400 Negro women and girls filled 519,897 cans of vegetables and fruits and dried 546,948 pounds of farm products. In 11 counties, 125 homes purchased all their extra food supplies with money obtained from demonstration poultry flocks.

In the first meat show held for this group of extension cooperators, over 500 entries were listed. Negro farmers during 1933 butchered 2,444 hogs the "A. & M." way and most of this meat was for home use.

Educational Motion Pictures

A POSSIBLE outgrowth of the conference on educational motion-picture programs which was held in Rome during April is the definite plan for the increase and improvement of these media in educational work. The United States Department of Agriculture, Division of Motion Pictures, was represented by C. A. Lindstrom, Associate Chief of the Division. The 45 nations attending the conference discussed the influence of motion pictures on morals and education, and in the field of international relations.

Users of educational films will be considerably aided by a catalog of available material, which the organization plans to compile.

A Long-Time Adjustment Program

(*Continued from page 130*)

69 times. To aid in bringing about this popularity of "soy" the State experiment station developed the "Illini" variety and tested some 74 varieties that might be adaptable to different areas.

But too much adjustment toward soybean production might cause another unbalanced acreage situation on Illinois farms. To guard against this, the college agronomy department, under the direction of its head, Dr. W. L. Burlison, came forward with new suggestions for the utilization of this rapidly increasing crop. Of these, soybean paint was probably the most significant. Today thousands of bushels of Illinois soybeans are being consumed in the manufacture of soybean-oil paint that is being spread upon everything from corn cribs to the governor's mansion. Some of the first soybean paint was used in an experimental way on the corn cribs at the farm of the College of Agriculture as far back as August 25, 1930. Since then, barns, dwellings, and even structures at the Century of Progress Exposition have been covered with the paint containing as much as 25 to 50 percent soybean oil.

In line with the development of this paint, the experiment station has been working on soybean varieties that will yield a higher percentage of oil in the beans. Processors and commercial firms are interested in beans of the highest oil content. If this can be attained without sacrificing high-acre yields, it is believed that greater and wider consumption of this crop may be achieved. Furthermore, higher oil content will add to the feeding value of the soybeans.

Comparisons Made

To those who suggested that a shift from harvested crops to pastures and forages would reduce farm incomes, the division of farm management pointed to records of contrary conclusions. Corn Belt farms with a 20 percent reduced corn acreage, replaced with legumes, have produced a little more net income to the acre during the past 8 years than farms with large corn acreages, a farm management survey shows. These farms were located in the heart of the Corn Belt.

The tax problem is still one of the unsolved handicaps in adjustment efforts. It has been suggested that lower tax assessments should be made against land devoted to pasture. Such a reduction would undoubtedly encourage adjustments, particularly in those sections where soil-erosion control is an important factor. This, however, remains a legislative problem to be dealt with by the State's general assembly rather than the College of Agriculture. Its solution, together with other problems that will arise from time to time, will constitute future chapters in the march of agricultural extension work and adjustments in Illinois.

RESEARCH workers of the Soil Survey Division of the U.S.D.A. are starting work in eight counties in Washington to complete a basis for land classification and the determination of land use within the region. The survey will cover nearly 8,000,000 acres of land, an area larger than the entire State of Vermont.

Native Wool Utilized in Women's Camps

To prepare wool for hooking the bat is twisted out into a roll.

WOOL gathering is no longer an aimless sort of occupation for Wyoming women. Last year, when wool was bringing a low price, almost every ranch had some fleeces or unscoured wool stored about the place. In searching for ideas for handicraft in the recreation camps, the idea came to Bernice Forest, clothing specialist, that raw wool might be used in some way. Hooked rugs seemed a possibility to make use of this stored supply of raw wool as well as a chance to boost natural resources of Wyoming. Experiments on scouring, dyeing, and carding the raw wool were all carried out in the wool laboratory on the University of Wyoming campus by the extension specialists. The results of these experiments proved very satisfactory, and the project was assured. Methods for hooking were tested, and it was found that the old-fashioned wooden handled steel hook was most satisfactory in hooking, as wool didn't hold together as rags or yarn did. Experiments also showed that any good commercial dye for use on wool garments could be used in dyeing the raw wool after it was scoured.

In order to simplify matters for the six camps held in the State, enough wool was scoured, dyed, and carded for all of them. The actual demonstration at the camps consisted of scouring wool, dyeing a small quantity of raw wool to show the method, and then teaching the women how to roll the wool and hook it into the burlap.

Original designs, descriptive of Wyoming, such as trout, trails, Indian paintbrush, ram's head, pine trees, and the like had been prepared by Miss Forest for the women to copy. They were drawn to be used on 6-inch mats, but could be enlarged and applied to full-sized rugs. Wool of every color in the rainbow had been dyed before camp, and the women selected their own color harmonies.

During the handicraft period at camp each woman received a small square of burlap, her hook, design, carbon paper for tracing, and then she selected the color of wool she preferred. To save time, the wool had been previously carded, but cards were on hand to give each woman an opportunity to learn this process. In preparing the wool for hooking the card of wool was rolled between the palms of the hands, stretched as it was twisted until a roll was formed 2 or 3 feet long and about the size of the little finger, or smaller if desired. It was this roll which was used for hooking, though small swatches were used to add bright spots of color in the design; thus no bit of wool need be wasted.

The actual hooking was similar to hooking rags or yarn, working with the steel hook from the right side and pulling the wool loops to the top of the burlap as far as the desired depth of the pile. If the pile was to be clipped it was a little deeper than that left unclipped. The mats completed by the women were beautiful in color and when clipped gave the appearance of lovely chenille. The edges were hemmed back on the under side in the finishing process.

The response from this work in raw wool has been very interesting. The women see in it a possibility to use the old wool, which has been stored and at the same time produce valuable pure virgin rugs for their homes. The mats made at camp have made attractive flowerpot pads, and hot dish holders. A few women have sold their rugs and mats as a result of their experience started at camp, but so far no active market for this product has been established.

Hot School Lunches

(*Continued from page 135*)

was presented at the district meetings of home demonstration agents by the extension nutritionist, Minnie M. Floyd. In October further impetus was given to the program when the State emergency relief administrators authorized a program of child feeding in the schools for children of families on relief lists where examination indicated malnutrition. In November, all the organizations interested in the movement got together to work out cooperative plans for providing a hot school lunch in rural schools and by March, 44 counties were serving a hot dish at the noonday meal in at least some of the rural schools.

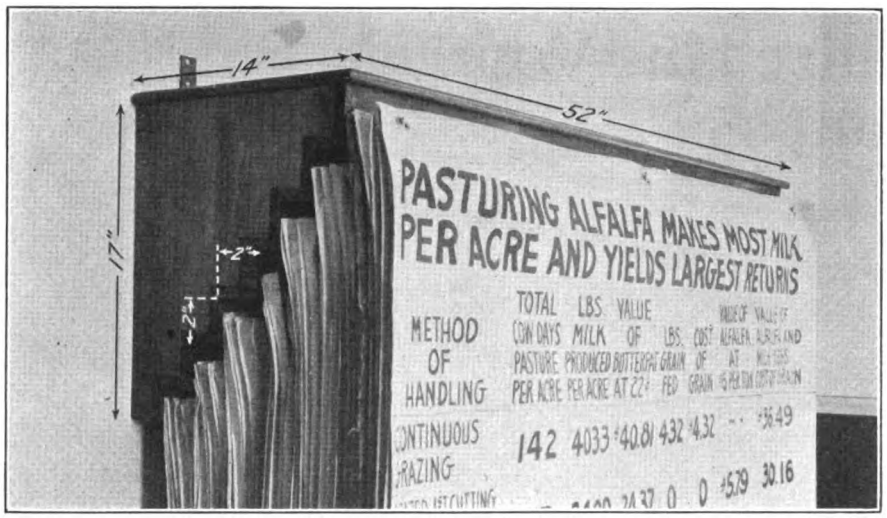
The plans varied according to local conditions but in general the relief administration furnished Government commodities such as eggs, cheese, butter, meat, fruit, cereal products, bread, canned vegetables, and meat from relief canneries. The administration also paid a worker for preparation and service of school lunches and $1 per hundred enrollment for children on relief.

The children's parents and women's clubs furnished some foods, especially milk; chicken; fresh, canned, dried, and stored vegetables, and equipment such as stoves, boilers, bowls, cups, spoons, pans, and towels. In many instances club women have prepared the hot foods where no paid worker was available.

The home demonstration agent in Allendale County reports that more schools will probably be added to the program this year and each home demonstration club plans to can vegetable soup for the hot lunches this year. The quantity canned will be based on the records of last year.

In Darlington County, each farm woman planted an extra row or two of tomatoes, beans, corn, and okra to can for school lunches. In Bucksport, Horry County, the 4-H club has canning days for the school and every club girl in the county is putting up at least one quart for school lunches. Records were kept in Orangeburg County by the supervisors of school lunches to gain an idea of the amounts and kinds of food necessary for serving school lunches in all rural schools of Orangeburg County.

Plans for better equipment and organization for the coming year are being completed by the more than 800 schools which made a start last year and it is planned to develop the work in many more schools.



A Chart Holder and Storage Rack

A CHART rack and holder have been developed in Michigan, according to a suggestion sent in by A. C. Baltzer, extension dairy specialist, for the use and storage of cloth charts. The care and handling of this material is more or less a problem everywhere, and the difficulty sometimes leads to neglecting the use of this valuable extension teaching method. The rack for the storage of the charts will hold about 70 charts and does not require that they be rolled or folded, operations which considerably shorten the life of a chart. The holder is constructed so that the number of charts can be varied, and it holds them in a manner which minimizes the dangers of tearing.

The chart material which has proved most successful at Michigan is a dull white sign oilcloth. The cost of the oilcloth is slightly higher than muslin but it has proved more durable and possesses a greater visibility value. This material comes in a 52-inch width, which has been established as a standard width for their charts.

Grummets, or metal eyelets, size 3, have been found satisfactory, and three of these are placed in the top of each chart. The exact placing of these grummets is important in that they are used in the holder and in hanging the charts on the storage rack. One grummet is placed in the center and one at each edge, about 2 inches from the margin.

The chart holder is made of two pieces of 2 by 2 material and is approximately 56 inches long. Each of these pieces is made half-round so that the chart will not be folded over sharp edges when in use. Three pins are inserted in the flat surface of one of the pieces at distances corresponding to the distance between the grummets in the charts. Holes are bored in the other piece so that the pins will fit into them. About 1 inch from the ends of the two pieces one-quarter-inch holes are bored completely through, bolts are inserted, and wing nuts are used to tighten the holder after the charts have been placed on the pins. The pins should not be longer than 2 inches.

The chart storage rack is illustrated and has the general dimensions given. The hooks should be placed to correspond with the holes in the charts and the pins in the holder. They have about 2 inches hanging space between the angle of the hook and the frame of the rack.

This information is being passed on to extension workers as a suggested aid in handling this type of instructional equipment. Old charts can be stored in this manner by placing the grummets in the proper positions. As an added suggestion a cloth cover may be placed over the storage rack to further protect the charts from exposure.

THE AMERICAN Country Life Association is sponsoring, in connection with its annual conference in November a meeting on November 16 for the consideration of factors essential for successful rural home and community life and for the discussion of suggested activities and objectives. Rural homemakers and rural organizations, including the Extension Service, are invited to participate. Representation from as many States as possible is being urged by the association. Grace E. Frysinger, of the Federal Extension Service, is chairman of the meeting.

Honor 4-H Club Work

The results of activities carried on by 4-H club members during the year will again be featured in the fifth annual 4-H achievement-day radio program. This Nation-wide celebration will be on the air from 12:30 to 1:30 p.m. eastern standard time, November 3. Representatives of the 925,000 4-H boys and girls will tell about the various 4-H enterprises in which they have engaged and the achievements made.

Hundreds of thousands of 4-H boys and girls with their local leaders will gather before the radio to hear the program. In many instances special meetings have been arranged to observe the local club's part in 4-H achievement. Radios will be tuned to one of the 58 stations of the National Broadcasting Co. carrying the programs organized jointly by 45 States and the United States Department of Agriculture.

The program will be divided into three periods. The first and last 15 minutes of the hour program will be broadcast over the entire network of 58 stations and will originate from Washington, D.C. These two periods will carry speakers of national prominence and music by the United States Marine Band. The half-hour period between the two Federal portions of the broadcast will be devoted to programs of local achievement presented by the cooperating States. During this time the network of stations will be dissolved and each station will carry its own local achievement program.

ILLINOIS farmers have organized 800 associations to cooperate with the various Farm Credit Administration loan branches. Farmers in the State expect to make every use of the Farm Credit organization to further their agricultural activities. Special attention for loans to cooperatives is being given by the organization. "The Farm Credit Administration, through the banks for cooperatives, is assisting cooperative marketing associations to secure ample credit facilities and also is assisting them in marketing their commodities effectively", says C. H. James, manager of one of the large cooperatives in the State.

DURING May, 540 New York dairymen enrolled in the "mail order" cow-testing service which operates in 52 counties of the State. Reports are treated as confidential and this policy has encouraged farmers to enroll. This is another service which extension workers are making available, a research service for farmers at an average cost of about 12 cents a cow per month.

Research and Extension—A Working Alliance

C. W. WARBURTON
Director of Extension Work

Extension work has a practical working alliance with scientific research. It came into being to bridge the gap between the laboratory and the farmer. Its responsibility is to get the results of scientific experiments to the farmer quickly and efficiently.

Just how valuable this alliance has been in Illinois is explained in the first article of this issue of the REVIEW. With the close correlation maintained, the acute need for an adjustment in agriculture became apparent and a long-time adjustment program was developed in Illinois.

Such coordination of science and extension was never more needed nor more desired than now. The Secretary of Agriculture and the administrators of the Agricultural Adjustment Act have repeatedly endorsed it. The act itself was based on a long series of research studies. Long years of conscientious study by scientists of the United States Department of Agriculture and experiment stations brought to light data on the economics of production and marketing and their effect on prices and farm income which resulted in the Adjustment Act.

The betterment of farming depends upon the continuous accumulation of such fundamental facts. Scientific research is a big job. Likewise, putting the results of investigations into common practice as an aid in the solution of farm problems is a big job. As I look back over the years, I am impressed with the success of the Extension Service in interpreting and applying scientific discoveries to farm conditions.

The value of swine sanitation, discovered through a study of swine diseases by veterinarians at the Department of Agriculture and the experiment stations is now common knowledge on almost any farm in the Corn Belt.

The improvement of market milk through sanitation, cooling, and handling methods was made possible because of bacteriological studies of milk and the adaptation of laboratory methods to practical conditions on the farm.

Much headway has been made in the control of pellagra, through the effort of home demonstration agents in searching out those suffering from the disease and bringing the information and the opportunity for the right diet to cure it.

The bad effects of depression diets, especially on the health of children, have been lessened considerably by the efforts of home demonstration agents who carried the information on low-cost but adequate diets to the farm homemakers.

Some other of the numerous examples which may be selected at random are the copper carbonate treatment of seed wheat for stinking smut, the value of legume hay in milk production, the control of Bangs disease and tuberculosis in cattle, and the fattening of younger cattle for market in which the contribution of 4-H baby beef clubs has been considerable.

Because of the emergency activities now carried on by extension workers, farmers have become more aware of the need and value of educational work of this character. More than ever do they realize that the extension agent is a sympathetic, trained adviser, familiar with local conditions and problems, and backed by the great fund of information at the disposal of the United States Department of Agriculture and the State experiment stations. It is my hope that the necessity for closer cooperation between all agencies that has arisen as a result of the emergency will serve to strengthen the bond that exists between research and extension.

NEW AIDS FOR ADJUSTMENT TALKS

NEW material is constantly being developed by the Agricultural Adjustment Administration in cooperation with the Extension Service to aid in the discussion of adjustment objectives and plans. Among the visual material and publications now available are the following:

Discussion Statements

No. 1. *Taking Stock of the Situation.*
No. 2. *The Cotton Belt's Comeback Under Agricultural Adjustment.*
No. 3. *The Emergency Years, 1933–34.*
No. 4. *The Next Step in the Emergency Agricultural Program.*
No. 5. *Corn Belt Agriculture and Planning.*
No. 6. *Cooperative Aspects of the Corn-Hog Program.*
No. 7. *Developments in a Program for Tobacco Growers.*
No. 8. *The Reopening of Foreign Markets for our Agricultural Products.*
No. 9. *The Place of Cooperatives in the Agricultural Adjustment Program.*
No. 10. *The A.A.A. Inventory.*
No. 11. *Land Use and Human Welfare: A Progress Report.*

Film Strip Series

(Price of each, 36 cents)

		No. Frames
207.	*The Agricultural Adjustment Program for the South*	47
321.	*The Farmer and Our Foreign Market*	20
323.	*World Wheat and the American Farmer*	14
324.	*The Hog-Corn Problem, 1933–34*	34
325.	*The Cotton Problem*	32

The film strips are available for loan or purchase at the price given. Requests for information regarding film strips or for copies of discussion statements listed should be sent through the office of the State extension director to—

EXTENSION SERVICE
UNITED STATES DEPARTMENT OF AGRICULTURE
WASHINGTON, D.C.

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Extension Service Review

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MORE THAN 5,000 COUNTY PRODUCTION CONTROL COMMITTEES, SUCH AS THIS ONE IN LAMAR COUNTY, TEX., HAVE LABORED WHOLE-HEARTEDLY TO HELP THEIR GOVERNMENT ADMINISTER THE ADJUSTMENT PROGRAM FAIRLY.

ISSUED MONTHLY BY THE EXTENSION SERVICE
UNITED STATES DEPARTMENT OF AGRICULTURE
WASHINGTON, D. C.

FOR SALE BY THE SUPERINTENDENT OF DOCUMENTS, WASHINGTON, D. C. - - - - SEE PAGE 2 OF COVER FOR PRICES

In This Issue

A SOUND national program for the future use of our land is of vital concern to the general welfare of the entire Nation. In his editorial Secretary Wallace shows why a consistent land policy is needed and summarizes some of the activities now under way which will contribute to the development of such a policy. He cautions us, however, that any plans must be considered as tentative until America decides definitely whether it will pursue a course of intense nationalism, internationalism, or some planned intermediate course.

His article on "Tariff Bargaining for Agriculture" concludes the series of three articles on the pursuit of that foreign trade policy which he calls "the planned middle course". In his article, the Secretary indicates that tariff bargaining offers large possibilities to agriculture and discusses some of the concessions that might be offered in return for concessions that would increase the foreign demand for farm products.

THE efforts of the Bartow Citrus Production Credit Association to relieve the financial distress of citrus growers in the 16 citrus-producing counties included in its territory have been much appreciated. After 3 or 4 years of unprofitable citrus seasons many growers who had reached the end of their resources readily availed themselves of this easy-term money. They were thus able to obtain and apply sorely needed fertilizer, spray their trees, repair tractors and other grove equipment and have their trees pruned.

How is the agricultural industry as a whole measured? Improved methods used by economists of the Bureau of Agricultural Economics for estimating farm income and computing index numbers showing change in farm prices are discussed in "New Measures of Farm Income and Prices."

Contents

MICHIGAN farmers are using a simple, as well as economical, method of furnishing water to their crops in dry weather. O. E. Robey, research assistant in agricultural engineering, who was a pioneer in Michigan extension work, found that by using a pump to lift and force water to a length of canvas hose, which was laid between crop rows, the water would seep through the pores in the fabric and soak the ground for a foot or more on each side. Farmers improve the quality and yield of crops by this method.

On The Calendar

International Livestock Exposition, Chicago, Ill., December 1–8.

Fifth Annual Session of the National Cooperative Extension Workers' Association, Chicago, Ill., December 6.

Tenth Annual 4–H Club Baby Beef Show, Union Stock Yards, Nashville, Tenn., December 12–14.

American Association for the Advancement of Science, Pittsburgh, Pa., December 27–January 2.

Thirty-Eighth Annual Convention of American National Livestock Association, Rapid City, S. Dak., January 9–11.

National Western Stock Show, Denver, Colo., January 12–19.

AS A result of organized work in rural electrification initiated in New England in 1925, New Hampshire now leads the Nation in the percentage of electrified farms. Research on seven farms in different sections of the State, which were selected as representative of dairy, fruit, poultry, and general farming, showed farmers what work could be profitably done by electricity.

THE conditions caused by the drought brought to light some interesting stories regarding the value of certain extension practices in drought-stricken areas. Such practices as the use of trench and pit silos to save feed for livestock, terracing to conserve moisture, the use of home-made concrete tile to irrigate gardens, planting of drought-resistant wheat, and many others have proved their worth under the severe test of abnormally dry weather. Emergency hay and pasture crops, as well as the grasshopper campaign, in which Federal bait was used, also played their part in saving food and feed crops. How farm men and women took advantage of these practices is brought out in stories from Minnesota, North Dakota, and Texas.

THE EXTENSION SERVICE REVIEW is issued monthly by the EXTENSION SERVICE of the United States Department of Agriculture, Washington, D.C. The matter contained in the REVIEW is published by direction of the Secretary of Agriculture as administrative information required for the proper transaction of the public business. The REVIEW seeks to supply to workers and cooperators of the Department of Agriculture engaged in extension activities, information of especial help to them in the performance of their duties, and is issued to them free by law. Others may obtain copies of the REVIEW from the Superintendent of Documents, Government Printing Office, Washington, D.C., 5 cents a copy, or by subscription at the rate of 50 cents a year, domestic, and 75 cents, foreign. Postage stamps will not be accepted in payment.

C. W. WARBURTON, *Director* C. B. SMITH, *Assistant Director* L. A. SCHLUP, *Acting Editor*

Tariff Bargaining for Agriculture

H. A. WALLACE
Secretary of Agriculture

THE tariff bargaining program offers large possibilities in the way of increasing the foreign demand for our agricultural products. We have recently had a little experience in such bargaining for increased exports of farm products through quotas on liquor imports. The thing which stands out most in this experience is the fact that in order to obtain valuable concessions from foreign countries we must be in a position and willing to make valuable concessions in return.

What concessions are we prepared to make in connection with our new tariff-bargaining program?

It has been suggested that we could make painless concessions by encouraging imports of noncompetitive goods, such as coffee, tea, or rubber. But we can, in fact, make no concessions on such products. They are not dutiable under our tariff, and our consumers already buy as much of them as they can afford to at world market prices. In order to make a real concession we must make it on some commodity of which our Government is now hindering or restricting the imports to the detriment of the foreign producer, and we must make it by removing such hindrances and restrictions. We are going to ask foreign governments to remove some of the duties and other restrictions which they place on our exports, and they will rightly expect us to make similar concessions in return.

There is, however, a very considerable number of minor commodities on which high rates of duty are imposed by our tariff although we produce them in insignificant quantities or not at all. The Tariff Commission has recently listed more than 350 types of commodities (the majority being manufactured commodities), which are described as "dutiable articles more or less noncompetitive and with respect to which foreign countries possess advantages." For 19 of these items the rate of duty in 1932 was more than 100 percent ad valorem.

It has hitherto been a part of our traditional method of tariff making that if any group or interest, however insignificant in the economic life of the Nation it may be, demands a tariff duty on some product, the request is usually granted forthwith. As a consequence, we have a great many duties that are largely futile and which could be eliminated with little sacrifice of domestic interest, but with substantial benefit to our own consumers and to our export producers.

"Tariff bargaining offers large possibilities for agriculture, but we cannot expect something for nothing," says Secretary Wallace in the third and last of this series of articles on reopening foreign markets for farm products. The first article described the general export situation; the second discussed the export possibilities of the principal farm products; and this final article of the series takes up what may be done to accomplish the desired end through tariff bargaining. He asserts that no concession that amounts to anything can be entirely painless and describes those concessions which he feels will be of benefit to the Nation as a whole.

Important Concessions

But if we really want to get anywhere, we shall have to make more important concessions than any I have suggested thus far. Besides those minor industries which tariff protection has failed to develop because they are not suited to American conditions, we have a number of industries which are capable of successfully meeting foreign competition in the domestic market, but which are nevertheless protected by high tariff duties. Of the products of such industries the imports are extremely small in comparison with domestic production.

A substantial reduction of tariff duties on these products would not prevent the domestic industry from supplying most of the domestic consumption. Imports would still be small in relation to domestic production. Nevertheless, foreign producers would in many such cases obtain a considerable advantage from being able to gain even a small part of the American market, since our total purchasing power is very large in comparison with that of any other country. If, for instance, our imports of a commodity increased from 2 to 8 percent of our domestic consumption, the gain might be great to foreign producers but the loss relatively small to our domestic interests, and even this loss would promptly be made good by a higher national purchasing power. The Tariff Commission has listed over 1,000 dutiable articles of which imports represent less than 5 percent of domestic production. In the case of more than half of these, our imports in either 1931 or 1932 were 1 percent or less of domestic production.

Naturally not all of the products coming under this category can be regarded as being specially suitable for concessions. Here we need some guiding principles to aid us in the selection of those which are most suitable.

Selecting Commodities

One such principle would be to select commodities of which the consumption responds readily to a change in price—commodities for which the demand is relatively elastic. A reduction of tariff duties on such articles will permit a real expansion of imports without a corresponding reduction of the outlet for domestic production. Generally speaking, the demand for most manufactured products is more elastic than the demand for most agricultural products.

Agriculture hitherto has always been given the worst of the deal in tariff manipulations, and at the present time I think it should be pointed out that a reduction of the tariff duties on some, at least, of our agricultural products would result in significant reduction of price with but a relatively small increase of imports. The sacrifice which domestic producers would need to make would be greater, in proportion to the gain made by the foreign producer, than in the case of many manufactured products for which the demand is more elastic.

Another important guiding principle will be to choose commodities which are produced in this country under conditions of monopoly or partial monopoly. We have in the United States a number of tariff-protected monopolies, cases in which the tariff duty is higher than would be necessary to enable the domes-

90681—34

tic producer to meet foreign competition. Such duties have enabled the monopolists to maintain prices at unduly high levels and to restrict output—and hence also employment—unduly.

Those commodities of which the prices have been held relatively high during the depression owing to inadequate competition should be among our first choices for sacrifice in tariff bargaining. The producers of these goods will be forced to lower their prices in order to meet foreign competition, but at lower prices they will be able to sell a larger volume of goods. Hence employment in the industries producing these goods may actually increase.

Such considerations will apply to more than a mere handful of exceptional cases. I doubt whether the extent to which competition has been limited in American industry for a number of years is adequately realized. That the prices of farm products declined more from 1929 to 1932 than those of manufactured products is partly owing to the relatively inelastic demand for farm products. But in a very long measure it has been due also to the fact that there is more competition in the production of agricultural than of manufactured products. There has been excessive competition in agriculture the world over, and in the United States we are attempting to remedy this by our adjustment program. To a large extent, however, it has also been due to excessive limitation of competition in other industries. The evils of competition in our most highly competitive industries, such as agriculture and coal mining, have been greatly increased by the limitation of competition in the more or less monopolistic industries.

Eliminating Disparities

An important aim in our economic policies must be to eliminate disparities between the prices of commodities competitively produced and commodities produced under monopolistic conditions. Tariff reduction can probably do more for us in this way than our antitrust legislation has ever done. To the extent that it does so it will make our economic system run more smoothly. Tariff-protected monopolies should certainly be among the first interests to be sacrificed in the making of trade agreements. McKinley preached this doctrine the night he was shot at Buffalo, and Woodrow Wilson made lower tariffs a prominent part of his attack on monopoly in his new freedom campaign speeches.

It must not be supposed, however, that the interests of manufacturing industry as a whole will be sacrificed. Some of our largest and most important manufacturing industries have in the past found profitable outlets for their products in foreign markets and can regain a part, at least, of what they have lost in exports by the reduction of foreign trade barriers. The new tariff policy should not be regarded as one of favoring agriculture at the expense of industry but rather as one of favoring those industries in which our productive capacities are most effective. This includes, in addition to many important branches of our agriculture, some of the most important branches of our manufacturing industry.

Effects of Tariff Reduction

Many people are afraid that a reduction of our tariff would tend to lower the level of wages in this country and bring it nearer to the levels prevailing in many foreign countries. Most of us know that this is a fallacy. Nevertheless, I wish to make some observations on the point. Those industries which have led the way in the trend toward higher wages in this country are the very industries which have shown the greatest ability to meet foreign competition both at home and abroad. These are the industries producing automobiles and various kinds of machinery and those in general which employ mass-production methods. These industries have raised the level of wages in the United States above the levels of wages in foreign countries because our productive capacities in them have been exceptionally effective. Our tariff, by fostering the growth of other industries in which our capacities are less effective, and in which wages are lower, has retarded the long-time tendency toward higher wages and better living conditions.

It is not generally realized how small a part of the wage-earners in this country have their employment protected by the tariff. Census data show that there were nearly 50 million "gainfully employed" workers in 1929. More than half of these were employed in nonmanufacturing industries with which imports cannot under any circumstances compete, such as internal transportation, gas and electricity, banking and insurance, building, public service, and others. Of the remaining half, a considerable part was employed in industries for which profitable outlets exist or can be made to exist in export markets, industries which have been injured by our high tariff and the foreign import restrictions that it has tended to encourage. Another important group was employed in industries which could not substantially be affected by imports. These include various purely domestic industries, such as most printing and publishing; industries producing bulky materials such as coal, bricks, and cement which are largely protected against foreign competition by high freight costs; and industries using methods of mass production such as ordinary textiles, pottery, and clothes, in which foreign competition could not undersell the efficient American producer.

Competition of Wage-Earners

At the most generous estimate, not more than one American wage-earner in six is competing directly with a foreign wage earner. As our tariff system has worked, the one has received a subsidy paid for by the five. To remove that subsidy quickly, however, would be disastrous; whatever is done must be done gradually and only after the workers and industries involved have had an opportunity to make necessary adjustments.

Finally, I wish to emphasize that, subject to certain qualifications already indicated, we should be most ready to make concessions on those commodities in which our productive abilities are least effective. Our most ineffective industries are those which need the highest degree of tariff protection to enable them to meet foreign competition. In general, therefore, our aim should be to reduce those tariff duties which have the highest ad valorem equivalent. The Tariff Commission has compiled a list of over 650 articles on which tariff rates exceeded 50 percent ad valorem in 1931. In nearly half of these items the rate exceeded 75 percent, and in nearly 100 cases it exceeded 100 percent. In 1932, when prices were lower, the number of cases must have been greater. I will surely not be called an extremist if I say that a rate of duty which is more than 50 percent ad valorem places a very heavy burden of proof on the industry which tries to justify it.

Since the increase in foreign purchasing power resulting from these tariff negotiations will be slow at best, the farmers of the United States will have to hold fast to the present adjustment machinery until that foreign market is reopened. Whether that will be 2, 5, or 10 years, no one can predict. But unless and until that does happen, it would be disastrous to revert to the old happy-go-lucky way of plowing up the fence corners and shipping the product off to Europe, for whatever it would bring.

Missouri Saves Unusual Fodder Crop

WITH PRACTICALLY no corn to harvest as grain this fall, Missouri farmers are using all standard methods and even some very unusual devices to save all their corn fodder and to provide safe storage for it. By the first week in September, 78 percent of all Missouri's drought-stricken cornfields had been cut for silage, for fodder, or for immediate feeding. This total included about 2 percent fed to livestock and 8 percent put into silos. The remainder was standing in shocks. With work still going forward in the greener cornfields, estimates from all parts of the State at that time indicated the eventual harvest of about 5,500,000 tons, or fully 90 percent of this year's corn crop as forage.

"Fortunately for Missouri farmers", says W. C. Etheridge, head of the department of field crops at the Missouri College or Agriculture, "the same circumstances that robbed them of their grain crop left on their hands the largest and most valuable forage crop the State has ever produced. Analyses of this immature corn fodder in the experiment station laboratories show that it has a feeding value nearly or quite equal to that of ordinary mature fodder including the ears and contains more than one-half as much digestible protein—ton for ton—and only slightly less carbohydrates than alfalfa hay.

Several of the feeds commonly used in Missouri were included in these comparative analyses on a dry-weight basis, giving shelled corn a rating of 100. The corn fodder examined was this year's fodder, the growth of which had been stopped by the drought just before the formation of ears. The results of the comparison are reported by A. G. Hogan, head of the department of agricultural chemistry, as follows:

Feed	Digestible protein	Total digestible nutrients	Rating
Corn, shelled	7.1	81.7	100.0
Corn fodder	5.76	58.31	72.5
Corn silage	1.1	17.7	21.0
Wheat	9.2	80.1	101.7
Alfalfa hay	10.6	51.6	73.1
Barley	9.0	79.4	100.6
Oats	9.7	70.4	92.0
Bran	12.5	60.9	86.2
Linseed meal	30.2	77.9	133.4
Cottonseed meal	33.4	75.5	136.0
Tankage	56.2	71.4	168.6
Wheat straw	.7	36.9	41.1
Oat straw	1.0	45.6	51.0

It is pointed out that such a rating ignores any special properties of feeds such as completeness of consumption, palatability, and vitamin or mineral content. It assumes that when necessary, protein supplements will be supplied from a cheap source, such as cottonseed meal. These various factors cannot be evaluated, so the ratings take into account only the protein and energy value of the feeds.

High Feed Values

As soon as the surprisingly high feed values of this immature fodder had been verified, the College of Agriculture launched a State-wide campaign to impress upon the farmers of the State the immediate necessity of cutting for fodder or silage the maximum possible percentage of this great forage crop. Information was forwarded to all county extension agents for use in local newspapers and at meetings. Similar articles were prepared and circulated through the metropolitan press. Representatives of the departments of field crops, dairy husbandry, and animal husbandry were given time on the daily morning radio broadcasts of the Extension Service from Station KFRU at Columbia to explain the actual and strategic values of this unusual forage crop in retaining on Missouri farms the better-breeding herds of beef and dairy cattle.

Jackson County farmers fill an emergency trench silo with fodder.

When the analyses of this fodder crop—all the nutrients of which have been retained within the stalk—were laid before Director Wallace Crossley, of the Missouri Relief and Reconstruction Commission, fodder buying was adopted as one of the State relief projects. Mr. Crossley's commission put into effect a plan to buy 150,000 tons at approximately $7 per ton, shredded and baled. Agents of the commission started on this million-dollar fodder buying program during the last week of August, confining their operations to areas not having enough livestock to use this forage locally and contracting to take the fodder when thoroughly cured, shredded, and baled.

With most of the State's fodder crop standing in the shock on September 15 the college centered its educational campaign on the necessity of thoroughly curing this material, then shredding or otherwise processing it, and finally putting it in safe storage protected from the weather.

"Missouri empty corncribs provided ideal storage for this material," says Dr. Etheridge, "since adequate ventilation was there combined with weather-tight cover. The greatest obstacles to the success of the campaign to save this crop were (1) the difficulty of getting farmers to realize how great its feeding value really was and (2) the difficulty of getting it shredded and into safe storage in a region where farmers were neither accustomed to this practice nor provided with adequate machinery."

In this emergency the college recommended the use of fodder shredders wherever possible, with the assurance that other types of feed cutters, ensilage cutters, or even threshing machines could be used successfully. In using the threshing machine most of the concaves were removed and the fodder merely torn into strips to facilitate complete curing and convenient storage.

The importance of the fodder shredding and storage campaign becomes all the more apparent when it is stated that only 4 percent of Missouri's farmers have permanent silos, with possibly an equal number using trench silos, papersack silos, and even empty cisterns during this emergency. The product from fully 80 percent of the State's cornfields this year must be saved—if saved at all—as fodder, cured thoroughly and stored in barn, crib, shed, or stack. So urgent is the feed situation in the State as a whole that even farmers who have little or no livestock left on their farms have been persuaded to cut and cure their fodder so that it may be moved to farms where it is needed.

New Measures of Farm Income and Prices

TWO METHODS of measuring the agricultural industry as a whole are being used by the Bureau of Agricultural Economics; first, estimates of income; second, index numbers showing change in farm prices. During 1934 two important forward steps have been taken with regard to such estimates.

As a new measure of income, a monthly estimate of cash income from farm products marketed has been issued since January 1934. This estimate gives a better measure of farmers' income from month to month, than has been obtained heretofore. No monthly estimates were made in the past, such estimates being confined to annual analysis of the values of total crops of each year. These monthly marketing income reports have been estimated for earlier years back to 1924. These monthly marketings when shown by index numbers cover the principal groups of farm products by months for each year since 1924. This series gives a very good picture of the seasonal variation of farm income as well as the yearly average trend. As illustrated by the chart on income from sales of farm products this series of estimates is on a calendar year basis and covers the marketing of 37 of the more important agricultural products which ordinarily constitute about 90 percent of all cash income received by farmers from the sale of products. These estimates meet the demand which has been growing for a number of years for monthly estimates of income on a calendar-year basis.

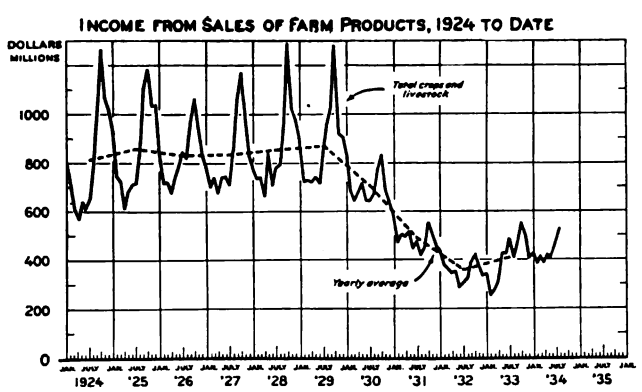
It is important to properly distinguish these estimates from the other series previously issued annually by the Bureau of Agricultural Economics. The other series which can be identified by the title of "Income from Farm Production" instead of "Marketings" is based on farm value, gross income and cash income of the production of crops and livestock in the calendar year. These estimates of gross production are published for each State and each crop and class of livestock, and show the details of distribution of the value of various crops for each State. Similar analysis was made for earlier years so that there now are available estimates in considerable detail back to 1924 and estimates of the single item "gross" income back to 1909.

Adequate information is necessary for the adjustment of agriculture. Knowing this, the Agricultural Adjustment Administration and the Bureau of Agricultural Economics have been making every effort to improve and strengthen available information on which are based parity prices and the whole adjustment program. Many trained economists are constantly studying these figures. Some improvements recently made in the measurement of farm-income prices which are described in this article will be of special interest to extension agents.

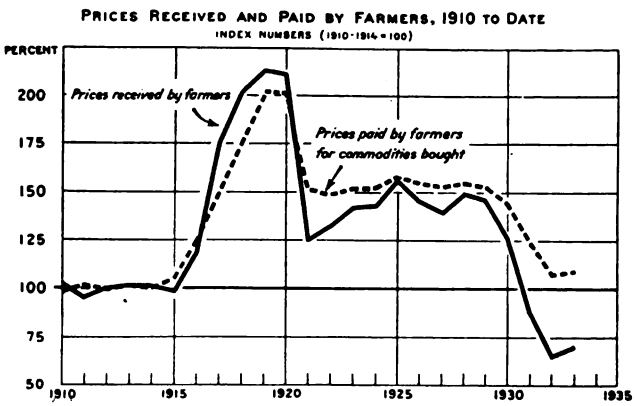
Using prices of farm products as an indicator of changes in purchasing power of farm products, the index series of prices received by farmers has been quite generally used as a measure of farm prosperity or depression. In the Agricultural Adjustment Act the index number was recognized when it was made the basis of estimating "parity" or the relationship of prices farmers receive to prices they pay, compared to the same relationship in the base period 1910–14. The index number issued by the Bureau until September 1934 has been developed gradually since 1924, on the basis of the best available farm prices. As the price-gathering facilities of the Bureau expanded, however, it was recognized that this index was no longer fully representative and should be revised. Beginning in 1931, utilizing the 1930 census data, this revision was started and was brought to a completion in 1934. The price series which have been revised were utilized in calculations after the Agricultural Adjustment Act was passed.

This revision presents new price series for dairy products and tobacco and adds a group of truck crops. The weights for marketings are changed from a base of 1918–23 to a base of 1924–29. The new index covers 34 major farm products and 13 commercial truck crops, whereas

(Continued on page 158)



The tendency to market a large proportion of most crops soon after harvest results in a marked seasonal variation in the monthly cash income of farmers. About 50 percent of farmers' cash income is usually received in the last 5 months of the year.



The revision of the index of prices received by farmers changes the relationship to prices paid only slightly. It reduces the disparity in 1925 and also since 1929. The low point in 1932 under the revised index is not as low as was shown by the old index.

Citrus Fruit Growers Organize Credit Association

PROGRESS of production credit in Florida—where the short-term agricultural financing program of the Farm Credit Administration has taken a firm hold—is marked by at least one outstanding performance of a production credit association. Florida has 25 of these production credit associations, but obviously it would be impracticable to relate here the experiences or accomplishments of all of them. One, however, the Bartow Citrus Production Credit Association, has made such a remarkable service record that it might be well to set forth briefly the manner in which this association has helped Florida citrus growers and show the reason for its prominence in the southeastern district.

The territory of the Bartow Association includes 16 citrus-producing counties, the association making loans only on citrus crops. By the latter part of August the association had handled nearly 200 applications for loans, aggregating more than $300,000. The majority of these applications were received and disposed of during a period of less than 12 weeks.

The extent to which the association has been of help to the citrus growers can best be understood when it is remembered that the past 3 or 4 citrus seasons have been anything but profitable for the orange and grapefruit grower. Low markets have been the rule rather than the exception and have been aggravated by rather severe droughts, augmented by tree pests and diseases, and general "tough breaks." This era of disheartening set-backs had left hundreds of citrus growers in acute need of financial help.

Financial Aid

Into this situation came the Bartow Association with its systematic method of relieving financial distress. Growers who had reached the end of their resources eagerly availed themselves of this short-term money. Groves that otherwise would have gone without sorely needed fertilizer and spraying received their food and immediately responded; tractors and other grove equipment, long in need of repair, were given prompt attention; dead and fruitless branches in drought-injured trees were pruned off by crews of laborers who once again found welcome pay envelops awaiting them; growers who had been bound to unsatisfactory marketing methods obtained funds with which to gain selling freedom. In short, life in the State's citrus belt took on its oldtime customary activity. Production credit was proving its worth.

The Bartow Association is fortunate in the personnel of its board of directors. All of these men—seven in number—are active citrus growers and prominent in the industry's affairs. In fact, they are men who have had many years of experience in citrus growing and hence are well fitted to handle their job of helping their neighbors. It would be pointless to tell of the Bartow Association without explaining that a large part of its successful administration has been due to the fact that its secretary-treasurer, Sam J. Overstreet, has had considerable experience in agricultural credit work and consequently has been able to handle intelligently and capably the many complicated problems of financially assisting the citrus growers who merit such help. Secretary Overstreet can truthfully be said to be the primary "why" of the association's excellent record.

Agents Assist

Secretary Overstreet will tell you that hard work and genuine interest in helping the growers along sound financial lines are the real reasons that the association has made a name for itself. He quickly gives credit too, to the county agents in his territory whose help, he points out, has been a vital factor in the all-important job of acquainting the growers with the fact that production credit is available to them. The recital of how his association forged ahead and of the help given it by county agents can best be told in Overstreet's own words.

"One of our earliest problems", Overstreet says, "was to inform the citrus growers of the workings of our association, who were eligible for loans, and how to proceed. We first contacted each county agent in our territory and explained to him in detail how the association would function. We explained also what the qualifications of a borrower must be as well as the type of borrower with whom we wished to deal. What we meant was that the eligible borrowers must be individuals, partnerships, or corporations whose financial affairs were not such that they would be unable to give adequate security for their loan and also that they must be persons or concerns who consistently honor their obligations.

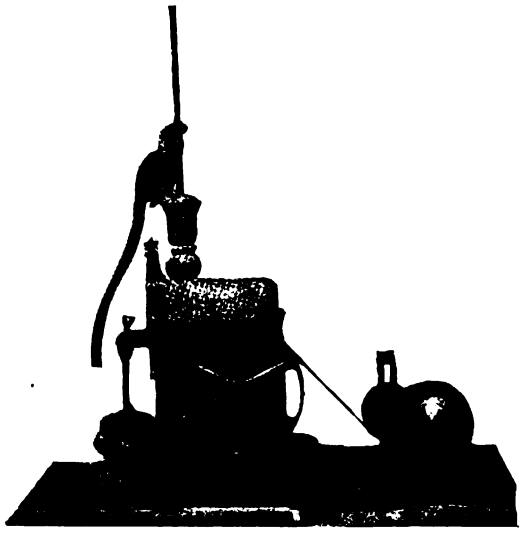
"We then asked the county agents to call special meetings of citrus growers in their respective districts so as to give us an opportunity to explain the workings of our association. These meetings proved to be effective and satisfactory methods of acquainting the growers with both the purpose and the procedure of the organization. About 25 of these meetings were held in this manner, the attendance at many of them indicating a genuine and intelligent interest on the part of the growers.

Meetings Held

"The county agents tell us that the meetings have been extremely helpful to them, in that only growers who are eligible for loans have sought their assistance and advice in making applications for loans. From our own viewpoint also we find that the association has been saved considerable time and expense by this method of contact, as practically all the applications we have received have come from eligible borrowers who knew and understood our collateral requirements and general procedure. In view of the fact that this phase of our work was brought about largely through the efforts and whole-hearted cooperation of our county agents, we cannot help but express our sincere appreciation for what they have done. They have reason to be proud of the part they have played in helping develop the Farm Credit Administration's production credit program in Florida.

"We do not contemplate lending more than a half million dollars this season. We are concerned primarily with making only sound loans that will maintain our stock in an unimpaired condition. We have endeavored, and we believe successfully, to deal only with growers who expect, and who are in a position, to repay their loans in full on or before the date due. We believe this is the only method by which a sound and permanent association can be built. Eventually, of course, the stock will be owned exclusively by the growers themselves, this being the purpose and plan of the Farm Credit Administration program."

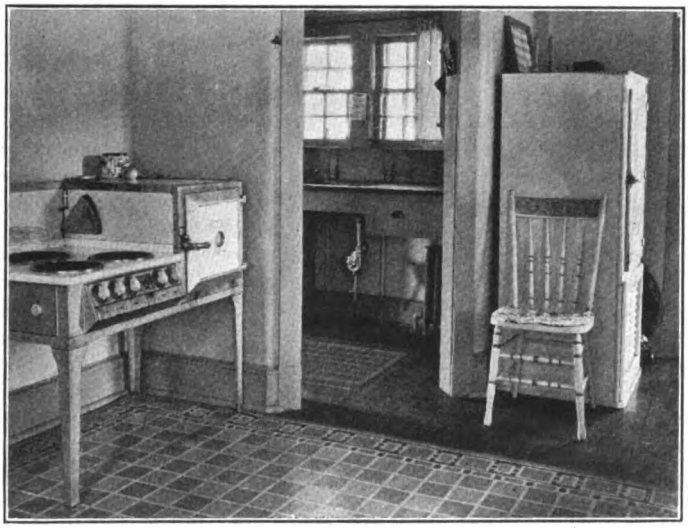
Nine Years of Rural Electrification



Modern convenience for the farm and home.

NEW HAMPSHIRE leads the Nation in percentage of electrified farms, according to the latest survey of the Edison Electric Institute. The figure is 61.3 percent, which is a lead of only one-tenth of 1 percent over California. Approximately 1,200 miles of rural electric line now carries electrical energy to nearly 10,000 farms in New Hampshire.

This is the accomplishment of organized work in rural electrification initiated in New England in 1925 by the National Committee on the Relation of Electricity to Agriculture in cooperation with the New Hampshire Experiment Station, New Hampshire Farm Bureau Federation, seven representative New Hampshire farms, and public-utility corporations throughout New England.



Electrical appliances in the farm kitchen aid in the preservation and preparation of healthful foods.

One of the first discoveries in this new field was that the farmer's cash share of the cost of the line extension to his farm frequently drained his ready capital so that he had little left to wire his premises and develop uses for the current. Out of this defect grew the farm bureau 5-year plan which provides for a minimum monthly guarantee for 60 months, sufficient to protect the company against loss while the subscriber is installing household and farm equipment and building up his current consumption to the point where the extension line is self-supporting.

During the early years of this rural electrical development, research was conducted on seven farms in different sections of New Hampshire. These were selected as representative of dairy, fruit, poultry, and general farming but were considerably above the average in productiveness, man power, and industry, enabling the investigators to try out a greater variety of operations. They were equipped with 60 major and 40 minor pieces of equipment covering 36 or more distinct operations and involving 60 or more different makes. Each piece of equipment was metered to provide individual monthly records of current consumption. In some cases comparative tests were made with other forms of power.

The aim of this research was to determine what percentage of human, animal, and machine labor on these farms could be profitably performed with electricity as energy, what appliances could be economically used, how much of an electric load could be built up on representative New England farms, and whether this would pay adequate returns on lines extended into rural sections. The result was the finding of a very considerable amount of work that electricity could profitably do on farms and the electrifying of about 60 percent of the farms in the State.

During the first 5 years on the test farms, the use of electricity increased an average of 228 percent per farm. Of the equipment which the farmers bought, 65 percent was put into their homes and 35 percent used for farm operations.

The farm women were particularly appreciative of the coming of electricity. One in Grafton County, New Hampshire, wrote "Electricity now lights our house and barn, milks the cows, washes and irons our clothes, and cooks our meals. Our electric radio brings us the voice of our President, concerts, lectures, and entertainment. A 1,000-watt sun bowl helps to heat the house and also dries our hair. The children undress before it. Heat is instantly available when we reach home, tired and cold from a long drive. With the aid of electric appliances we accomplish more; we live better; and in all probability we shall live longer."

The use of electricity for light, heat, and power usually results in lowered production costs and relief from monotonous routine, raises the standard of living, and develops pride and renewed energy through the use of more modern equipment and methods.

W. T. Ackerman, of the New Hampshire Experiment Station, has been in charge of the research phases of the project. J. C. Kendall, director of the Experiment Station; F. A. Belden of the Edison Electric Illuminating Co. of Boston; and George M. Putnam, president of the Farm Bureau Federation, were three of the more active members of the project committee.

Publications on this project include the preliminary report issued at the close of the first 2 years' work, a research bulletin on electric dairy cold storage, a circular on building such a storage, a research bulletin on electric household refrigeration, and a research circular on electirc laundry equipment, and a 6-year final report.

THE first man in Arkansas to pay his rehabilitation debt under the rural rehabilitation program of the Federal Emergency Relief Administration did it with 900 cans of wild plum preserves.

Pastures for Eastern Kansas

PASTURE acreage in 12 eastern Kansas counties increased from 1,723,589 acres in 1924 to 2,074,634 acres in 1929. The difficulty with this indicated increase is that it is due to the increase of submarginal land which has been abandoned. In its present state, this so-called pasture is worthless, yet taxes must be paid on it.

The situation in those 12 counties is representative of much of eastern Kansas. Overgrazing, neglect, and excessive breaking up of native sod are listed by extension agronomists as being responsible for the poor condition of many eastern Kansas pastures.

During the past 2 years, the Kansas Extension Service has been carrying on a pasture-improvement program in this region of the State. As a result, the old "sod buster" plow, once a symbol of progress, has become a symbol of a type of agricultural expansion much overdone.

This program has as its main features the elimination of overgrazing, seeding of crop land to pastures, reseeding of depleted pastures, seed control, fertilization, and pasture management. Under the heading of management, the agronomists refer to the use of supplementary pasture crops, rotation grazing, and delayed spring grazing.

The pasture gospel is being carried to farmers through leader training schools, local meetings, result demonstrations, the press, and radio.

Additional stimulus has been given to the program through the cooperation of the Kansas City, Mo., Chamber of Commerce with the extension service in carrying on a pasture-improvement contest. This contest offers, each year, 10 gold medals and $270 in cash prizes to eastern Kansas farmers. A new division was added in 1934 dealing entirely with the use of contracted wheat and corn acreage for growing pasture crops. Although recent drought provisions, liberalizing contracted acreage rulings, have lessened interest in that phase of the contest to some extent, agronomists are of the opinion that agricultural adjustment and pasture improvement will work together very well in eastern Kansas.

Altogether, the pasture-improvement program has met with considerable success. Farmers are realizing more and more the need for more and better pastures. There has been some difficulty encountered because of lack of money with which to purchase seed. However, several good result demonstration plots have been established, and interest over the entire eastern section of the State is increasing.

Since the A.A.A. programs have been adopted, the extension service has been encouraging the planting of contracted corn and wheat acreage to permanent pasture. To solve the problem of lack of seed, the leaders in each county are being encouraged to sow their contracted acreage not to mixed grasses for pasture, but to single grasses for the sole purpose of seed production.

"Scars on the face of nature" is the phrase used to describe the ill effects of continuous cropping. Nature created the landscape so that it normally has a pleasing effect upon the eye. Man has abused the soil by excessive cultivation to such an extent that no matter which way you look, the hillsides and slopes are gullied, and the soil is badly depleted.

Much land in eastern Kansas was once fertile, but now is almost worthless. Nature's way of remedying this situation is to grow pasture grass on these areas.

That is the reason the extension service is carrying on an extensive program for increasing pasture acreage in the eastern section of the State. Agronomists in the service believe that the present acreage of 6 million can well be doubled.

The extension service is advancing a program whereby the scarred and gullied slopes may in time be covered with grass, a check made to the washing of valuable topsoils into streams and rivers, and restoration be made of grazing capacity of Kansas pasture lands.

Good Business at Curb Market

The Fort Smith Arkansas Producers' Club Market recently celebrated its fourth anniversary sales day with an attendance of more than 500 customers. During the 4 years the curb market has been in operation, 544 different farmers from eight Arkansas counties near Fort Smith and two Oklahoma counties have sold products with a total value of $88,560.32, according to W. B. Proctor, county agricultural agent, North Sebastian County.

Since the curb market was organized it has been running 3 days each week, and during that time the average sales have amounted to $162.79 per day, or $7.19 per person selling products on the market each market day.

Ninety-two percent of the money received for farm products at the market was spent in Fort Smith for staple products such as hardware, clothing, shoes, furniture, automobile accessories, staple groceries, and other miscellaneous articles, according to replies from a questionnaire Mr. Proctor distributed among the producers.

The Fort Smith Producers' Curb Market was organized by 31 North Sebastian County farmers in May 1930, and the annual sales have ranged from $14,623.31 in 1932 to $31,153.76 in 1930. Last year's sales showed an upward trend and amounted to $5,000 more than the total for the previous year, with farmers selling $19,687.64 worth of produce in 1933. If it were not for this outlet, most of the produce sold at the market would be a total loss to the farmers.

Each market day, patrons of the market are given a list of suggested prices, in line with other produce prices, for the various products they have for sale. The people of Fort Smith demand quality fruits, vegetables, meats, flowers, poultry, and dairy products fresh from the farm, and the demand has been greater than the market has been able to supply.

During the 4 years the market has been in operation there has been a marked improvement in the quality of products. Farmers are now familiar with trade wants, and are striving harder to produce the kind and quality demanded by the people of Fort Smith, declares Mr. Proctor.

REPRESENTATIVES from every major agricultural organization in Louisiana met recently at the Louisiana State University under the auspices of the Louisiana Farm Bureau Federation. They agreed to coordinate all of their activities so as to present a united front with regard to important matters relating to agriculture.

Instead of forming a State agricultural council as was at first proposed, those attending the meeting decided to add members to the executive committee of the Louisiana Farm Bureau and to allow the executive committee to decide the major policies of the different organizations.

The organizations represented at the meeting were the American Sugar Cane League, Jersey Cattle Club, Louisiana Potato Association, American Rice Growers' Association, Louisiana Farm Bureau, American Cotton Cooperative Association, Louisiana Dairy Association, Louisiana Sugarcane Producers' Association, and the following representatives of the Louisiana State University: Dean J. G. Lee, Dr. C. T. Dowell, and J. W. Bateman.

Farm Practices That Helped in an Emergency

To what extent have extension practices adapted to normal seasons been of benefit during recent unfavorable weather conditions? Here are offered some concrete examples of how certain phases of the regular extension program proved of real value in safeguarding farm families against extreme losses and privation.

Subsoil irrigation with home-made tile has saved many a Texas garden

Drought Defeated by Texas Demonstrators

"IN GENERAL, it may be said that those farmers and ranchmen survived the disaster best who were in the habit of conducting their affairs with the aid of what has been learned through scientific study and experiment", observes Minnie Fisher Cunningham, Texas extension editor. To prove her point Mrs. Cunningham cites first the story of the pantry demonstrators.

"Here is a typical story from Haskell County in the plains, where in spite of the drought, Ruby Stodgill canned more than 100 quarts of vegetables besides having fresh vegetables for the family and some to give to her neighbors. She gathered 1½ bushels of onions, 100 cantaloups, a gallon of cucumbers, and large amounts of radishes, lettuce, beets and squash.

"A summary from Navarro County in central Texas shows 96,580 quarts of food conserved by home demonstration club women in the county.

"Mrs. J. E. Ferris, of Archer County, in the north Texas area, canned 236 quarts of fruits and vegetables, 33 quarts of pickles, and 60 pints of jellies and jams. Her garden was made without subirrigation, but the soil was thoroughly cultivated and every means used to conserve moisture.

"By June 30 Mrs. Herman Schneeman, Tom Green County in west Texas, canned 470 containers of meats, vegetables, and fruits for her family of three. This more than fills her canning budget, which calls for 450 containers.

These reports all come from counties which were early affected by the drought. They are not selected as being exceptionally good but as typical. There are hundreds like them and many better. It requires no imagination to perceive that the tables where these ladies preside over the coffee urn are better served than are those where no systematic attempt was made to plan and assemble the year's food supply when the season was favorable.

But don't think that mention of a "favorable season" means dependence on having such a season. In sections where there is a late spring, home gardeners made 4,116 hot beds last year; so that they and often their neighbors could have plants which were started early. Subirrigation and even "gyp" water, or water from the kitchen sink, can be used this way without harming the plants.

So many home gardeners have put and are putting down a hundred feet of the home-made concrete tile, which is a cheap and successful way to irrigate a small patch of garden when water is scarce, that any figures used in this article would be out of date by the time this is published. And so tantalizing did it prove to see these green garden spots growing in the midst of the drought-stricken land that relief authorities turned their attention to the matter and with relief labor constructed tile for relief gardens.

One of the most ambitious of these ventures was in Scurry County on the Plains where 4,000 tile were made and put down. Another was in Hemphill County in the Panhandle where a subirrigated plat 50 by 150 feet kept on producing vegetables in the face of complete disaster to other green stuff all around the region. There may have been others equally as large and many smaller.

Good seed justified itself too under the fiery testing of the drought of 1934. One J. J. McCarthy, of Cameron County, testified that an acre of tomatoes from good seed gave him an income of more than $200 better than that yielded by an acre planted with cheaper seed.

In Haskell County common red oats produced only 30 bushels per acre against 60 bushels of Nor-Tex oats and 50 bushels of the Spivey variety; but there was another factor in this difference besides

Fodder corn planted as a drought emergency crop on the Minnesota farm of Edward and Anthon Huseth.

Investment in Extension Practices Paid Dividends When Most Needed :: ::

Trench silos for saving feed and home canning to insure the winter food supply for the family have been much in evidence this fall.

good seed. Those Nor-Tex oats went on land where green cotton was plowed under last year in the plow-up campaign.

Those who deplored the wastefulness of that procedure would be comforted if they could have access to county agricultural agents' reports this year. Over and over again comes the same story. This is a sample: "Walter Walker, Unity community in Lampasas County, told the county agent that he harvested 66 bushels of oats per acre on land where he plowed under cotton last year and only 40 bushels per acre on the land that grew grain last year."

And here is another, "Farmers continue to profit from the cotton plow-up last year, according to E. B. Isham of the Deep Creek community in Shackelford County. Mr. Isham reported a yield of 65 bushels of oats per acre on 10 acres of land where the cotton was plowed under last year and only 10½ bushels per acre on 15 acres of similar land."

D. F. Eaton, county agent of Shackelford County, also reported that F. W. Alexander had an average yield of 76 bushels of oats per acre on 110 acres of last year's cotton plow-up land. From every section of Texas came similar reports showing the value to the land of plowing under this green and growing crop. Apparently, instead of Providence frowning upon this practice, as was threatened, it met with an especial blessing as all good husbandry seems to do.

Two more of the practices that the drought brought into sharp relief as good and profitable were the trench silo and terracing. County agricultural agents' reports for June, July, and August were full of stories of farmers and ranchmen who had put their drought - deteriorating corn, or grain sorghum, or even grass into such silos and saved themselves a total loss while providing for their livestock a feed which they prefer above many others.

Minnesota sweetclover harvested for seed instead of being plowed under for summer fallow.

Junius Furrh in Harrison County in east Texas put his corn in a trench silo. His corn was drying up and would not make any grain, but by making sileage out of it he has a good supply of roughage for his cattle. George McClaren filled his trench silo for the fourth time. He was still feeding silage that he put down last year when he began filling the trench again this year. Pasture shortage did not bother his dairy business this year; the shorter the grass got the more silage he put out for the cows. Webb Rogers is filling his silo for the fourth time also. He states that he can grow and put down corn silage at $2 per ton.

The county agricultural agent in Brazoria County reported that there were 2 trench silos in his county in 1932 and 75 in 1934, with about 150 tons of silage put down in 1932 and 11,250 tons this year. In Atascosa County the agent persuaded John Kopecky of Pleasanton to dig a 30-foot trench and save 5 acres of feed that was burning up. Mr. Kopecky thought that the feed was so satisfactory that he has dug a 125-foot trench and intends to put down all his fall-raised feed. Stories of trench silos come from every section of the State, indicating that the method is usable in different climates and soils.

Terracing at this late date, needs no special explanation. Texas, chiefly through the leadership of the Extension Service, has put nearly 7,000,000 acres under the protection of terracing and has no idea of stopping until the whole job is done. Even last year, a year replete with emergency jobs, county agricultural agents broke all records with the number of individual farms that had received some help on terracing. The valuation placed on the 1933 terracing done on 15,465 farms in Texas was $1,814,562.

Terracing values were subject to pretty good proof last year in the cotton plow-up. Time after time a terraced field brought its owner a greater return than surrounding acres when rented to the

Government because its crop was obviously so much better than that standing on the unterraced land. This year the drought tested the terraced fields and found them good because they had conserved every possible bit of moisture. There isn't a section of the State that hasn't provided a story of crops made on terraced land while the adjoining unterraced fields went bare.

And so we have the tale of the things which showed up as golden successes against the black background of the year's disaster.

Father and Son Outwit the Drought

The farming operations of Anthon Huseth and his father, Edward Huseth, give a good example of how many northwest farmers are using technical knowledge obtained from the United States Department of Agriculture and the Agricultural Extension Service of the University of Minnesota, coupled with industry and good common sense, to meet successfully the drought emergency. Edward Huseth, the father and one of several Huseth brothers, who have made homes and raised fine families in Grant County, Minn., is owner and operator of a 266-acre farm a few miles south of Elbow Lake in Grant County. Anthon owns 80 acres adjoining his father's farm and lives with his father. They operate their land as one unit. The West Central Minnesota School of Agriculture at Morris, which is a branch of the Department of Agriculture of the University of Minnesota proudly numbers Anthon as one of its graduates.

The usual crop rotation on the Huseth farm consists of 1 year of corn, 1 year of barley followed by 1 year of barley, oats, or wheat, seeded with sweetclover, the sweetclover being plowed under in May or June and the land summer fallowed for 1 season in preparation for another corn crop. Acid phosphate is applied occasionally, usually before wheat or corn. This rotation is varied, of course, to meet conditions which arise from time to time. It is this ability to vary the rotation to meet existing conditions, the good state of fertility maintained by plowing under sweetclover and applying phosphate, and especially the conserving of moisture through summer fallowing that have put the Huseths in a position to keep their farm on a paying basis even during an exceptionally dry season like this.

The Huseths have been regular readers of the various bulletins issued by the Extension Service. Anthon has made good use of the knowledge gained at the school of agriculture. In particular, they have been leaders in adopting new varieties of grains which have been introduced by the agricultural experiment station in recent years. The farm is covered by a wheat-allotment contract, by a corn-hog reduction contract, and eight head of cattle were recently sold in the drought emergency program.

In an average year there are 30 or 40 acres summer fallowed on the Huseth farm. In 1933, 70 acres were fallowed because of the low price of grain and the shortage of moisture. When, in mid-June of this year it became apparent that a real shortage of hay and other feed was faced because of the extreme lack of moisture, and when the Agricultural Adjustment Administration relaxed its rulings on the corn-hog contract to allow the planting of unlimited acres of fodder corn, the Extension Service urged upon farmers the wisdom of planting various types of emergency hay and pasture crops. The Huseths responded by taking a considerable acreage of their summer-fallowed ground for that purpose. An accompanying photograph, taken August 16, shows Anthon and his father standing in a splendid piece of fodder corn, which was planted on July 5. In the background can be seen three stacks of millet hay, which contain between 12 and 15 tons of good forage which was produced on 6 acres of land.

Another piece of land which was to have been summer fallowed produced a heavy growth of pigeon grass. Because of the shortage of hay, this grass was cut, producing 8 or 10 tons of good forage. To be sure, the Huseths have been fortunate in that their farm has been in a district which had the benefit of several local rains in late June and early July. However, some of the neighbors who have had as much rain, some even more, do not find themselves in as satisfactory a position as these men who have had the ability to put good technical advice to real practical use.

The second illustration shows a field of sweetclover cut for seed. This is a 30-acre field which was to have been plowed under and summer fallowed. As a result of the extreme drought of early spring the clover blossomed out when it was less than a foot tall. The stand was rather good, however. On about June 15 this clover was clipped off and left on the ground, rather than plowing down as would have been done in a normal year. The latter part of June brought one or two rather good rains, and the clover was cut for seed. The stalks are not very coarse, and considerable grass is held in the bundles, so that it is planned to use the straw for roughage after the seed has been threshed out.

One crop, which Anthon Huseth has produced this year, will provide a good cash income. Last spring the agronomy division at University Farm, St. Paul, released for the first time a new variety of spring wheat named Thatcher. This wheat is as rust-resistant as, and a little more productive than, Marquillo, the variety being widely grown at present. Furthermore, it is as desirable for milling and baking as the older and established variety. Marquis. This last characteristic was not possessed by Marquillo. Anthon bought 12 bushels of Thatcher at $1.50 per bushel and seeded it on 11½ acres of land which had been summer fallowed the year before. Before seeding he top-dressed the field with 100 pounds of acid phosphate per acre. Two hundred and forty-seven bushels of Thatcher were threshed and certified as to purity by the Minnesota Crop Improvement Association. This makes a yield of 23.2 bushels per acre, which is a good yield for any year and really remarkable for this dry season. Most growers of the new wheat this year were not so successful and the demand for seed of this variety should be good next spring.

Extension Advice Aids Pembina County Farmers

"The drought has changed farming practices to a marked degree in Pembina County, N. Dak., this spring and summer", reports H. Earl Hodgson, agricultural adjustment agent. Seedsmen estimate that the planting of emergency pasture and forage crops has increased 25 percent over last year. This increase is a result of a determined effort on the part of Pembina County farmers to combat the drought along lines recommended by the Extension Division. Trench and pit silos are being dug to make feed supplies go as far as possible.

They have poisoned grasshoppers to save feed and crops and are practicing crop rotation to conserve moisture.

"I'm harvesting one of the finest fields of wheat this year that I ever pulled a binder into", reports Herb Simons, a farmer living near Bathgate, "and I would like to let you fellows know I wouldn't have got the seed back if we had not poisoned the hoppers early this spring. Why honestly, Mr. Hodgson, those hoppers were so thick along the fences and roadsides, I didn't think we had a chance; but we used that Government bait like you told us to, and we sure got results."

Pembina County is harvesting a drought-hit crop this year that is 70 percent of normal. Without the grass-

(Continued on page 159)

(Above) County Agent O. H. Phillips, formerly of Stanly County, N. C., examines a sample of Korean lespedeza in that county.——— (Right) County Agent G. C. Hodge looks over a field of *Lespedeza sericea* on a Florida farm.

The Spread of the Lespedezas

Every movement of any magnitude represents the efforts and sacrifices of many men; and so it is with the wave of lespedezas which has swept the South and parts of the Middle West to the great advantage of agriculture. A. J. Pieters of the United States Department of Agriculture, who has been associated with the introduction and development of lespedeza from the beginning, has reviewed this history in the following article written for county agents, who, as he says, have been so effective in "pushing these plants where they could be useful."

THE ANNUAL lespedezas have come to play so important a part in the agriculture of the South and as far north as southern Iowa that many county agents will be interested in knowing where they came from. This is the more true because no single agency has been more effective than the county agent service in pushing these plants where they could be useful.

It may be well to note here that the lespedezas are cultivated in the United States only; nowhere else in the world are lespedezas cultivated. This is the more interesting since the annuals we use here are oriental species. We have a dozen wild perennial species but none are useful.

So far as we know, common lespedeza was introduced early in the nineteenth century, probably at Charleston, S. C., or Savannah, Ga. The first plant was found in 1846 at Monticello, Ga. This was collected by the roadside and the species must have spread gradually, perhaps helped in its spread by the movement of troops during the Civil War. At any rate, it was all over Alabama in 1867; in South Carolina in 1866; in North Carolina in 1867; in Missouri about the same time; and in Tennessee in 1870. Long before 1880 it was known in Louisiana and in that year McGehee began to sell hay and seed.

Since seed has become commercially available, the common lespedeza has spread north until it is now naturalized as far as central Indiana. Of course the main area of usefulness for common lespedeza is still in the deep South. Farther north than North Carolina it seldom grows tall enough to cut for hay, but in many places it makes excellent grazing.

Improved Varieties

The history of the improved varieties is more accurately known than that of the common lespedeza. In 1912 Prof. S. H. Essary of the Tennessee Agricultural Experiment Station, observed that common lespedeza was widely variable and he started a program of selection. In the course of the work he selected a great many forms, all of which were discarded except his no. 76. This is a variety that grows more upright than the common and gives a larger yield. It has become the leading variety in central Tennessee and is extensively grown in certain parts of North Carolina. It is a late-maturing variety and unfortunately the seeds are indistinguishable from the seeds of common lespedeza.

The Korean was the next important variety introduced. Seed of this was received at the Department of Agriculture in 1919, and because the package was not addressed to any individual, it was passed around from hand to hand until the spring of 1921, when it was seeded at the Arlington Farm under F. P. I. No. 47027. It was at once seen that this was a new species of lespedeza and all the seed was saved for increase. The following year the Department of Agriculture produced 240 pounds of seed at Arlington Farm from one-fourth pound of seed and we began to distribute the seed to experiment stations and certain interested individuals. For several years after that the Department distributed 2,000 or 3,000 pounds of seed annually. Because of its early maturity it was felt that this variety was more suited to the belt of country including Virginia, Kentucky, and Missouri than it was farther south. Lespedeza was not grown very much in those territories because the common lespedeza is too small to be useful.

As was to be expected, people were slow to take hold of it at first but in the course of time—partly through the efforts of the county agents, partly because when the seed was first placed on the market it sold for more than 50 cents a pound—people began to take an interest in it. After it once got under way, it spread with amazing rapidity. In the

course of 10 years from the time the species was first introduced, it had spread pretty well over Kentucky, over the Piedmont of North Carolina, eastern Tennessee, central Missouri, northern Arkansas, and had been used quite extensively as far north as Champaign, Ill., and Lafayette, Ind.

Kobe Introduced

About the same time the Department introduced Kobe. The seed of this was obtained by J. B. Norton, near the city of Kobe, Japan, in 1919. Unfortunately, the office with which he was then associated was not interested in lespedeza at that time, and he took the little seed of Kobe he had to Hartsville, S. C., where he became connected with the Coker Seed Co. of that place. They grew seed for a few years but not finding a sufficiently profitable market, ultimately abandoned it. The Division of Forage Crops and Diseases obtained some seed from this stock and made several distributions, which resulted in the firm establishment of the variety particularly in Virginia, North Carolina. and western Tennessee.

While none of the varieties occupy anything like the acreage occupied by Korean, each one has its place and it is not wise to say, in any one intance, that one variety or another is better suited for a certain section, unless it has been tried.

About 1920, the Division of Forage Crops and Diseases procured some seed of *Lespedeza sericea*, which is a perennial plant with somewhat the habit of alfalfa. While this new species has not yet become well enough established to permit a final word as to its value, it is highly regarded in parts of Tennessee and North Carolina and has done remarkably well on the sour lands of the Ozark regions in Missouri. We believe that it is worth trying wherever alfalfa and red clover cannot be grown without excessive liming.

After this species had been on trial a few years at Arlington Farm, it was learned that Dr. Seaman Knapp, the father of the whole county agent system had sent some seed of this species from Japan as early as 1899. The plants had been grown at Arlington Farm for some time but workers at that time were trying to fit the land for alfalfa rather than to find the plants that would be adapted to the sour soils without liming. It is interesting to note that the first introduction of this plant which may become highly important, was made by Dr. Knapp, and I have found a notation in Dr. Knapp's handwriting made when he sent the seed to the effect that this looked to him as if it might be a good forage crop.

Work of Extenson Agents

I have indicated above that the county agricultural agents have been very important in the spread of lespedeza. It is impossible, of course, to name all the county agents who have been active in this work. There would not be room here, even if I knew them all. I want, however, to mention a few who have done outstanding work. Oscar Philips, formerly of Stanly County, now of Mecklenburg County, N. C., laid the foundation of improvement of Stanly County through common lespedeza. T. J. Broome, of Union County, N. C., also did a great work with this species. W. G. Yeager of Rowan County, N. C., and R. D. Goodman of Cabarrus County, N. C., have been active in developing Korean and Kobe. H. A. Powers of Henderson County, Tenn., has been one of the most active in pushing Tennessee 76, while Prof. Ralph Kenney of Lexington, Ky., has done more than any other one man to spread the gospel of Korean lespedeza in that State. Without the active assistance of the county agents, the spread of these varieties would have been much slower; but the county agents could not help seeing that these varieties had a value to their farmers and they were not slow in putting the advantages of lespedeza before the farmers of their counties.

Measuring Irrigation Water

Impressed with the great value of irrigation water by recent years of drought, farmers and irrigation companies in many sections of Colorado are planning to measure water more accurately by installing the famous Parshall measuring flume.

This flume was developed under the supervision of Ralph L. Parshall, senior irrigation engineer for the Colorado Agricultural Experiment Station and the Bureau of Agricultural Engineering, of the U. S. Department of Agriculture. It has been installed during recent years in many foreign countries as well as in several States in this country.

A number of farmers in northern Colorado, particularly ranchers in North Park, are now installing these accurate and comparatively inexpensive measuring flumes in irrigation ditches in preparation for next year. Tests have shown that these flumes often will pay for themselves in a few days of use by actually delivering to the user all of the irrigation water to which he is entitled.

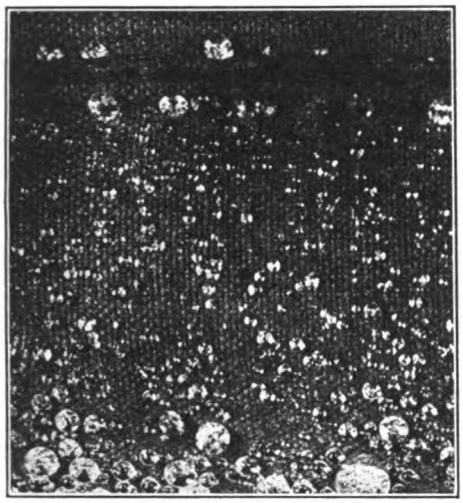
Many Parshall flumes are in operation in California, Utah, Nevada, Montana, Arizona, New Mexico, British Columbia, and Alberta. These flumes also have been installed in Peru, South Africa, Argentina, Honduras, and several hundred are in use on large sugarcane plantations in the Hawaiian Islands. Requests for information concerning the flumes have been received from China, Japan, Russia, and Italy. The flumes also are used in sewage disposal plants in Los Angeles and Pasadena, Calif.; Syracuse, N. Y.; Newark, N. J.; Providence, R. I.; and cities in South Carolina.

Agent Assists Students

There are 130 farm boys attending the Texas Agricultural and Mechanical College this winter on a self-help basis. They are living in farm houses that were vacant near the campus, and eating three regular meals a day from food furnished by themselves, their families, or by friends. The pantry shelves are filled with canned goods for their use this winter. Some of the boys were working in relief canning centers, and they took canned goods as pay; some of them actually canned the food themselves. The boys are divided into 12 groups. The cost per student under the plan ranges from $5 to $15 per month.

The county agricultural agents have been of help to more than one of the groups. In Houston County, C. E. Bowles interviewed boys in his county who could meet the entrance requirements and a group of 12 was organized. During the summer they planned their activities, canned their food, and collected odds and ends of furniture for their new home. A truck was obtained to transport the food and furniture to the school, and a young man and his wife went along to take care of the house and do the cooking. Each month the county agent takes a trailer load of food to the boys. Open houses were held in the home community at which offerings of food, furniture, cooking utensils, and other accessories were assembled.

FARMERS in Colorado have drilled more than 200 irrigation wells since the drought conditions became severe. W. E. Code, associate in irrigation investigations of the State experiment station, has advised farmers to make adequate tests before drilling in order to assure water in supplies large enough to be of value in irrigation work.



Porous hose in action; water seeping from sides and bottom of hose.

Porous Hose Irrigation Profitable

A CURSORY examination of maps or of weather reports would lead one to believe that Michigan would be one of the last States to need irrigation for crops. The Great Lakes almost surround the two peninsulas and the interior is dotted with thousands of lakes which range from mere dots on the landscape to 15 miles in length.

Both maps and weather reports are deceptive because in years of normal rainfall, there has been a deficiency of water in Michigan during the period of plant growth in many of the years since weather reports have been kept. Heavy rains in the fall and early spring are of little value in late July and August.

Most of Michigan has such an uneven surface that the western method of irrigation is impractical even where water supplies can be reached readily. The State's field crops are not of the type which give acreage returns high enough to make overhead irrigation attractive.

O. E. Robey, a pioneer in Michigan extension work, and an agricultural engineer, went to work on the problem of perfecting a means of furnishing water to crops by a method economical enough to appeal to farmers in general. The method which Mr. Robey perfected has now been under trial for 3 years in the field. Two of the years were nearly normal in rainfall, and the 1934 season saw Michigan go into the secondary drought classification.

The Robey irrigation method is simple, the essential of the system being a pump to lift and force water to a length of a canvas hose. In practice, iron pipe is used to connect the pump and the hose, and in some cases an iron header pipe long enough to reach across the side of a field is used.

The water supplied to the hose seeps through the pores in the fabric and soaks into the ground for a foot or more on each side. The hose is laid between crop rows, left long enough to supply the needed water, and then moved to the next row. Water can be carried over rather abrupt slopes. Heavier grades of canvas are used for the end of the hose nearest the pump and on slopes where the water is being carried up.

Many Michigan farmers have been able to buy second-hand pumps and piping and have kept installation costs at a minimum. The canvas hose can be made at home from 8- or 10-ounce duck by sewing strips with a lap seam. This hose is also manufactured commercially. The College of Agriculture has applied for a patent on the idea and has leased manufacturing rights, but Michigan farmers are permitted to make their own hose if they wish.

The results of the system can be best visualized by reading field reports of extension men. The yield data for 1934 are not available now, so the 1933 report of George Amundson, extension specialist, is used.

Mr. Parmalee, Allegan County, irrigated 15 acres of potatoes. He is the only man south of the Straits to obtain a yield of 400 bushels per acre. He says the equipment doubled his yield and improved the quality of the potatoes. His total investment in equipment was $300.

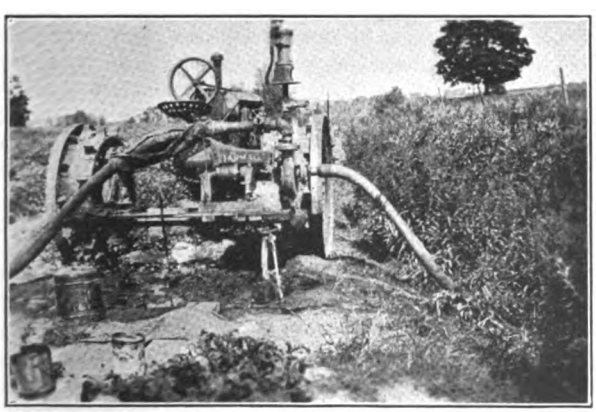
Mr. Pakes, Montcalm County, irrigated 12 acres, started late, and increased his yield about 100 bushels per acre.

Mr. Gray, Ogemaw County, increased yields 150 bushels per acre on 12 acres of irrigated potatoes.

One of the most startling examples of results from irrigation was on red raspberries on the farm of Mr. Yuill, Otsego County. Three acres out of a 28-acre planting were irrigated. The three acres yielded 6,000 quarts of berries; the non-irrigated 25 acres yielded 2,000 quarts. He now plans to irrigate 15 acres.

The Cadillac Potato Growers Exchange has asked the agricultural engineering department to help a group of growers plan irrigation systems so that their products can be marketed separately as high-quality stock.

Rainfall in Michigan in 1933 was nearly normal so the increased yields obtained could be expected in a majority of the crop seasons in Michigan. Conditions have been much different in 1934, but a report from one of the county agents shows how the porous hose irrigation system works in times of drought.



Pump installation, Mason Parmalee demonstration farm, Allegan County, Mich.

Moving hose to next row.

William Murphy, county agricultural agent in Macomb County, says, "Roy Stroup, a farmer living north of Mount Clemens, first heard of a canvas hose irrigation last year at our demonstration on a nearby farm. It did not take him long to see the worth of the idea, and although it was late in the summer he installed the system and made enough extra money on a few acres of potatoes to pay for his entire investment.

"Stroup was so enthusiastic about his irrigation system that he invited a reporter from the Mount Clemens Monitor and me out to his farm to see it in operation. It was a scorching hot day; there had been but two light showers in the past month. The countryside was burned a uniform brown, but not on Stroup's irrigated land, where a turgid hose was distributing warm water from the nearby river. From a luxuriant patch of strawberries, Stroup had marketed fruit at top prices and had already realized a total of $134 from a half acre. Nearby were several rows of unwatered plants, and he said that there had not been a quart of salable fruit from the entire stretch.

"The total investment of this farmer has been only $38. He went to a junk yard and bought some used 2-inch pipe. A second-hand centrifugal pump was 'picked up' for $20 and he already had a 3-horsepower, 2-cycle gasoline engine. Canvas hose was made to order at a city department store for $0.08 per foot."

Child Care in Oklahoma

Twenty-eight counties in Oklahoma are carrying a project in parent education as one of their major extension programs in home demonstration work. This project was established in 1930 at the request of rural parents for help in meeting the responsibility of the farm home in rearing healthy, wholesome children. E. Faith Strayer, specialist in child development and parent education, devotes much of her time to demonstrations before home demonstration clubs and to the preparation of informational material. Frequent conferences with county home demonstration agents, local leaders, and interested "demonstration" parents strengthen the program.

The most valuable results of the projects are intangible and immeasurable, yet reports show material gains in all phases of the work. During 1932 health examinations were made of 750 children, in 1933 of 1,609. In 1932, 454 physical defects were corrected, and in the following year, 1,464 corrections were made. Four hundred and eighty-three homes reported new practices in care and training in 1932, while 1,071 homes reported new practices in 1933. The number of selected books on the subject of child care and training which were read by parents almost doubled. The number of homes in 1932 in which furnishings were adjusted to meet the needs of the children was 340, this number increasing to 638 in 1933.

New Measures of Farm Income and Prices

(*Continued from page 148*)

the previous series included only 27 major farm products.

This revision does not change the individual price series now in use for "basic" commodities and does not change "parity prices" of these products. The revision of the dairy products prices was completed before the Agricultural Adjustment Act became law and was used in computing parity prices for these products.

The revised index numbers of all groups of farm prices combined range from 2 points lower than the old index in 1915 to 10 points above for the year 1928. (See chart on prices received and paid by farmers.) The new index number of September 1934 is 102 compared with 95 for the old index number. The index for cotton and meat animals remains practically unchanged; the index for grains is slightly higher. The old fruit and vegetable index is replaced by separate indexes; one for fruits and another for truck crops. Potatoes, sweetpotatoes, and dry beans have been added to a miscellaneous group in which tobacco, hay, and potatoes are the most important commodities. The revised index numbers for chicken and egg prices are from 2 to 3 points higher.

The most significant changes in the revised index relate to dairy products. For many years it has been recognized that this index number series was unsatisfactory. New data have been gathered by the crop estimates service so that the new index now includes four dairy products sold by farmers; namely, wholesale milk, butterfat, retail milk, and butter. The old index included only wholesale milk and butter. The addition of these prices to the dairy index lowers the series 2 points in 1920 and raises it a maximum of 11 points in 1932.

In the September issue of "Crops and Markets" in the general chart on the back page will be found a chart showing the revised and old index numbers together in a manner which shows the changes that the revision has made. The new index is being published in "Crops and Markets" and "The Agricultural Situation." The revised series for earlier years is available and is being prepared for publication in a separate printed book. Outlook charts which involve the use of index are being revised for use this fall in the General Outlook Conference.

Farmers Attend Credit Conferences

Extension workers in Georgia will have ample opportunity to learn of new developments in farm credit. Special emphasis was placed on the new farm credit organizations and facilities during the recent farm and home week. Representatives of the Federal Land Bank of Columbia, S. C., addressed conferences of Georgia farmers and extension workers on the loans available to farmers, explaining the operation and organization of the farm credit system. Open discussion followed, giving the farmers and agents an opportunity to learn how the loans might be applied to their credit needs.

Methods of improving farm income, developing markets, and efficient farm operation were discussed in view of their bearing on the repayment of loans. Extension workers have been active in aiding farmers to organize credit associations and in explaining the steps necessary to obtain the farm credit loans.

The University of Georgia and the College of Agriculture are offering regular courses in farm credit studies. Opportunity will be given students to gain actual experience in inspecting farms, in making appraisals, and in the determination of credit needs on individual farms.

Forty turkey growers in 11 Colorado counties have caponized about 2,000 young tom turkeys this season in an effort to develop a new and profitable phase of turkey production. Most of these birds have been caponized in demonstrations arranged by O. C. Ufford, Colorado extension poultryman, who first introduced turkey caponizing into the State last year.

The Cooperative Wool Growers of South Dakota handled well over 4 million pounds of the 1934 wool, between 4,000 and 5,000 growers marketing through the association this year. This is the record year since the association was formed in 1920.

New Film Strips

Five new film strips as listed below have been completed by the Division of Cooperative Extension in cooperation with the Bureaus of Agricultural Economics, Agricultural Engineering, Animal Industry, Biological Survey, Dairy Industry, Entomology and Plant Quarantine, and Plant Industry. They may be purchased at the prices indicated from Dewey & Dewey, Kenosha, Wis., after first obtaining authorization from the United States Department of Agriculture. Blanks for this purpose will be supplied upon request to the Division of Cooperative Extension.

Series 301. The How and Why of Pastures in the Northeastern and Corn Belt States. This series is designed to awaken an interest in pasture improvement and to supply information on common pasture problems; 56 frames, 45 cents.

Series 335. History and Development of Agricultural Implements and Farm Machinery. Illustrates the history and development of some farm implements and machinery; 54 frames, 45 cents.

Series 342. Diseases of Flue-cured Tobacco. Illustrates the more important diseases of flue-cured tobacco and should be useful at meetings of tobacco growers in the States of Virginia, North Carolina, South Carolina, and Georgia. Certain of the slides are applicable in other States, but the notes were written for the flue-cured tobacco district; 49 frames, 45 cents.

Series 346. First Lessons in Beekeeping. Illustrates standard equipment and a simple, practical method of procedure in handling bees for the production of honey for home use; 45 frames, 36 cents.

Series 351. The Screw Worm and Related Flies. Illustrates the methods developed by the Bureau of Entomology and Plant Quarantine for control of the screw worm and related blowfly maggots; 39 frames, 36 cents.

Revised Series

The following series have been revised:

Series 150. How to get Rid of Rats. Supplements Farmers' Bulletin 1533, Rat Control, and illustrates the damage done by rats and methods of control; 57 frames, 45 cents.

Series 305. Wheat Outlook Charts, 1933–34. Supplements the 1934 outlook chart report on wheat, and illustrates selected charts with brief titles. The explanatory notes should be supplemented by consulting the agricultural outlook report for the current year issued by the Bureau of Agricultural Economics and the States; 58 frames 45 cents.

Completed Localized Film Strips

The following two localized film strips were completed by the Division of Cooperative Extension in cooperation with county extension agents, specialists, and other extension workers. The photographs used were all local pictures, either selected or taken by the agents themselves.

Series 1137. The Home Demonstration Agent at Work (Maine); 42 frames, 36 cents.

Series 1138. Club Work in Cavalier County (N. Dak.); 43 frames, 36 cents.

Farm Practices That Helped in an Emergency

(*Continued from page 154*)

hopper poisoning campaign, using Federal bait, crop yields would have been low indeed. Extension entomologists noted a 30 percent infestation of grasshopper eggs in the total crop acreage. Local farmers who observed conditions believe that this estimate was rather low.

Fred Farrow, a farmer living northeast of Cavalier, is not a master farmer or an inspiring leader in his community. He doesn't work as hard as some of his neighbors, but he "uses his head", as the expression goes, and if he notices an agricultural practice that isn't bearing fruit he quickly discards it for a better one.

"Back in the early days we raised Fife and Bluestem wheats, but they didn't yield very well. Then we changed to Marquis, but the rust hit that pretty hard in wet years," Fred told me one evening while we were talking about farming, the weather, Secretary Wallace, and the Agricultural Adjustment Administration, and other things in general. "Then the North Dakota Agricultural College came out with this Ceres wheat, the stuff with the beards on it. I didn't try it at first. Instead I switched over to Reward wheat after Marquis, and that's mighty good in wet years, ripens before the rust hits it. But for the past 2 years I have been growing Ceres and Reward. I'm saving only the Ceres for seed for next season. Last year my Reward yielded 25 bushels to the acre and the Ceres 30. This year the Reward went 20 while Ceres went 28 bushels to the acre.

"Oh, no! I put both varieties on the same kind of land, sweetclover ground. Me for Ceres from now on; it doesn't seem to need as much water as the Reward does. The hoppers don't bother it so much either."

Mr. Farrow is an ardent enthusiast of the old school of soil scientists, believing soil tillage conserves moisture. Keep the soil well mulched on top and the air can't get down to the moisture, is his explanation.

Fred's main cash income is obtained from the raising of State and Government certified seed potatoes. Using an 8-year crop-rotation practice to conserve moisture and increase soil fertility, he gets yields of certified cobblers averaging 250 bushels to the acre, without the application of commercial fertilizer. Even this year, his 22-acre field will yield 150 to 175 bushels to the acre.

His crop rotation, based on his own experience and the advice of the county agricultural agent, is as follows: First year, barley seeded with sweetclover; second year, sweetclover; third year, wheat; fourth year, oats. He plows the field shallow in the fall. The next spring he disks early, cross harrows, plows 4 inches deep the first of June, double disks, harrows crosswise, and plows 6 inches deep in the fall. This plan conserves moisture and kills weeds. The sixth year he cultivates and harrows the field crosswise, then plants potatoes from the 15th to 20th of May. Wheat and then flax complete the rotation.

"I spread about 2,000 pounds of hopper bait on the farm this spring, during the last of May and the first part of June, in the pasture, along fence lines, roadsides, and on the hatching beds", continued Fred. "You know, in growing potatoes we have to watch out for grasshoppers. They spread mosaic fast. If a hopper takes a bite out of a diseased plant leaf, he can spread the disease to any number of healthy units. And that hopper poison sure saved my oats and barley this year. Got a yield of 20 bushels on the Swedish select oats and 25 bushels on the Trebi barley. I wouldn't have got the seed back if we hadn't stopped the hoppers."

Five hundred and fifty-four dairy farmers in New York are regularly keeping records of production. "The dairyman's change of attitude toward keeping records when milk prices are low is due to a desire for greater production efficiency", says C. G. Bradt, extension specialist in animal husbandry. This is the largest enrollment the club has had in recent years.

Motion Picture Equipment

A marked increase in the number of motion-picture projectors available to extension workers has taken place during the period 1922–33, as indicated by the following figures taken from a compilation of replies to questionnaires:

	1922	1933
Agents reporting	982	1,588
Projectors available	165	973

The States of Illinois and Iowa lead with 90 projectors each; Indiana, second with 76; and Ohio, third with 66. Other States ranking high are Kansas, 46; California. 42; Missouri, 41; Michigan, 35; and New York, 29. Since less than half the agents in the service reported on the 1933 questionnaire, it is probable that the actual total number of projectors accessible to county agents is considerably in excess of the 973 reported.

Of the reported projectors in 1933, only 5 were of the 16-millimeter width. In 1933, there were 113 of that size. Sound projectors had not been perfected in 1922. Four were reported in 1933. About 500 more agents answered the last questionnaire than replied to the earlier one.

The above figures indicate a healthy expansion in the use of motion pictures by extension workers and a growing appreciation of the value of the motion picture as an aid in furthering the agricultural and conservation programs of the Government.

Sound has added greatly to the value as well as to the interest in motion pictures. Several worth-while sound projectors are now on the market at reasonable prices and a library of sound films is rapidly being built up. Any extension worker contemplating the purchase of a sound projector should obtain the latest information from the Division of Motion Pictures, Extension Service, Washington, D. C.

THE attendance of farm women at the thirteenth annual farm women's camp at Jackson's Mill broke all previous records. There were 408 women from 36 of the 55 counties. About one-half of the campers were newcomers. Five of the women had attended all of the previous 12 camps. A new feature of this year's camp was the study of handicrafts. Many women were interested in this as a new source of income as well as a way to add beauty to the home.

LOUISIANA has a strawberry cooperative. It is farmer-owned and farmer-controlled and is made up of a central cooperative association with affiliated organizations at 11 shipping points in the berry-producing area. All of the associations are organized under identical cooperative charters, having met the requirements of the Federal lending agencies, and conforming with the Federal Cooperative Marketing Act and the Louisiana Marketing Act. It is believed that the total membership for the coming season will be approximately 3,000 producers. Some of the units have already signed more than 400 members. The association is planning to handle other commercial perishable produce.

WILD sunflowers, which grow in large numbers along the roadways in New Mexico, have been harvested and put into pit or trench silos as sunflower ensilage to help tide cattle over the shortage of feed due to drought. Other emergency feeds being saved are soapweed, Spanish-dagger, sotol, and beargrass. When these are cut in lengths similar to silage they make a good maintenance feed. Yucca is used after burning the dry leaves off and finely chopping the stem and tuft of green leaves. Even cacti are being utilized by singeing off the spines with a torch, after which the cattle eat them with apparent satisfaction.

National 4-H Club Radio Program

Annual Theme: 4-H Club Work Influences the Farm and Home

Twelfth Phase—4-H Leadership

Saturday, December 1, 12:30 to 1:30 p. m., Eastern Standard Time

My Club's Cooperative Undertakings_____ 4-H Club Boy Winner of Moses Leadership Trophy.

What My Club Would Like to Do for Our Community_____ 4-H Club Girl Winner of Moses Leadership Trophy.

How 4-H Clubs Develop Leadership Ability_ State Extension Worker.

Agriculture Under Rural Leadership_____ Federal Extension Worker.

National 4-H music identification test: Conclusion of the 1934 national 4-H music hour. The United States Marine Band will play a selected list of compositions chosen from the numbers played during the year. All 4-H club members and their friends will be urged to identify these compositions as they are played, by writing the name of the composition and the name of the composer. The correct list will be announced at the close of the broadcast.

PIONEER Farm Homes is the subject of a new educational illustrated film-strip series which the Division of Cooperative Extension has under consideration for use by 4-H clubs. Although some very interesting illustrations on this subject have been collected, a few more photographs or drawings of farm homes that have historic backgrounds are required to complete the series. It would, therefore, be appreciated if extension workers possessing such photographs would lend them for a short time to the Division of Cooperative Extension of the United States Department of Agriculture. They should be accompanied with a brief explanatory legend. The pictures would be returned if desired. Only prints of good quality would be suitable.

THERE are two wayside markets now being operated by farm women in Tennessee that have proved both successful and profitable. One is located at Gatlinburg in the heart of the Smoky Mountains and the other near Chattanooga on Signal Mountain. They are open every day and cater to tourist trade and people in summer cottages.

FROM 5,000 to 7,000 families on the tenant farmer lists are being rehabilitated by the Federal Emergency Relief Administration's program of rural rehabilitation in Alabama, Arkansas, and Mississippi. The average expense, covering land lease, equipment, and livestock, for each family ranges from $86 in Mississippi to $126 in Arkansas.

NEEDED—A Unified Land Policy

H. A. WALLACE
Secretary of Agriculture

Careless Policy Pursued in Past

THERE is a need for a unified, consistent national policy of land use, a policy that will test the use of every acre in terms of the general welfare. During the past 150 years in the United States we have managed our lands in ways that indicate destructive possibilities. Over large areas we have made no real effort to restore to the soil the fertility which has been removed. Year after year, we stood by while our public lands were despoiled. What happened to privately owned lands, meanwhile, was nobody's business. All of this has been careless, thoughtless, wanton, and to the disadvantage of nearly every one.

Action Now Imperative

WHEN this administration came into power, it was no longer possible to content ourselves with research on the problems of land use and hopeful advice; there had to be action. Partly as a result of drought, partly as a result of adjustment programs, the surpluses have been in most cases disposed of, and that problem now becomes one of controlling expansion; on the problem of submarginal areas, on the necessity for providing new opportunities for the unemployed, we have taken certain tentative experimental steps.

Most of the activities now under way can be summarized about as follows: (1) We are inducing producers of major crops to keep some of their land out of production temporarily, but we are encouraging them to use this opportunity to build up fertility on these idle acres; (2) we are buying several million acres of submarginal land (submarginal for farming) to be kept out of commercial production permanently; (3) we are offering thousands of distressed families, both rural and urban, an opportunity to relocate in areas where they can at least produce their own food, and eventually obtain their cash income from industry; and (4) we are trying to make secure our vast assets in publicly owned land, not only because of the effect on that public property itself but also because of the effect on private property within the sphere of influence.

Agriculture's stake in these activities is obvious. Our hopes for an agriculture properly balanced in relation to industry and to the world market are in large measure bound up in this land program. Even now many are asking, "When the emergency task of keeping good farm land out of production is finished, will our land policy be such that it can serve as the foundation of our whole agricultural program?" For our new land policy will not be concerned merely with conserving; it will have a great deal to do with wise utilization of our lands; it will affect not only the public domain but the private domain as well. And agriculture, it goes without saying, has the chief interest in this private land domain.

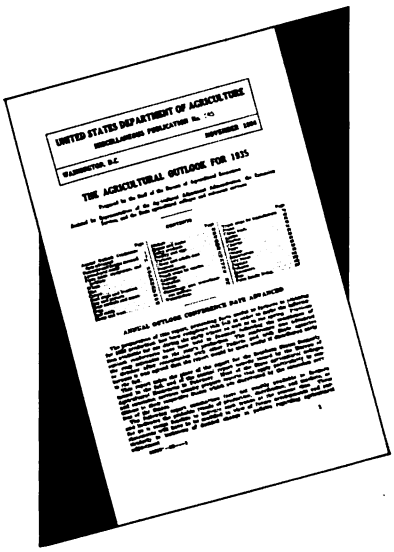
Federal-State Cooperation Helpful

AS TO the means of translating a land policy into action, the emphasis has wisely been on the largest possible measure of local initiative and local autonomy. For that reason, among others, the continuous cooperation of the Department of Agriculture with State colleges, experiment stations, and State agricultural departments has been a significant and hopeful fact. In this cooperation, it seems to me, we have at hand a means of effectuating national land-use policies in a way most likely to prove impartially scientific and in the public interest. But of course the Federal share in that cooperation must be sufficiently unified to be consistent and efficient, something which has not always been true in the past.

America Must Decide

IN ALL of these many activities, whether of local, State, or Federal origin, we are of necessity proceeding under a handicap; we do not yet know the answer to one fundamental question. We do not know whether our agriculture and our industry are to move toward nationalistic self-sufficiency, toward internationalism, or to some planned middle course. America has not yet chosen. The administration is doing everything in its power to induce a choice, but as yet the answer is fragmentary and confused. The efforts of the Agricultural Adjustment Administration are, as you know, an attempt to hold the fort for agriculture until some decision is made by the people themselves.

Until the answer to that question comes clear and loud, agriculture cannot say definitely whether it needs 325 million or 375 million acres in cultivation. No one expects, of course, that submarginal land purchases alone will keep farm production in balance with supply, but these purchases in conjunction with other elements in a national land program can be determining factors over a period of years. Pending this fundamental choice, we can, of course, advance a good distance in a land program, as we are advancing now, but I hope the people realize how tentative all our plans must continue to be until America makes up its mind which way it prefers to go. Painstakingly, but surely, we are finding a way to put our lands in order. I know it is the hope of all that we may soon agree upon a unified, consistent national policy of land use, and stick to it through thick and thin. The alternative is to maim and misuse our basic heritage, and thereby to destroy our civilization.



OUTLOOK IMPORTANT IN BALANCING PRODUCTION

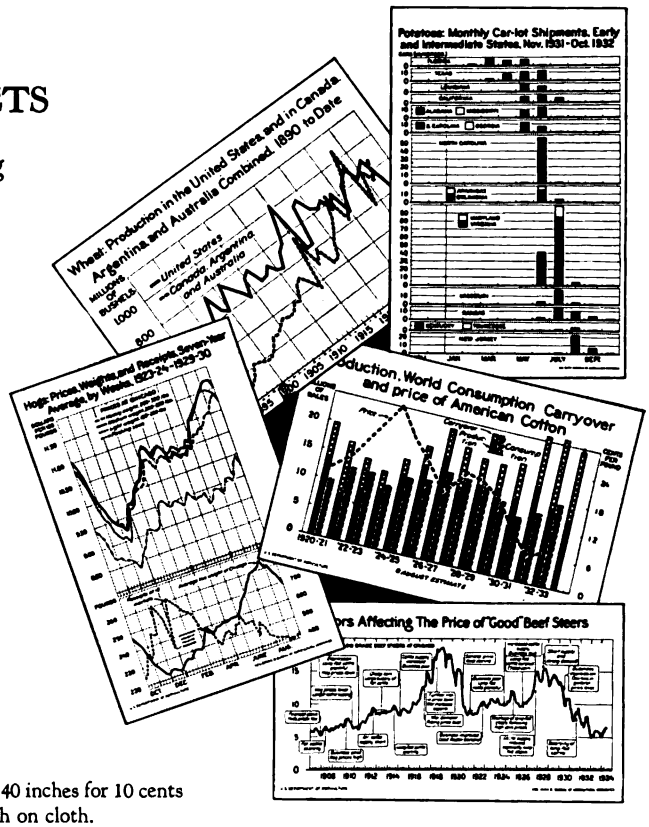
SOUND planning requires careful analysis of probable production next year.

THE Agricultural Outlook Report for 1935, prepared by the Bureau of Agricultural Economics and State extension economists, provides the facts and forecasts for intelligent planning by individual farmers as well as administrators.

OUTLOOK CHARTS PROVIDE A SHORT CUT TO FACTS

Outlook Chart Books for 1934–35, illustrating charts most suitable for extension use, discuss the production, demand, credit, and prices of the following commodities:

- COTTON
- WHEAT
- CORN, OATS, BARLEY, RYE
- TOBACCO
- BEANS, PEANUTS, RICE
- POTATOES AND TRUCK CROPS
- FRUIT AND NUTS
- BEEF CATTLE
- HOGS
- SHEEP, LAMBS, AND WOOL
- DAIRY PRODUCTS
- POULTRY AND EGGS



Outlook charts illustrated in these books will be made to order in size 30 x 40 inches for 10 cents each on blueprint paper, 20 cents each on black-line paper, or for $1.00 each on cloth.

The outlook report and chart books are distributed to all extension workers when they are issued.

E X T E N S I O N S E R V I C E

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WASHINGTON, D. C.

U. S. GOVERNMENT PRINTING OFFICE: 1934

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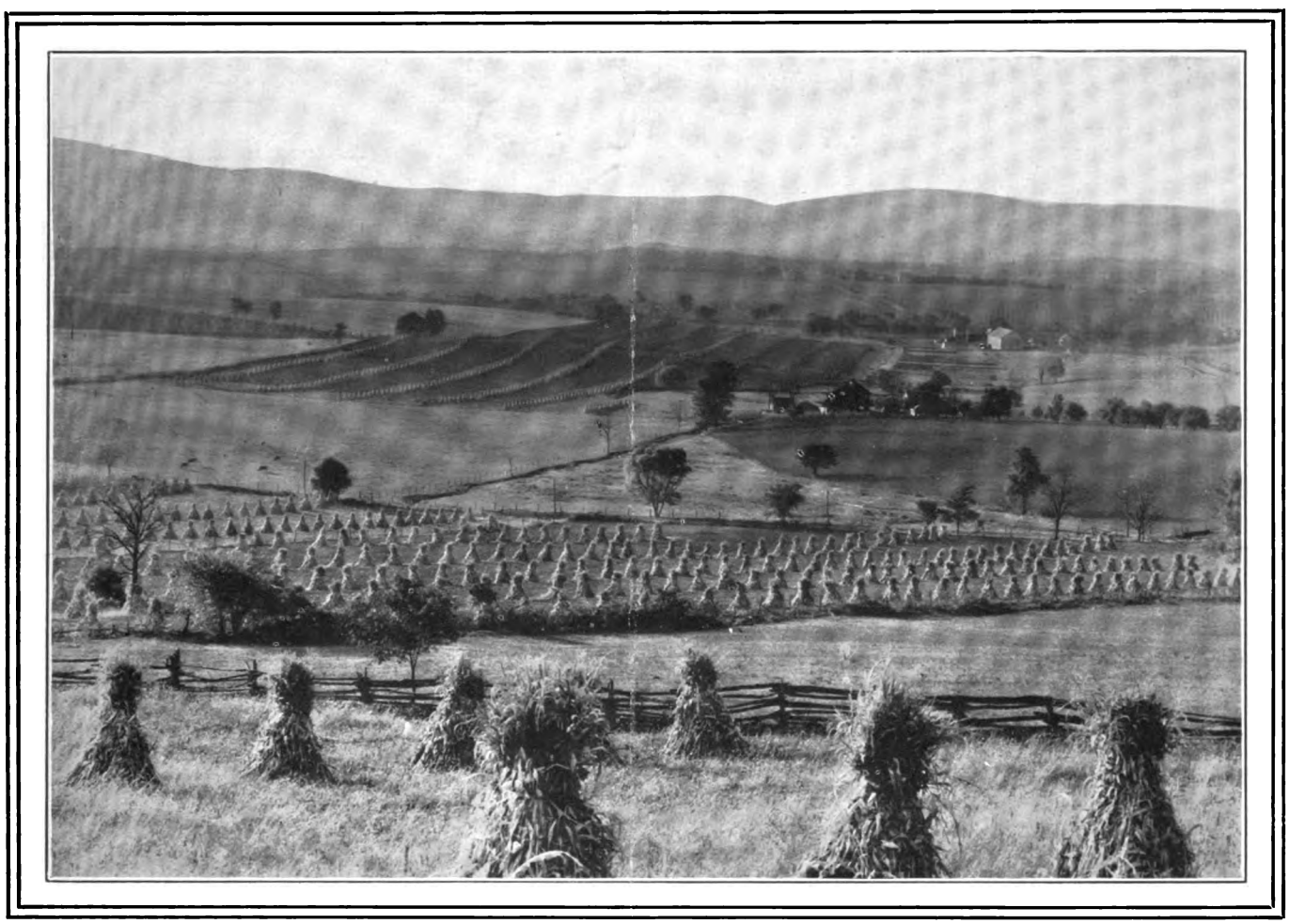

ISSUED MONTHLY BY THE EXTENSION SERVICE
UNITED STATES DEPARTMENT OF AGRICULTURE
WASHINGTON, D. C.

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In This Issue

CHESTER C. DAVIS, Administrator of the Agricultural Adjustment Act, discusses what is being done through the agricultural adjustment program. He says that the ability of the country and the city to buy from each other has been improved and that there is an actual increase in business activity with important net gains to the people as a whole. For agricultural recovery to go much further there must be further improvement in demand. The problems of the restoration of markets abroad and further industrial recovery at home must be squarely faced if the country is to be restored to full economic health.

DO LOCAL LEADERS in home-economic extension projects derive benefit and pleasure from their work with other women in their communities? In a discussion of a study made in her State, Essie M. Heyle, Missouri home demonstration agent, summarizes what the local leaders themselves say on this question.

THE LANCASTER Production Credit Association in Pennsylvania, which makes loans in Dauphin, Lancaster, and Lebanon Counties, had lent $195,000 to 480 farmers up to September 13. This cooperative association of farmer borrowers makes loans at cost to its members.

ALFALFA, sweetclover, and reed canary grass have come to the front in Minnesota's shift from cereal crops to forages. The drought helped to emphasize the outstanding ability of sweetclover to survive and produce under conditions too severe for any other good forage crop.

YAKIMA COUNTY, WASH., is carrying on a big job of farm-debt adjustment work, the committee having dealt with 827 individual cases, involving debts of $2,100,590, from October 23, 1933, to October 1, 1934, and secured adjustments in 478 cases.

Contents

AS A RESULT of the live-at-home program Mississippi is better prepared to feed her farm population, both persons and livestock, than ever before. The Extension Service conducted a survey of the food and feed needs of the State which revealed the need for increased production of such crops. Farmers were then informed of the food and feed requirements of persons and animals and were shown how to calculate their own needs according to the size of family, the number and kind of livestock, and the average yield of crops.

On The Calendar

American Association for the Advancement of Science, Pittsburgh, Pa., December 27–January 2.

Thirty-Eighth Annual Convention of American National Livestock Association, Rapid City, S. Dak., January 9–11.

National Western Stock Show, Denver, Colo., January 12–19.

Livestock Show and Rodeo, Tucson, Ariz., February 21–23.

Houston Fat Stock Show, Houston, Tex., March 2–14.

Fifty-Ninth Annual Convention, Texas and Southwestern Cattle Raisers Association, Houston, Tex., March 12–14.

BECAUSE of the whole-hearted cooperation of people in her county Bertha Hausman, home demonstration agent in St. Lucie County, Fla., was able in the short period of 2 months to organize 8 home demonstration clubs with 103 members and four 4–H clubs with 125 members, to hold 41 meetings; and to make 146 farm and home visits, 99 calls on business men, and 22 street calls; besides writing articles for publication and doing many other things. These people provided office space, equipment, a new 4-unit electric range, a sewing machine, signs for the house and office, notebooks, typewriter table, and chairs, and gave much of their time to help start the work.

WHEN South Dakota people foresaw last spring that should there be another dry summer, crops ordinarily planted would not produce enough to enable stockmen to preserve their livestock they united in a campaign to encourgage the planting of sorghum and millet. Under the direction of the Safer Farming Committee, organizations to push the planting of emergency feed crops were perfected in 42 counties.

SOUTHWESTERN INDIANA farmers have their seed wheat cleaned at home by having portable seed-cleaning equipment moved to their farms.

THE EXTENSION SERVICE REVIEW is issued monthly by the EXTENSION SERVICE of the United States Department of Agriculture, Washington, D.C. The matter contained in the REVIEW is published by direction of the Secretary of Agriculture as administrative information required for the proper transaction of the public business. The REVIEW seeks to supply to workers and cooperators of the Department of Agriculture engaged in extension activities, information of especial help to them in the performance of their duties, and is issued to them free by law. Others may obtain copies of the REVIEW from the Superintendent of Documents, Government Printing Office, Washington, D.C., 5 cents a copy, or by subscription at the rate of 50 cents a year, domestic, and 75 cents, foreign. Postage stamps will not be accepted in payment.

C. W. WARBURTON, *Director* C. B. SMITH, *Assistant Director* L. A. SCHLUP *Acting Editor*

Farmers Consolidate Their Gains

The agricultural adjustment program is passing through a change. In the crisis which caused the program to be launched, agriculture was at the point of collapse. To revive it was the first imperative need. Now that emergency action has brought a measure of relief, the farmers' next job is to maintain their position.

CHESTER C. DAVIS,
Administrator, Agricultural Adjustment Act.

IN MAY 1933, when the Agricultural Adjustment Act was passed, agriculture had been suffering from the existence of tremendous surpluses which had piled up after the disappearance of our export markets. A second acute maladjustment came about last summer through the drought.

These maladjustments really were two aspects of a crisis in farm supplies. The drought put a different face on our surplus problem, which otherwise would have continued for a much longer period. But for thousands of farmers it threatened ruin. That is why the Agricultural Adjustment Administration, with flexible powers conferred by Congress, swung quickly into action to minimize its harmful effects.

In the field of production adjustment 1935 should see a realization of most of the first objectives of the program. By next summer surplus stocks of wheat, cotton, and the major types of tobacco will have been reduced to normal or nearly normal levels.

Our stocks of wheat in 1933 totaled nearly 400 million bushels. It is expected that the carry-over in 1935 will be 125 million to 150 million bushels. With normal yields our 1935 plan will insure a supply ample to satisfy domestic and export demand, leaving sufficient carry-over for the 1936 season, but no burdensome surplus.

The world carry-over of American cotton, which totaled more than 13 million bales on August 1, 1933, was reduced to 10.6 million bales last August 1. If this progress is to be maintained a program of crop control in 1935 will be necessary to maintain this adjustment.

The corn-hog program for 1935 will be designed to produce enough grain to feed a much reduced swine and cattle population. The corn acreage-control measures contemplated will be designed to prevent the setting of the stage for large increases in hog and other meat animal production in the summer and fall of 1935 and running through 1936.

A difficult problem of the future will be the maintenance of a balance between feed supplies and livestock numbers. What we want to do is to avoid the cycles of low prices which have distressed farmers in the past. Reserves of feed and forage depleted by the drought must be restored. But they should be restored without setting out again on the road toward another disastrous adventure in piling up surpluses.

Through the coming winter we shall have to conserve feed supplies. The drought curtailed supplies of grains and feed much more swiftly than had been contemplated by the adjustment program. A year ago we were worrying about the extraordinary numbers of beef animals on the farms. Now, after a period of buying to conserve food supplies, utilize cattle from the drought areas, and protect prices from a glutted market, the Government is helping farmers to maintain adequate foundation herds on the farms.

The crisis of the drought past, our emphasis has swung from a program of buying cattle to that of conserving on the farm the largest possible numbers of good beef and dairy animals. Some advantages have accrued from the drought. It served to a certain degree as a culling program. Reduction of poor stock was greater than reduction of good stock. Emergency buying made so little distinction in price between good and poor stock that liquidation of inferior animals was encouraged. But the consequences of the drought are yet to be faced. The remnant of the herds constitutes the nucleus of our livestock industry, and this we must preserve.

In general, adjustment of supplies with markets has been reached. From this point on the problem is to maintain this balance, increasing our production in step with advancing buying power.

By August 1934 the purchasing power of farm products in exchange for other commodities had a net increase of 44 percent, as compared with March 1, 1933. Paralleling this advance is an increase in the purchasing power of factory pay rolls of 45 percent. It is clear that the ability of the country to buy from the city, and the ability of the city to buy from the country have both been improved. There has been an actual increase in business activity with important net gains to the people as a whole. To this improvement our program has certainly contributed.

Henceforth the interdependence of agriculture and industry will have to be frankly recognized in efforts to meet farm problems. The income of farmers, particularly from livestock and other domestic products, bears a direct relationship with factory payroll totals. It is apparent that agricultural recovery cannot go much further without further improvement in demand. In part, we must look to the restoration of markets abroad, and in part, to further industrial recovery at home. These twin problems must be squarely faced by anyone who wishes to see the country restored to full economic health.

An essential factor in the success of the program of the Agricultural Adjustment Administration has been the efficient and loyal field work of the Extension Service. The existence of a trained group of men and women who could be drafted to help with the adjustment program obviated the necessity of building a body of leadership from the ground up. I am confident the members of the Extension Service are as eager as anyone else connected with the program to see it carried forward in the interests of American agriculture.

98259—34

Women Find Rewards and Difficulties in Leadership

ESSIE M. HEYLE
State Home Demonstration Agent, Missouri Extension Service

IN MISSOURI a study of adult home-economics leadership showed clearly that women do not begrudge the time given to extension projects, and that they find the time so used rewarding. Only 27 of the 493 leaders who reported felt that the average of 50 hours of labor they had given, the time ranging from 2½ hours to 30 days, was too much; while 432 definitely stated they got more out of serving than it had cost them in time and effort. The study also indicated that leaders are more conscious of the rewards and satisfactions than of the difficulties and dissatisfactions connected with leadership; that the satisfactions they feel most keenly are those connected with serving others, personal development and the widening of their horizon, and that most of the difficulties were those that could, to a large extent, be avoided by more careful program planning, choice of leaders, and better extension methods.

This study made last year was undertaken with three objectives in mind; first, to make women more conscious of the rewards of leadership to themselves; second, to reinspire agents and specialists with faith in the value of leadership to women so they would not be reluctant to ask women to serve as leaders; and third, to point out to extension workers the difficulties the women leaders are experiencing which might be coloring their attitude toward assuming such responsibilities and might jeopardize the success of their leadership. An extensive study was not contemplated.

Before starting the study, the State home demonstration agent discussed informally with six groups, composed of 150 women, the rewards and difficulties of their jobs as leaders. These women, all of whom had had experience in several different types of leadership, seemed interested in discussing the subject and expressed themselves very freely. Their exact words were written on the board, and from the six lists that were thus obtained a summary was made of all of the different satisfactions and dissatisfactions listed. This summary, with a few additional questions, was prepared as an individual check sheet and checked at leaders' meetings. It was checked by 493 women who had served in one or more capacities as project leaders, 4-H club leaders, presidents, secretaries, reporters, game and song leaders, or child development chairmen.

Satisfactions listed on the check sheet and considered by leaders as constituting abundant rewards for all their volunteer effort included five general types: joy in serving others, widened social contacts, growth of their own personality, mental stimulus, and greater efficiency in home making. The check sheets revealed a total of 3,786 notations of rewards of the first four classifications and 767 gains of the more tangible character related to skill in home practices. In contrast with these totals, checks noting reasons for dissatisfaction in leadership experience totaled only 1,025.

All of the 493 women checked one or more of the following happy experiences in leadership.

Joy in Serving Others

In volunteer leadership 318 women found reward in the belief that they were helping make their community a better place in which to live, 307 appreciated the opportunity to do something for others, 253 gave service because it provided the boys and girls a better opportunity, and 226 enjoyed the opportunity to use for the benefit of others some talent such as music, writing, acting, or skill in swing, cooking, and gardening.

Widened Social Contacts

Three-fourths of the women, or 369, enjoyed the many new and interesting acquaintanceships made with persons from the county and State. Almost as many, or 364, checked as a reward the pleasure found in the making of new friendships, and 294 reported increased zest in living because of the inspiration, enthusiasm, and fun that came from working with others.

Of the leaders checking the questionnaire, 299 considered their leadership experience as having contributed to their own personal growth because it had enabled them to understand their neighbors and others and to work with them more effectively. Learning to meet strangers more easily was checked by 256. The opportunity to lead others and to see work accomplished under that leadership was appreciated by 196.

To 131 this experience gave a feeling of prestige in the community, or a sense of being needed and appreciated. An equal number of women credited the experience as having accustomed them to speaking in public.

Among their rewards for serving as leaders, 374 stated that the work gave them many new and interesting things to think about, 141 learned to express their thoughts more clearly in writing, and 126 found themselves reading newspapers and magazines with keener insight and interest.

Greater Efficiency in Homemaking From Leadership

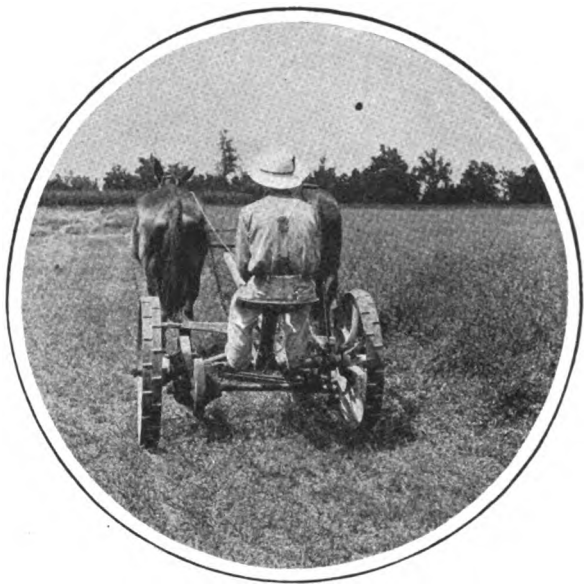
It is believed by some that the reason that women are interested in giving time and service to leadership in home-economics projects is a more or less selfish one. It is recognized that those who as leaders have the direct contact with specialists and home demonstration agents have an opportunity to increase their skill and knowledge and to gain new inspiration for their job to a greater degree than those who get the help second-hand through a local leader. Three hundred and six homemakers indicated that they felt repaid for leadership because of the direct help on their problems received from the agent or specialist, 273 because they had gained a new interest in homemaking, and 188 because teaching others meant that they themselves became more skilled and informed.

No one of these advantages, however, was checked as often as 2 of the items on satisfactions in service, 2 of the joys in social contacts, or 1 of the rewards from mental stimulus. In the discussions at the meetings where the questions were set up and those at the meetings where the survey was checked, it was very evident that the leaders were appreciative of the enrichment of their lives which came from greater social opportunities, personal growth, and mental stimulus, and were consciously influenced to accept leadership because of the opportunities of service offered.

(*Continued on page 175*)

Mississippi Enjoys Home-Grown Food and Feed

"This year has been marked by the largest adjustments ever made in our agriculture, and by a continued improvement in our farm incomes", says L. A. Olson, Director of Extension Work, in a preliminary report on the progress of extension work in Mississippi. "With food, feed, and soil-building crops planted on about 95 percent of the 1,515,000 cotton acres rented to the Government, and with favorable seasons, Mississippi is more nearly on a complete self-sustaining basis than ever before."

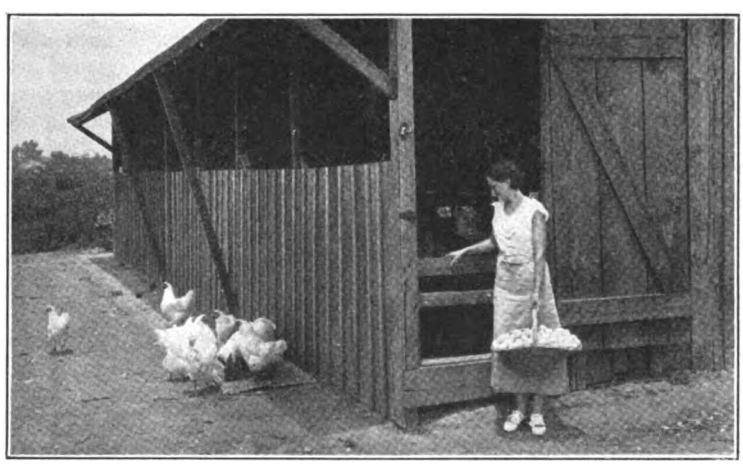


A field of alfalfa hay in Coahoma County, Miss., which will help to feed the livestock on the farm.

MISSISSIPPI has made unprecedented progress this year toward carrying out an adequate live-at-home program on every farm. The larger portion of 1,515,000 rented acres under the Government's cotton-adjustment program was planted to food and feed crops for home use. More attention has been given to home gardening and community canning, poultry raising, production of milk and butter, meat, and molasses for the farm family.

Seasons have been favorable and crop yields normal to above normal. An unusual effort has been made by farmers and farm women to harvest, can, and conserve all food and feedstuffs possible. As a result, Mississippi will go into the coming winter and next year better prepared to feed the farm population, both persons and livestock, than ever before.

Gains made in crop production in 1934 over 1933, according to the Government's September 1 crop report, include an increase of 4,548,000 bushels of corn, 302,000 bushels of oats, 44,000 tons of hay, 790,000 bushels of sweetpotatoes, 490,000 bushels of potatoes, 3,105,000 pounds of peanuts, and a larger production of soybeans, cowpeas, and velvetbeans.



4–H club member with some of her purebred White Wyandottes which contribute to the farm living.

Significant gains in the live-at-home program are evident, especially in the Mississippi Delta and other areas of the State with large plantations where the landlords have given their tenants the use of the rented acres for the production of food for their families and feed for their livestock. On thousands of plantations, where little had been done in the past in raising food and feed for home use, each tenant now has a home garden, a patch of sweetpotatoes, cowpeas, sorghum for sirup, and corn sufficient to furnish the family with corn meal and to fatten one or more hogs for meat.

Three factors probably have contributed most to the success of the live-at-home program. First, the Extension Service conducted a survey of the food and feed needs of the State based on standard requirements of both the persons and the livestock on the farms and in the towns and cities of the State. This survey revealed the need for increased production of food and feed crops to meet home needs.

The release of 1,515,000 rented acres from cotton production under the Government adjustment program offered farmers an opportunity to meet this need. Results of the survey together with much additional information, including all of the outlook material furnished by the Department of Agriculture, were presented to farmers at county and community outlook meetings conducted throughout the State during January. Farmers were informed of the food and feed requirements of persons and animals and were shown how to calculate their own food and feed needs according to the size of family, the number and kind of livestock, and the average yield of crops.

County agents who assisted 27,829 farmers in making out their cropping schedules under the requirement of emergency crop loans took advantage of this opportunity to see that farmers allotted sufficient acreage to food and feed crops to meet home needs.

The State and county home demonstration agents, in addition to expanding their regular work in food preservation with home demonstration women and 4-H club girls, cooperated with the State emergency relief administration in carrying out the most comprehensive canning

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Conservation Program in Kansas

WATER conservation in Kansas begins where the raindrops hit the ground and follows through to the points where the various rivers leave the State.

The program is being conducted by the Kansas Emergency Relief Committee with the Kansas Extension Service as one of the main cooperating agencies. It is the first intensive program of its kind in the State and has as its main objective, the conservation of water and soil.

In addition to its benefit as a protection for the soil and water resources of the State, the program provides an excellent project for the useful expending of at least a part of the funds allocated to the State for relief purposes.

George O. Himes, of Erie, Kans., is one of the many Kansas farmers who are constructing ponds on their farms in which to store water for livestock.

From an emergency standpoint, the program dealt this summer with the locating of wells and supplying of water to stockmen. In many sections of the State, pumping plants were placed in operation to take water from lakes, ponds, rivers, and reservoirs, thus making the water available for watering livestock.

There are four general objectives included in the long-time phase of the program. They are: First, to conserve the topsoil and rainfall; second, keep silt from filling up ponds and stream beds; third, conserve some of the rainfall for irrigation purposes; and fourth, maintain a higher ground-water level.

Small amounts of rain do no harm to the soil as the moisture either soaks into the soil or evaporates. Heavy rains, however, result in much of the water running off the fields and carrying with it much of the valuable topsoil. Not only that but the action of the run-off water soon cuts into the fields, later developing gullies.

A considerable amount of the valuable topsoil, carried away as silt, settles in ponds and stream beds. It not only ruins the ponds but causes streams to overflow, flooding much valuable lowland.

Terraces, through their ability to make "running water walk", are important in preventing the loss of topsoil and increasing the amount of the rainfall stored in the subsoil. The control of gullies is being brought about not only by terracing but by the use of brush dams and similar checks.

Catchment basins, or silt traps, are valuable in keeping this fine topsoil from filling in ponds and causing streams to overflow.

Farm Ponds

While it is hardly to be expected that farm ponds can furnish enough water for irrigating any great amount of land, they are sufficient for the irrigation of gardens or small truck patches. Not only that but the seepage from the pond increases the moisture content of a small amount of ground below the pond.

Ponds, as well as city and county lakes, assist in making additional water available for irrigation purposes through their action in raising the ground-water level. Thus the water may be obtained more readily through the use of wells.

The Extension Service is mainly concerned with the terracing phase of the program. Starting in August 1934, the extension engineer has spent about 2 months supervising a State-wide terracing demonstration program. Engineers of the Kansas Emergency Relief Committee are conducting the demonstrations under his supervision.

During the last week in August demonstrations were held in five counties, with 14,900 feet of terraces being built.

The Extension Service is also assisting in the construction of farm ponds and in the advising of farmers on complete water-conservation programs for their individual farms.

Much of the man power and some of the materials needed in the program are being furnished through relief funds. The program has apparently created a new State-wide interest in the possibilities for soil and water conservation.

Mississippi Enjoys Home-Grown Food and Feed

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campaign ever put on in the State. The program was supervised by the Extension Service and financed by the Emergency Relief Administration. Twenty-nine complete canning outfits were purchased. Local leaders were trained and persons on relief rolls employed to supervise the 8,000 community canneries. As a result of this program, approximately 2,000,000 cans of food products were conserved through an 8-week period largely for relief families.

An intensive informational program on the use of rented acres was conducted among contract signers. For example, an 8-page leaflet prepared by the State Extension Service on the utilization of the rented acres was placed in the hands of more than half of the contract signers. The informational material furnished by the National Extension Service, the Replacement Crops Section, and Division of Information of the Agricultural Adjustment Administration, the Farm and Home Hour, the Farm Flash radio program, together with wide use of the press doubtless were important influences in advancing the live-at-home program.

THREE series of community meetings were held in every county of Kansas to explain the Agricultural Adjustment Administration Farm Record Book to contract signers. County agents and local leaders cooperated in carrying on a thorough educational campaign. The record book was explained, and producers were furnished practice supplements for use in learning how to place records correctly in their books. The local leaders will continue to function as advisers, and follow-up programs will be held later in the year to help with any difficulties which arise.

Minnesota Shifts to Forage Crops

Harvesting reed canary grass for seed in Minnesota.

A dozen years of intensive work by the Minnesota Agricultural Extension Service have done much to lay the groundwork for the marked shift from cereal crops to forages that Minnesota farmers, along with those of other States, are now finding advisable. Likewise, this forage work helped thousands of farmers to provide pasture during the disastrous drought which reached its climax this year rendering practically worthless the thousands of acres of poorly managed permanent bluegrass pastures upon which many farmers have relied for summer livestock feed.

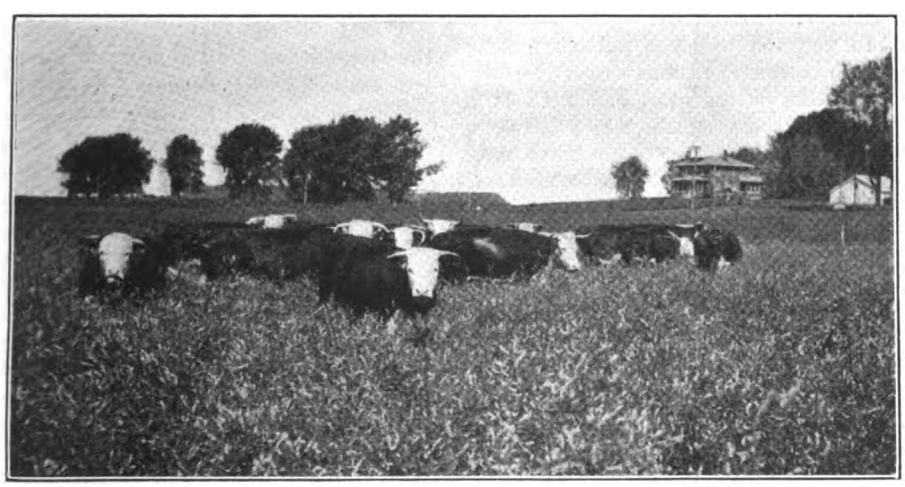
IN THE broad program of forage-crop improvement and promotion which the Minnesota Extension Service has carried on, two phases of the work stand out in bold prominence; namely, the increased use of sweetclover, especially as a pasture but also for hay, and the introduction to farmers of Phalaris or reed canary grass. Until the Extension Service began its campaign about 8 years ago, reed canary grass was being grown by only a few farmers in one or two southern Minnesota counties.

Both sweetclover and reed canary grass fill unique and important places in the Minnesota forage program. For a full appreciation, the situation must be viewed partly from a historical standpoint. Minnesota's livestock industry developed mostly after the great bulk of the best land on farms was already under cultivation. In consequence, pastures consisted very largely of the poorer portions of the farms and were vegetated with June grass or wild grasses. Very little attention was given by farmers to fertilization or management methods designed to improve or maintain pasture productivity.

Spread of Alfalfa

Coincident with the development of the livestock industry, the use of alfalfa had spread slowly, so that by 1920 its value as a hay crop was quite generally recognized, although the acreage was entirely inadequate to meet the needs and possibilities. Moreover, from the all-round forage standpoint, alfalfa had decided limitations in that it could not stand pasturing well and is unsuited for soils low in lime. Furthermore, the high initial cost of seed and the difficulty of working alfalfa into short rotations discouraged farmers from going into the crop more extensively.

Into this picture stepped the Extension Service with a legume campaign which not only encouraged the growing of more alfalfa but also expansion in clovers, especially sweetclover, which at that time was regarded with considerable hostility by farmers who believed it to be a weed, or at least only a honeybee pasture. In fact, many beekeepers who advocated sowing sweetclover along roadsides or in waste areas were looked upon by their neighbors as public enemies, and there is record of a Minnesota preacher whose advocacy of sweetclover nearly lost him his position. About 1915, farm papers and the agricultural college had begun to advocate sweetclover, but it was not until about 1922 that the campign reached the active stage with the extension agronomist and county agents staging farm demonstrations and talking sweetclover at hundreds of farm-bureau and other meetings, as well as giving it wide publicity. Down through the years this work has been maintained and it has been pushed with special vigor during the last 2 or 3 years, in which the drought has served to emphasize the outstanding ability of sweetclover to survive and produce under conditions too severe for any other good forage crop.



Cattle in sweetclover on farm of L. E. Potter, near Springfield, Minn.

Value of Sweetclover

Not only have the Minnesota Experiment Station and Extension Service done everything possible to encourage the use of sweetclover on soils adapted to its use, but they have also given much attention to the study and dissemination of management practices which enhance the value of this crop to farmers. The rule at present is for farmers to seed sweetclover with a companion crop of small grain, or occasionally to seed it with corn at the last cultivation, a practice which is being encouraged. Another practice which the Extension Service has

encouraged is the seeding of timothy with sweet clover, as livestock appear to relish sweetclover better when a variety of forage is provided. Sweetclover has been found to make an excellent hay and is widely used when alfalfa or other clovers fail. The growing practice in making the hay is to cut it with the binder, shock it, and then stack it. When so handled it has been found that the sweetclover cures out in good "tobacco cure" fashion and is relished by all livestock.

Much credit for the spread of sweetclover and legume use, as well as for the general trend from cereal to forage crops in Minnesota is due to the foresight and efforts of Ralph F. Crim, extension agronomist. Several months before the Agricultural Adjustment Administration came into existence, Mr. Crim voiced the philosophy which the Agricultural Adjustment Administration is attempting to carry out, in his presidential address before the International Crop Improvement Association, November 30, 1932. He said, "It is sound farming to sow legumes and grasses on land which today only increases the surplus of grain crops. We could well afford to convert some of the acreage now growing cereal crops to pasture for a few years at least until consumption catches up with production. We need more legumes. The acreage of alfalfa could well be increased. Red clover, sweetclover, and soybeans have not been overworked."

Mr. Crim's remarks were widely circulated through the press of the Nation, and in Minnesota they were given special publicity by a leading seed company which published the foregoing excerpt on posters circulated to elevators and feed stores throughout the Northwest.

Today, sweetclover is widely known in the western half of Minnesota and elsewhere on the rich limestone soils, or on those that have been limed. Furthermore, with the eloquent testimony given by the drought conditions to the value and dependability of this crop, the prospects for future expansion look exceedingly bright.

Reed Canary Grass

There are very large areas in eastern and central Minnesota not adapted to sweetclover production without liming or other treatment which the financial condition of farmers now practically prohibits. However, widely scattered throughout these same areas are numerous peat bogs, many of which were at one time considered practically worthless for any purpose, being in most years so wet and soggy that they could not even be pastured or driven over with a team. Here it was that reed canary grass offered a unique solution.

Reed canary grass is believed to have been brought into Waseca County from Germany 40 or 50 years ago and was found to thrive on bogs in that area, producing excellent crops of pastures or hay and maintaining a stand continuously for 30 years or more. Still, only a handful of farmers were using the crop until an article in a Minnesota farm publication aroused the interest of farmers and staff members of the experiment station. Immediately the experiment station and the Extension Service extended their investigations and trials which, coupled with the dissemination of information about the crop, has resulted in its adoption throughout the peat bog areas where it has proved a lifesaver as a pasture and hay crop for the intensive dairy farming carried on in various parts of the State.

Not only have thousands of farmers with land unadapted to legumes been enabled to grow a high quality, superyielding forage, but at the same time they have been able to make invaluable use of large areas of their land which heretofore were almost worse than useless.

It has been found that reed canary grass stands are fairly easy to obtain. The seed is sown very early in the spring or, where standing water makes it difficult to get on the bogs in early spring, the seed may be sown in October to germinate the following spring. On weedy lands seeding may be delayed until the last week in June or the first week in July. Bogs can be successfully used for reed canary grass production even when they are so wet they will not bear the weight of machinery except when frozen underneath. The crop grows so vigorously and the roots mat so well that animals can pasture on the bogs without danger of miring, or hay may be harvested with machinery.

In addition to much publicity, many demonstrations and numberless platform discussions on the value and methods of producing this crop, the Extension Service and experiment station have done much for the reed canary cause by developing better methods of harvesting seed, assisting prospective growers in locating sources of seed, and otherwise facilitating the exchange and distribution of seed. Likewise, the experiment station has assisted in developing a satisfactory seed-harvesting machine which can be constructed at little cost from a discarded grain binder.

A great deal might be written of the forage promotion and improvement service rendered by the experiment station and Extension Service in Minnesota. To complete the story, much would need to be said of the encouragement of the use of alfalfa, soybeans, adapted varieties of clovers, Sudan grass as an emergency crop, and so on. Just now, bromegrass and crested wheatgrass are being tested for Minnesota conditions. Improvement of sweetclover varieties is underway. The complete story would include much regarding the work of developing and popularizing better management and utilization methods in connection with forage generally. More and more attention is being given to the search for better varieties of permanent pasture crops and for better methods of maintaining and improving permanent pasture productivity.

Future forage improvement cannot be foretold, but there can be no question that the popularization of sweetclover and of reed canary grass are feats destined to hold unrivaled places among the contributions of the experiment station and Extension Service to the State's agronomy and her agriculture generally.

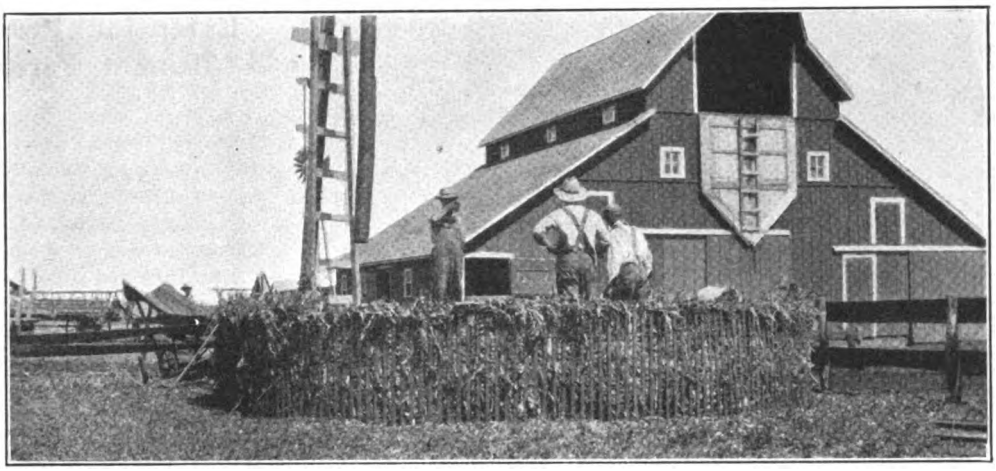
Home Economic Values

The economic value of home demonstration work in Kentucky last year was more than half of a million dollars.

The vegetables, fruits, meats, and other foods canned as a direct result of the work had a minimum value of $319,569. Home furnishings made as a result of the work were worth $87,855; home sewing, $44,634. Other parts of the work and their values are: Home management, $35,562; home millinery, $5,687; home dry cleaning, $4,340; home crafts, $9,282; 4-H club clothing, $11,733, and 4-H club canning, $6,991.

Aside from the economic value, Director Cooper of the Kentucky Extension Service points out that: "A large part of the home demonstration program cannot be measured in dollars and cents. Greater happiness and satisfaction of the home maker, more beauty and comfort in home surroundings, higher standards of health, greater appreciation of life are intrinsic values that cannot be measured."

Home demonstration work was conducted in 464 communities in the State, with 6,242 women enrolled in home makers' clubs, and 11,583 girls enrolled in the work. With the aid of 3,298 volunteer local leaders, 40,037 persons were reached. A total of 10,657 meetings were held, attended by 376,980 persons. Help was afforded in relief work for 10,582 families.



Filling a crib silo on the Sam Lassen farm, near Aurora, S. Dak.

South Dakota Plans Safer Farming

SOUTH DAKOTA farmers are thankful for sorghums and millet. These two crops have helped them to battle the drought which has stalked the State, severely testing farmers and farming practices. This year in many parts of the State the intensity of the drought has been such that even the best methods have availed little, but in sections where the farmers have had half a chance the superiority of scientific, intelligent farming has been demonstrated.

One of the major changes made this year to meet adverse weather was the substitution of sorghum for corn over wide areas. The South Dakota Extension Service has long recommended sorghum as a drought- and grasshopper-resisting crop with advantages which should make it a part of the regular farming system in sections of the State where rainfall is usually limited. Scattered here and there many farmers have planted it for years, but not until 1934 was it planted wholesale in every corner of the State.

A grain sorghum variety demonstration plot on the Shelby Coleman farm, Mission, S. Dak.

Thirty-five years ago, in the spring of 1899, a series of tests with amber "cane", Kafir corn, kursk millet, and several varieties of proso millet were started at the Highmore Experimental Farm, which is maintained by the State college. Throughout the entire 35-year period this experimental farm and others have served well to obtain crop facts of value to South Dakota farmers and land owners.

Since 1930 the Extension Service has planted sorghum variety demonstration plots in various parts of the State to show the relative values of the different varieties of this crop and to refute the claims of some irresponsible salesmen who sold unsuitable sorghum at high prices to South Dakota farmers.

Foreseeing that should the State experience another dry summer, crops ordinarily planted would not produce enough feed to enable stockmen to preserve their livestock, citizens last spring generally united in a campaign to encourage the planting of sorghum and millet. The dry summer did come—the driest on record, in fact. Under the direction of the Safer Farming Committee, organizations to push the planting of emergency feed crops were perfected in 42 counties. The State Safer Farming Committee was composed of Emil Loriks, president of the Farmers Union and secretary of the South Dakota Holiday Association; H. B. Test, president of the Farm Bureau; J. J. Martin, master of the Grange; W. S. Given, chairman of the agriculture committee of the South Dakota Bankers' Association; C. E. Sanders, president of the Press Association; and Robert D. Lusk, managing editor of the Evening Huronite. Organizations which these men represented all got behind the campaign. Dr. C. S. Betts was chairman of the Beadle County Safer Farming Committee, which was the parent organization. The South Dakota Extension Service cooperated in every way with the committees, supplying much of the information disseminated. Regular news channels and circulars were also utilized by the Extension Service in distributing information.

The Safer Farming Committee distributed approximately 10,000 posters urging the planting of emergency crops, and 35,000 copies of the Safe Farmer, a 4-page newsprint paper which stated editorially, "The purpose of this publication, the Safe Farmer, is to encourage a cropping program in South Dakota that is adapted to dry weather conditions. Through this program it is hoped that, despite subnormal rainfall, farmers may be assured of sufficient feed for their livestock next winter, pasturage during the summer and fall, a large producing flock of chickens next winter, feed for the chickens, and a supply of garden food for table use."

Farmers everywhere rallied to the objectives of the campaign and planted an estimated 500 to 600 carloads of sorghum and millet, an amount many times that planted in any previous year. The relief administration in the State purchased more than 9,000,000 pounds of sorghum and millet and distributed it to farmers.

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THIS 13-acre plot furnished 11,197 bunches of fresh vegetables, 97 bushels of sweetpotatoes, and 36 hampers of English peas between September 1, 1933, and April 28, 1934. The land was donated for relief garden work by a Negro mail-carrier; the work was supervised by the Negro county agent; and the food was distributed through the relief agencies of Alachua County, Fla.

South Dakota Plans Safer Farming

(*Continued from page 167*)

Rains did not come abundantly so that even these crops could not grow normally, but a large part of the feed which farmers have is sorghum and millet. This, together with Russian thistles, some corn, wild oats, and wheat or other small grain cut for hay will furnish winter feed for livestock. Grasshoppers threatened this spring, but a systematic poisoning, using approximately 12,000 tons of bait furnished by the Government, together with cooperation from the weather in this matter, has reduced "hoppers" to about normal, according to an egg survey recently completed. Livestock numbers have been materially reduced, thus slashing feed requirements. Nearly 1,000,000 cattle have been disposed of in the emergency drought-relief program, and thousands of sheep are now leaving farms and ranches which are unable to maintain them during the winter.

South Dakota farmers are making wide use of other practices recommended by the Extension Service in preserving what feed they have. They have built pit, trench, and crib silos. The Extension Service has told them that the feeding value of such emergency feeds as Russian thistles, mixtures of oats and foxtail, stunted corn and sorghum, is more fully preserved in the silo than if fed dry. The experience of farmers in Powell Township in Edmunds County and just across the line in Faulk County is typical. Gar Griffith, in Faulk County, built a large trench silo in 1933 and found it so satisfactory that this year he built another on a second farm in which he has an interest. The silo he built in 1933 is located on a hillside, the trench opening being toward a creek. The trench is 125 feet long, 18 feet wide at the bottom, and 30 feet at the top. The depth is about 12 feet.

Mr. Griffith's success with this type of silo encouraged his neighbors, the three Richards brothers, to each construct one. Working together they have ensiled their limited fodder of corn, Russian thistles, and whatever other suitable material they could gather.

Herman Township in Lake County is a booster for silos, nearly every farm having one. Nearly every type of silo commonly used, except creosoted wood stave, may be found within a radius of 5 miles from Junius. Herman Township has always taken an active part in extension work, has supported the county agent in every way, and is reaping the benefit therefrom. Emergency silos are doing their part in nearly all portions of the State.

Those who have experienced successive years of drought with South Dakota are convinced that the lessons these years have taught will not soon be forgotten. Especially, they are sure that sorghum will have a more prominent place in the cropping system than it has had in years past.

COUNTY agricultural agents are aiding in the land-use survey now being made in Florida under the direction of the National Resources Board. The utilization of marginal and submarginal areas to better advantage is the principal object of the survey.

Extension Program Aids Tenant Farm Family

A live-at-home program planned in 1928 and which has been followed for the intervening years has brought about a very definite improvement on the farm of Michael Nathaniel, a Negro tenant farmer of Sumter County, S. C. In the years 1926 and 1927 he had made very little progress under his old plan of work and was determined to make improvements, but he needed aid and information. In conference with his county agent plans were made for some changes and improvements in his farming. He then talked these plans over with the landlord and obtained his cooperation in the plan.

In 1928 he followed the recommendations of the county agent in a more balanced planting of farm crops. In addition to the regular crops of corn, cotton, peas, and potatoes, he planted a year-round garden, sugarcane, oats, peanuts, cowpeas, and sweetpotatoes. He also purchased a high-grade cow. Each year he has followed a somewhat similar plan, increasing the acreage of certain crops and obtaining a cash income which he reinvested in poultry and a cow for home milk, butter, and eggs.

By following the extension plan of balanced farming this farmer has not only been able to produce his home food and feed supplies but he has been able to educate two daughters and a son. One of the daughters is teaching in a neighborhood school and serving as the local 4-H club leader. The son, likewise, following an extension program, won the State record for corn production in Negro 4-H club work during 1928.

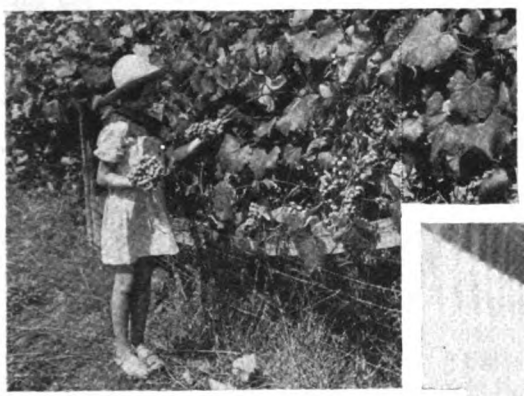
This demonstration has not only improved the living of the Nathaniel family but 11 other farmers in the community have taken up the practices which he has followed in improving their own farms.

IN KIOWA COUNTY, OKLA., there had existed a long-time need for growing more alfalfa, not as a commercial crop, but as an available source of home livestock feed. The use of retired acres under the cotton-control plan for home livestock feed production offered an opportunity for rapid development of the plan. It was advised that all farmers plant sufficient acreage to meet the needs of their particular farms. From observation it was ascertained that at least 125 farmers in the county have followed the suggestion. About 50 farmers in the county planted some acreage to cowpeas.

Autumn Days on the Farm

"Power and wealth were worshiped in the old days. Beauty and justice and joy of spirit must be worshiped in the new."

From "New Frontiers" by Henry A. Wallace.



Results Speeded

EXTENSION workers teach cooperation among farmers. They know also that they must obtain cooperation before their work can be most successful.

An unusual example of whole-hearted and widespread cooperation, with resultant accomplishments which make a record for the time involved, is found in a report of home demonstration work in St. Lucie County, Fla. Bertha Hausman, who was appointed agent there, with headquarters in Fort Pierce, started work on September 1, 1934. Just 2 months later she said the following about generous assistance received.

"From the chairman of the board of county commissioners to the colored man on the garbage truck, everybody has cooperated in a vital way. The commissioners appointed one of their number as guardian angel of home demonstration work and gave him power of decision in matters pertaining to the work, thereby expediting the organization. The official family of the courthouse has given the home demonstration agent a hearty welcome. They have provided office space, equipment, information, prisoners to clear grounds and plant shrubs, transferred equipment from storage room to office, and evidenced a friendly interest (especially in sampling the foods prepared).

"A beautiful new four-unit electric range was given by the city for the demonstration kitchen. The firemen made curtain poles, brackets, and the easiest-going tea cart you ever saw. The ice company leaves ice each morning. The merchants have given barrels and boxes for furniture and paint and brushes for craft work. A lumber company made signs for the house and office and gave asbestos samples for hot pads. A newspaper gave notebooks for each 4-H club girl. A dairy gave burlap bags. A church lent a sewing machine. A road superintendent from the Federal Emergency Relief Administration hauled the machine and other equipment. Civic clubs have invited the agent to be present at their meetings and given her an opportunity to speak. A former prosecuting attorney donated the use of a desk for the office. An insurance company provided blotters. A power company gave shrubs, and an automobile dealer gave inner tubes which will be used later in making toys. Women gave a typewriter table, pencils, patterns, chairs, and old clothes."

That all of this assistance enabled Miss Hausman to register a large number of accomplishments in the 2 months is attested by her report of work done.

"Eight home demonstration clubs have been organized, with 103 members, representing 99 homes. Thirteen meetings have been held with a total attendance of 174. Four 4-H clubs have been formed with 125 members, representing 103 homes. Eight meetings have been held with a total attendance of 225. Twenty miscellaneous meetings, including school and church groups, civic clubs, city and county commissioners, and the school board, have been attended. One hundred and forty-six farm and home visits have been made, also 99 calls on business men and 22 street calls. Two hundred and twenty-seven visitors have called at the office and 136 bulletins have been distributed. Thirty-one Federal Emergency Relief Administration clients have worked a total of 1,272 hours. One hundred and twenty-seven articles have been made for welfare and demonstration purposes, and a kitchen cupboard has been built. Eight hundred and forty-two miles have been traveled by car. Two thousand cabbage and collard plants have been distributed to relief clients. Five articles have been prepared for newspaper publication, as well as notices and accounts of each club meeting. Menus and market orders have been prepared for the Federal Emergency Relief Administration nursery.

"Developing home demonstration work in St. Lucie County has been, and will continue to be, interesting and beneficial to the entire county. Groups working, planning, and studying together, each for a common cause, will develop a spirit of helpful cooperation, which in turn will result in happier families and better homes, the ultimate goal of home demonstration work."

Negro 4-H Clubs Held State Meetings

Negro 4-H club members have turned out for their annual State camp or round-up in greater numbers than ever before and have had a greater enthusiasm and determination to get the most of their opportunity of a week or 10 days at the college. Alabama, Georgia, Louisiana, Mississippi, and Texas have held successful meetings during the past summer.

At the Alabama meeting of 4-H club members a complete physical examination was given to 233 boys and girls, representing 30 counties. Heretofore only the first day was used in giving the examination, but this year the complete 10-day period was used in giving a most complete examination. In addition, lessons in personal hygiene, health, and sanitation were given to create in these young people a greater pride in themselves and a deeper respect for others.

Four hundred and twenty-nine boys and girls attended the Mississippi annual short course, the largest ever held in the State. The meeting was held at the Alcorn Agricultural and Mechanical College, where a very worth-while course in character training was offered the young people.

The fifth annual short course for Negro club boys and girls was held at Southern University, Baton Rouge, La. There were 232 in attendance, the largest enrollment they have ever had. Busses were provided for carrying the boys and girls from their homes to the meeting.

Recreation, as well as instruction, was emphasized at each camp. A feature of the Negro 4-H club camp at the Georgia State College, Savannah, was a boat ride on the Atlantic Ocean, which 500 happy people enjoyed at the close of the conference. The program was well presented and planned. The members of the extension staff and the faculty of Georgia State College cooperated in making it an outstanding activity.

"Round-up Time in Texas" lived up to its name. More than 1,500 Negro 4-H club members and their parents attended the meeting. The 3-program meeting, 1 for boys and girls, 1 for the parents, and 1 for the agents, was supervised and directed by the extension forces assisted by the faculty of Prairie View State Normal and Industrial College. The faculty of the school had been held over after the close of summer school to aid in this meeting.

THE home-maker's market basket will be efficiently filled through the efforts of the Kentucky extension workers in a food-purchasing program. Four points are considered in the planning and are emphasized in the demonstrations given for farm women. Buying canned goods, fresh vegetables and fruits, meats, and judging the value of home-made products are some of the factors the housewives have discussed.

"We spent only $24.98 for food products during the year, and at the same time produced and consumed $516.74 worth of food. It is also interesting to note that at the same time we sold $62.31 worth of poultry and dairy products above our home needs. With a balance of $37.53 we are more than living at home", is the remark made by one cooperator.

W. R. Reynolds.

Time Shows Value of Extension Work

Jackson, one of the mountain counties of Kentucky, has kept the same agent for more than 20 years. The 1930 census shows that there are 1,865 farms in the county, practically all cultivated by their white owners. About 59 percent of the total land area is in farms, 70 acres being the average size of the farm. The aims and accomplishments, as well as the enviable record of the extension service in this county, through 20 years of continuous effort are described by County Agent W. R. Reynolds.

TWENTY years is a long time, yet it seems to me but yesterday when I mounted my horse and started over the hills, up and down the creeks in Jackson County, carrying to the isolated farm home in the best manner I knew the story of a "new day" for rural homes. I knew then, as I do now, that I was pioneering with bright hopes for the future, telling farmers and their families of new and improved practices that I was sure would turn losses into profits and discouragement into hope.

In 1914 many people were guessing what a county agent was and more about what he could do to help the farmer. Even Uncle "Dude" Robinson, when I was telling him of the construction of a new silo at Annville, thought it a place for crazy people. Today many think a farmer without a silo or other farm conveniences is eligible for the asylum.

In 1914 but few farmers knew of seeded pastures or hay crops other than broomsedge, and seldom did I see fields seeded to any kind of leguminous crops. It was seldom that I found a home with a storage house or cellar for caring for winter foods, or with any kind of modern conveniences. Japan clover grew wild to some extent in old depleted fields and it was hated by the farmer as he would hate a rattlesnake because he said it caused his horse to slobber. Little hay of any kind was grown in the years before 1914, the farmer depending largely upon corn blades and corn fodder for his supply of roughage.

The problem of bringing a "new day" to the rural home was by no means a small one. Methods of building a program had to be worked out. The main idea was to secure cooperation among the farm homes and this looked like almost an impossibility to me. I decided to try to secure this cooperation in large measure through the sons or the daughters of the farmers by organizing them into 4-H clubs. So I centered my first activities on the juniors. The first club was organized in November 1914, as the "Corner Oak Club" and my first county extension committee was selected in 1916.

Since then some progress has been made toward reaching our goals. I like to think that there are more than 3,000 acres seeded to Korean lespedeza where broomsedge and weeds grew before; that hundreds of acres of other clovers and permanent pastures have been established on gullied and depleted acres; that home conveniences are in a large number of homes; that improved livestock, up-to-date farm machinery, and storage buildings are now found on hundreds of farms in the county.

The first limestone club was organized in 1919. A lime crusher started crushing limestone rock that was hauled by horse-drawn wagons to more than 300 farms with a total acreage of more than 4,000 acres. Fields have been made to produce from 25 to 100 bushels of corn per acre where 10 to 12 bushels was formerly produced.

Instead of boys and girls leaving the county, seeking employment in the factories, they have through the 4-H clubs been given a new outlook upon life and have become partners with their parents, getting both work and pleasure which bring profits and contentment. The first 4-H fair was held in 1916, with 24 club members exhibiting. Now it is not unusual to have 400 boys and girls taking part with several hundred exhibits.

Adult community clubs have done much in bringing a spirit of cooperation. Roads have been constructed through community effort. One-room school buildings and log-cabin homes have been replaced by consolidated school buildings and modern homes. Cooperative buying and selling and other cooperative community projects have become a permanent fixture in the farm program.

Jackson County has never been a surplus producing county in farm produce, and the aim has been to have farmers feed themselves and live independently of the markets. But since hard-surfaced roads have been constructed and community roads improved, greatly improved soil practices and general farm practices adopted on many farms, the farmers are looking forward with new anticipation to producing some farm products which can be shipped and sold outside the county.

After 20 years of continuous service, I can see that though much headway has been made, I have in truth only been pioneering. New conditions coupled with droughts, depressions, and unrest among the populations of the world face us with new problems; problems that only the Extension Service can solve. I believe that a larger percentage of the rural people are now backing the extension

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Meeting Pennsylvania Credit Needs

LOANS of $195,000 to 480 farmers had been made up to September 13 by the Lancaster Production Credit Association in Pennsylvania. These loans consisted of $125,000 for crop and general farming purposes and $70,000 on feeder cattle. There were 280 farmers in the former group and 200 farmers in the feeder cattle loan group.

This association, which was incorporated December 1, 1933, and is organized on a cooperative basis, makes loans in Dauphin, Lancaster, and Lebanon Counties. The authorized capitalization is $250,000. The association has $150,000 in class A stock which is invested in Federal bonds. Each farmer receiving a loan must own one share of class B stock costing $5 for each $100 or fraction thereof borrowed. Stock may be purchased with money borrowed from the association. It gives the borrower the right to 1 vote at the annual meetings regardless of the size of his loan. The farmer need not buy stock each time he borrows, unless it has become impaired in value or he wishes a larger loan. Funds from the sale of class B stock also are invested in Government bonds. The bonds are pledged with the Intermediate Credit Bank of Baltimore to secure a line of credit for the paper the association wishes to discount.

This cooperative association of farmer borrowers makes loans at cost to its members. Security consists of a first lien on the crops or livestock to be financed and whatever additional personal property that may be required to adequately secure the loan. Loans are repaid when the crop or livestock financed is sold and usually do not exceed 12 months in length. Dairy loans may be made for a year, renewable for 12 months at a time for 2 additional years, and are usually paid by monthly installments.

Loans are made up to a reasonable percentage of the appraisal value on livestock and equipment, the actual percentage varying according to the many factors that go to make an efficient farming operation. Real estate is not ordinarily taken as security but where other security is insufficient may be used as secondary collateral.

When the applicant seeks a loan he must state on the application blank the purpose for which the loan is to be used. His property listed on the application is appraised by the association inspector and the value thereof is reported to the loan committee, which acts after considering this report, the standing of the farmer in his community, and the moral risks involved.

In many cases loans will be paid immediately out of a cash fund upon approval of the loan committee. These loans then are offered for discount with the intermediate credit bank. Some loans are acted on by the board of directors and passed on by the Intermediate Credit Bank of Baltimore before they are granted.

A cash-loan fund of $10,000 for feeder cattle is on hand. These loans are usually made on conditional-sale contracts. They can be had in a short period of 2 or 3 days after farm and cattle inspection, and after being passed on by the loan committee.

Interest is charged at a fixed margin above the rediscount rate of the Intermediate Credit Bank of Baltimore. The present interest rate (September) is 5 percent, to farmers borrowing from the Production Credit Association.

Feeder loans must carry fire and storm insurance costing 67 cents per $100 in insurance, which is paid by the borrower. Loans requiring a chattel mortgage must pay $1.50 each for recording.

Time Shows Value of Extension Work

(*Continued from page 171*)

program in this county than ever before. Agricultural extension work in Jackson County has been the sole agency working with the rural people in helping them to help themselves, and I feel sure that this program has changed the status of living in this county during the score of years.

One principle that I have always kept in mind is that it is not the purebred pig, calf, lamb, or poultry that makes for efficiency but the boy and the girl who will bring about the change which will result in the "better day." No one can fully realize to what extent 4–H club work will reach the lives and character of boys and girls unless he has closely observed it working over a long period of years. In 1915 the first shipment of purebred pigs was delivered to some 30 club members. This group represents my first crop, and I have seen them grow up during these 19 years to hold positions of trust such as superintendent of schools, superintendent of the high school, engineers, and farmers of the first class. I am not exaggerating when I say that 4–H club work in this county has influenced for the better the lives of some 4,000 boys and girls.

As I look around me and observe counties where county agent work has not been continuous or a definite long-time program has not been worked on continuously, I am made to believe that agricultural extension work will render its best service when the work can go on without interruptions. Such a program as extension offers to the rural people is sure to give results; and our county needs this service as much as, or more today than it did when I started work more than 20 years ago. I have reached goals which I doubted I could reach, but now new goals are up and the new adjustment in agriculture certainly offers the extension worker a broad field for service which no other agency can fill.

FARM women in Maine "know their groceries." Extension workers in the State, through the home demonstration agents, have been carrying on a series of demonstrations on low-cost meals and efficient buying. At the first meeting the home demonstration agent discussed meal planning and food preparation with the group. A low-cost meal was prepared and served to the group. During the afternoon the agent led a discussion of the points to remember in buying canned foods, emphasizing the idea of quality, grade, and condition of the contents.

At the second meeting the women discussed the events, such as the food and drug legislation, which would affect the buying habits of the women. There was also a discussion of the use of cheese in low-cost meals. The afternoon discussion centered about the points to be considered in purchasing a list of food requirements.

As an outcome of these meetings a merchant in one community set up a demonstration shelf of foods to be considered in low-cost meals. At later meetings the cooperators reported their results and reactions to the plan and as to its value.

New Approach to Seed Wheat Cleaning

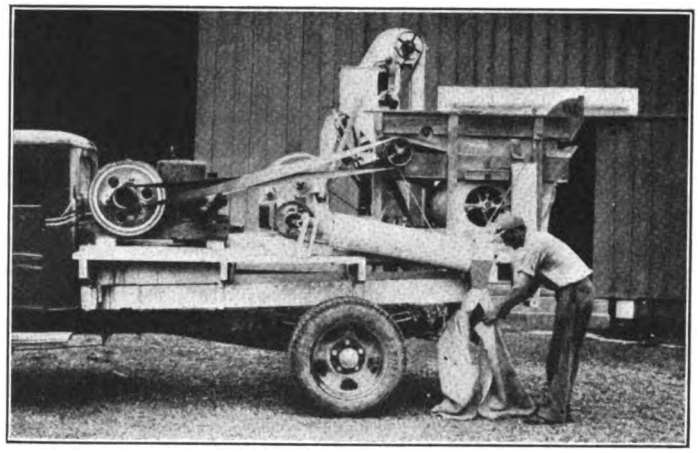
AFTER wearing out all the age-old slogans, such as "As ye sow, so shall ye reap", and resorting to every known method of persuasion common to extension agronomists and county workers, a new approach to the seed-wheat cleaning problem proved very successful in southwestern Indiana. The plan worked out by C. E. Skiver, of the agronomy department of Purdue University, consists of making available portable seed-cleaning equipment and having it moved to the seed wheat rather than having the seed brought into a central point. County agricultural agents have actively supported the development of the project and have arranged schedules for the units.

The units are set up with the best cleaning equipment available which consists of a large capacity fanning mill, a cockle separator, and a 3½-horsepower gasoline engine as a power unit. The elevators and conveyers are so installed that all operations are automatic. The seed grain is put in the receiving hopper on one side of the truck and taken off in the sacker on the other. The equipment is mounted on an ordinary 1½-ton truck chassis. The machines will clean seed wheat at the rate of 35 to 50 bushels per hour, depending upon the amount of dirt in the grain.

The area in which this project is operating is a typical soft red winter wheat area of the Ohio Valley. The 783 farms serviced in Indiana in 1934 averaged 103 bushels of seed per farm. The weed seeds most difficult to separate are cockle and chess or cheat.

As the mutual benefactors from the operation of this equipment would be the millers and the growers, an attempt was made to so set up this project that the burden of expense would fall about equally upon both parties. The mills were asked to provide the equipment and a small toll was taken to cover actual operation expenses. The first year the toll was 3 cents per bushel, which was payable either in cash or grain. Making tolls payable in grain made it easy for the operators to collect and made payments easier.

The first year of the operation of this equipment was 1932 when two improvised fanning-mill units were provided by a milling company of Evansville, Ind. This was the year when the price paid to the farmer for his wheat ranged from 37 cents to 42 cents per bushel, and farmer morale was considerably below that level. In spite of this, the two crude machines reached 209 farms and cleaned a total of 19,155 bushels of seed, which was 8 percent of the seed required in the area in which the machines were operating. While times were hard and many toll collections were paid in grain, the machines proved very popular and they were able to reach only a small percentage of the growers requesting the service.



One of the mobile seed-cleaning units.

Improved Service

The next year the same millers were able to see the marked improvement and furnished three portable units. In addition cockle separators were added to the equipment and sufficient elevators and conveyors were installed to make all operations automatic. The machines this year were started immediately after threshing and operated until seeding time. This gave them 8 weeks in which to run. With the improved service and the doubling of the cost of the units, the fee was necessarily raised to 4 cents per bushel. During the second season, 1933, the 3 cleaners reached 468 farms and cleaned 53,420 bushels of seed wheat which was 22 percent of the area's requirement. The operators were unable to reach all the growers requesting their services.

In an attempt to extend this type of service to other field crops, one of the units was equipped to clean lespedeza seed and 60,000 pounds were cleaned after the wheat cleaning season of 1933.

During the 1934 season 1 unit was added to the Indiana territory making 4 units available there, and the same commercial firm provided 2 additional units for adjoining counties in Illinois, making a total of 6 machines in operation altogether. The two machines worked in Illinois were operated under the direction of Prof. J. C. Hackleman of the agronomy department of the University of Illinois, with the assistance of the county extension agents.

Treating Seed

As bunt or stinking smut had become very prevalent in this area, a smut treater was developed that would feed the proper amount of copper carbonate dust into the stream of wheat as it left the cleaner and properly mix it with the seed before discharging into the sacker. No additional charge was made for the dusting other than the cost of the chemical. This made the project so popular that the requests for the services of the machines were again far in excess of their capacity.

The 6 portable cleaning units reached a total of 1,086 farms and cleaned 121,085 bushels of seed wheat, which is 35.4 percent of the seed requirement of the area in which the project was conducted. In addition, the machines treated 43,947 bushels of seed for stinking smut. This is 12.8 percent of the area's seed requirement.

The success of the project can be attributed very largely to two factors: First, the excellent job which this improved equipment was able to do; and, second and most important, was the large volume of seed they were able to reach in the 7 or 8 weeks between the threshing and seeding seasons. It was this large volume that kept the cost exceptionally low for the quality of service rendered. This large volume was made possible through the efforts of the extension agents in this area, as it was

their duty to arrange the schedules of the machines. The most effective plan of scheduling these machines was conducted in Knox County, Ind. Here County Agent A. S. Benson sent out his publicity and named the township wheat committee chairman as the party who would receive requests for the services of the machine and route it while in his township. The cleaning unit simply moved from one township to the next and reported to the chairman. In this county 42.6 percent of the total seed requirement was reached through the efforts of the county agent and the cooperating township wheat committees.

Machines Kept Busy

A competent operator was in charge of each machine, as operator, manager, and purser. For his wages he received a sizable portion of the net receipts of the machine. Thus it was to his advantage to keep the machine busy and arrange a schedule to get the most volume. During the latter part of the 1934 season each operator employed an assistant and with the aid of lighting equipment operated the machines day and night. In this way each of the 6 units was able to average better than 20,000 bushels of seed. Even with these long hours of operation they were not able to meet all the requests for their services.

It is apparent from this experience thus far that the millers will get their investment back in a period of from 4 to 5 years and will have the improvement of the wheat in the area. The demand has been so heavy and the millers have been so well pleased with the results of this project that they propose to add 4 new units to the fleet next year, bringing the total operating units up to 10.

The processing or treating of the seed for a little over one-third of the acreage in this territory will be of material value to the growers and in addition will head off an infection of stinking smut that has broken out in the community in the last 2 years.

While the milling companies which provided the cleaning units are interested solely in wheat, the services of two units are being extended to the cleaning of soybeans this year. The extension of these units to other field crops will help relieve the overhead and will bring about as intensive and as rapid an improvement as it has in wheat production and quality.

Yakima County Adjusts Farm Debt

ONE of the outstanding pieces of farm-debt adjustment work in the United States is being done in Yakima County, Wash. The committee dealt with 827 individual cases, involving debts of $2,100,590, from October 23, 1933, to October 1, 1934, and secured adjustments in 478 cases. Loans on adjusted cases during this period total $1,467,250, representing almost three-fourths of the indebtedness involved. Taxes and water assessments made available through the work of the committee total $82,035 and $65,278, respectively, and were not reported until the mortgages were filed with the Federal Land Bank, Spokane. The cases handled involved 9,048 interviews in carrying on negotiations between the debtors and creditors involved.

Yakima County has also the distinction of being one of the first counties in the United States to set up an organization for farm-debt adjustment work. The agricultural committee of the Yakima Chamber of Commerce opened an office for helping farmers to make out applications for land-bank loans in June 1933. The bank's requirement that all debts be consolidated for the loan started the committee into the farm-debt adjustment field, with all its ramifications. The actual work of adjusting debts was taken up by two prominent Yakima orchardists, J. L. Hughes and R. A. DeBuch. Mr. Hughes resigned in March this year and was replaced by T. S. Johnson, another representative of the orchard interests.

After official appointment of the farm debt adjustment committee by the Governor of the State, the committee of 13 representative farmers and professional men realized that the job would require the full time of at least two men. It also became apparent that formal meetings of the entire committee with parties interested in debt adjustment might add to the debtor's humiliation and lack the effectiveness of personal consultations. Consequently the actual work was turned over to the two men pioneering the work in the county, while the committee representing all parts of the county acted in an advisory capacity and referred cases in their communities to the two adjusters.

Cooperation with Bank

One of the most important factors in the success of the committee is the close cooperation with the Federal Land Bank of Spokane. The land bank not only referred 267 of the 827 cases handled directly to the committee but cooperated in every way in granting reappraisals, increased committments, extensions of time, and other courtesies where the cases seemed to justify such action. The contact appraiser has been especially helpful in overcoming many difficulties encountered in securing beneficial loans and in arriving at a fair basis for adjustments.

Frankness on the part of the two debt adjusters in dealing with both debtors and creditors and the advantage of personal and confidential conferences with those involved has resulted in the handling of hundreds of cases that would never reach the average committee. A large committee, made up of men donating part of their time to the work, labors under a distinct handicap in dealing with the average debtor and creditor in the opinion of the Yakima organization.

The unusual results obtained by the committee have been obtained by placing the actual work upon men who give their entire time to the many details involved in each individual case. The work is being financed by funds from the Washington Emergency Relief Association and Yakima County. These funds also permit the employment of a stenographer so that daily records are kept of all work done. Summaries are prepared showing the volume of funds brought in through the aid of the land bank and to what end they were used. A slip is attached to each case filed showing the entire history of its progress.

"The work being done by Mr. DeBuch and Mr. Johnson, of Yakima farm debt adjustment committee, is outstanding not only in the State but in the Nation", said E. M. Erhardt, president of the Federal land bank at Spokane. "The attitude of the numerous persons interested in the loan program toward the work of the committee is almost entirely favorable, and the work is to be highly commended. The aim of the farm debt adjustment program has been to lend aid to farmers who would then be able to help themselves. Of all the funds loaned to farmers in the Northwest, 89 percent have been used to refinance old debts. During the past 17 months loans amounting to $13,989,220 have been made in the State of Washington, many of them through the cooperation of debt-adjustment committees, aiding 6,286 farmers to meet their obligations", said Mr. Erhardt.

Farmers Use Cold-Storage Plants

The extension workers in Louisiana are working with the farmers and obtaining the cooperation of the cold-storage plants in promoting better curing of home-produced pork. Extremely low prices for live hogs, a comparatively small farm income, and the increased facilities offered by ice houses have been factors in producing an increased interest in home curing. The annual reports for the State indicate an additional 2,500,000 pounds of pork cured by farmers in the State.

A part of the Louisiana program has been the cooperation obtained from the cold-storage plants in the State. Meetings were held to bring together the cold-storage managers and farmers, explaining the need for such storage in curing meat and to acquaint the farmers with the facilities of the plants. Training schools and demonstrations were held to afford opportunity for all to see the improved methods of cutting and curing, avoiding waste, and eliminating the chances of spoilage. Storage people, after an introduction to the plan, cooperate to the fullest extent, as this work comes at the time of their autumn activity. The average charge throughout the State has been about 2 cents per pound for the curable pork, and in one case 25 cents per 100 pounds of meat stored for 30 days.

In Avoyelles Parish 22 demonstrations were given with 563 farmers in attendance and 45,000 pounds of meat were cured in the local cold-storage plant. Over 60,000 pounds were cured in Rapides Parish following 13 demonstrations.

Women Find Rewards and Difficulties in Leadership

(*Continued from page 162*)

Examination of the difficulties and dissatisfactions in the job of leadership made evident that the difficulties are ones that may be overcome partially, at least, if extension workers will exercise more care in program planning, leadership training, methods of work, and election of leaders not too greatly handicapped by lack of time or facilities for travel to meetings.

One hundred and thirty-four women felt that club members had insufficient interest in work planned, and this might have been obviated by better program planning; 124 felt the lack of enough training or help to know exactly how to do the job; 119 reported lack of information as to what was expected; 61 complained of difficulty in getting reports; and 44 of not understanding how to make out reports. All of these difficulties could have been reduced by more careful training of these volunteers. Fifty-eight felt a lack of recognition of service given, and 27 felt that the work required too much time.

Choice of Leaders

The mistakes in choice of leaders involved 122 who were unable to drive a car and get to meetings regularly, 55 who had young children, sick folks, or a very large family so that their home duties demanded an unusual amount of time, and 22 inexperienced or uninterested in the particular job of leadership for which they had been selected.

It is difficult and often impossible to do a successful piece of community work in an ill-willed community. Doubtless not all of the 147 who felt hindered by misunderstandings on the part of club members or people in the neighborhood or personal prejudices and the 58 who reported difficulties due to local factions and jealousies that divide the group, live in such communities. Even if they did, however, so that none of the conditions causing them to check these resulted from factors that could be controlled or prevented, the number of those difficulties and dissatisfactions which could have been avoided or at least decreased through better methods and more detailed training were four times those of factors over which an extension worker might have little control.

A UNIQUE live-at-home project is being tried out in De Soto County, Miss., at the suggestion of County Agent G. C. Mingee in connection with the acreage retired from cotton production. On each of the 12 large plantations in the Delta a sufficient area of land best suited to truck growing will be planted to vegetable crops to meet the needs of tenants on the entire plantation. This is worked by such tenant or tenants as are skilled in trucking, and the vegetables grown are issued to the other cotton tenants, in the same way rations were formerly handled from the commissary.

THE roadside market in Tazewell County, Va., is only open 1 day each week, yet it has contributed to the income of the cooperative home makers. In some families this was the only cash income. Mrs. Tickle, the chief supporter of the market since it was established, earned $163.95 during the summer of 1933.

Mr. and Mrs. Walter C. Porter.

He Demonstrated Better Farming in 1903

MR. AND MRS. Walter C. Porter were among the first farm demonstrators. Back in the winter of 1902–3 Dr. Seaman A. Knapp held a meeting at Terrell, Tex., and presented his plans for agriculture. Mr. Porter volunteered to demonstrate the practices recommended, but so impressed were the town people that they raised a fund of $1,500 to guarantee Mr. Porter against loss in following the new farm practices. Mr. Porter devoted 100 acres to his first demonstration; one-third to cotton, one-third to corn, and one-third to oats and speckled peas, testing the best varieties for the section and the value of certain fertilizer. These acres showed from $6 to $8 an acre profit above normal. He has been a successful farmer and has educated nine children. Six of the boys have attended Texas Agricultural and Mechanical College and one of the sons now manages his father's farm. Mr. and Mrs. Porter are still following extension teaching on the same farm.

HOME industry and a roadside market were responsible for a welcome cash income on the dairy farm of George Brackett, of Greenland, N. H. Home-made ice cream was the product and special high-speed freezing equipment made it possible for Mr. Brackett to meet demands which ran as high as 100 gallons a day. The extreme cleanliness of the market building and the nearby dairy barn attracted customers from far and wide.

Education Aids Cotton Program

IF LOUISIANA farmers do not understand all phases of the cotton adjustment program it is not the fault of the county agents, county committeemen, nor of the teachers of vocational agriculture, and the daily and weekly press, for all of these agencies have cooperated with the Cotton Section of the Agricultural Adjustment Administration and the State Extension Service in presenting unbiased facts to growers.

Although the vocational teachers rendered good service in the plow-up campaign, no concerted program was adopted until April 1934, when C. A. Cobb, Chief of the Cotton Section, called a Southwide meeting in Washington of agricultural extension workers and vocational leaders, and decided upon the type of educational program which would be presented. Bentley B. Mackay, extension editor, attended the meeting, and Roy Davenport, professor of agricultural education, Louisiana State University, was later appointed collaborator.

Armed with charts and other data furnished by Washington officials, Dr. Davenport returned to Louisiana and conferred with J. W. Bateman, director of extension; J. G. Lee, dean of the College of Agriculture; Shelby Jackson, State supervisor of vocational agriculture; F. W. Spencer, field director of the cotton program; and others.

These leaders, together with E. D. White, Arkansas extension economist, acting as field representative of the Cotton Section, then called four district meetings which were attended by vocational teachers and county agents. At these meetings plans of procedure for each parish and community were outlined. Upon their return to the parishes the county agents and teachers called together the county and community committeemen and gave them a thorough course of training so that each man would be in position to answer intelligently any question that might be asked concerning the program. In some places the agents and teachers held parish-wide meetings which were well attended. At such gatherings the agent confined himself largely to the immediate procedures necessary to complete the program as rapidly as possible, while the vocational teacher discussed events leading up to such a program, the national and international situation with regard to cotton, and the like.

The next step was for the vocational teachers to hold community meetings in areas surrounding their schools and to hold themselves in readiness to carry the message to any other community when requested to do so by the county agent. According to reports received from the 90 teachers in 37 parishes there were 304 such meetings held in 35 parishes from May 15 to July 1, with a total attendance of 13,626.

Now that the rush has subsided special meetings are not being held, as a general rule, but every teacher has included cotton-production adjustment facts as a part of the adult evening classes. Charts and information furnished by the Cotton Section form the basis for all of the talks.

These discussions have proved invaluable agents, teachers and farmers say. Louisiana was the first State, with the exception of Florida, to complete the issuance of cotton certificates to growers under the provisions of the Bankhead Act. While due credit must be given to the State office force and to the excellent clerical help, one cannot deny that the educational campaign played an important part in putting over one of the most stupendous jobs ever undertaken by an agricultural group.

Meat Curing in Florida

Demonstrations on meat cutting and curing which were held in five communities of Jefferson County, Fla., have resulted in improving the quality of home meat supplies. Not only have they had this desirable effect but as each demonstration was opened by a discussion of the type animal which will produce the most economical cuts of meat, it is believed that there will be a general improvement of the type of swine produced in the county.

The 1930 census figures for the county show that nearly a million pounds of pork have been cured in the county each year. However, much of this production was of rather low quality, lacking in uniformity of cure, and a large quantity was lost through spoilage from improper handling. Waiting for cool weather had often resulted in loss of quality in the animal and in the cured meat.

Animals used in the demonstrations were killed and stored overnight in the local cold-storage plant. The advantages of this quick chilling and its importance in the prevention of spoilage were pointed out. The demonstration was completed with the application of the dry salt and sugar for curing meat.

To illustrate methods for individual farm curing, a curing cold-storage box, using ice as a refrigerant, was demonstrated. Cured pork from these demonstrations won the $300 award for the best home-cured pork at the State fair, and not a single piece of the meat was lost through spoilage.

Rural Rehabilitation in New Hampshire

Ten county rehabilitation agents have been appointed in New Hampshire to organize local community leadership in the State-wide effort to help rural-relief individuals of the State get back on the road to self-sufficiency. An experienced local person in each of the 10 counties was selected for this work.

Instead of following a program under which 50 to 200 people are selected for rehabilitation and started with loans of Government money, the New Hampshire Extension Service aims to provide educational guidance for helping 2,000 rural-relief and near-relief individuals to get established on a subsistence basis without indebtedness. The State extension service will give all possible educational assistance and is responsible for putting the plan into effect. It is cooperating with the State Emergency Relief Administration and is administratively responsible in this work to that administration.

The actual responsibility for the rehabilitation will be placed with the communities concerned. Each local community will be called on for definite advice and direction, under the leadership of the county rehabilitation agents.

Labor-commodity exchanges will probably be one development in the program. These would be managed by the community advisory committees for the purpose of assisting those persons now on relief or near relief to exchange their labor for milk, fuel wood, and similar necessities and thus become less dependent.

The local community is also to be invited to assist by supplying such needs as cows or a few chickens, or even by arranging for loans through the local bank if these are considered a definite need.

J. C. Kendall, director of the New Hampshire Extension Service, has stated that he believes this plan to be a desirable one for his area because it does not place the individual now on relief under greater financial obligation than he is able to pay. Neither does it set up the relief recipient in better circumstances than the border-line person who has struggled successfully to stay off the relief rolls.

Farm Prospects Are Brighter

C. B. Smith
Assistant Director, Extension Service

THE crop year of 1934 in the United States has been an unusual one. The worst drought in 50 years visited some sections of the Central West. In large portions of a number of these States not an ear of corn was produced, gardens were cut to the ground by blistering winds, streams and water holes dried up, wells failed, cattle and sheep had to be moved by thousands of trainloads to distant pastures. Over great areas, crops failed utterly.

Benefit Payments Helpful

AND yet, in these very areas, the majority of farm families have something for which to be thankful. Most of them had accepted the Federal Government's plan of production control and secured partial payments on adjustment of their normal volume of production of crops and livestock, even though no crops were produced. The destructive effects of the drought on the farms in drought areas have thus been eased in some degree by this Government crop insurance plan. In many cases, these benefit payments have constituted the farmer's only source of income. This is a Government activity never attempted before and came in the nick of time to help ameliorate a great regional tragedy. That is something for which to be thankful.

Increased Farm Income

IN sections of the country where normal or approximately normal crops have been produced, the farm family has seen substantial advances in prices of agricultural products. The year's farm income has been increased by nearly a billion dollars. The farmer is getting nearly a dollar a bushel for his wheat on the farm, 11 to 12 cents a pound for his cotton. Corn, barley, and oats are bringing good prices. Hogs have advanced in price substantially. The average income of these farm families for the sale of crops and livestock products in 1934 has increased approximately 19 percent over 1933. This increased income has reflected itself in more things for the home and family. That is also something for which to be thankful; but it is probably not the biggest thing for which the farm family may be thankful.

Constructive Work

ONE of the biggest and most blessed things in the world is work—constructive, creative, worth-while work. Today, while 10,000,000 men and women sit or stand in idleness because industry lags, 32,000,000 farm folks have constructive work to do, work that gives them hope and keeps them sane, wholesome, and forward-looking. Besides that, practically all farm people have shelter, a place to live where rent is lower than anywhere else. Most of them have something to eat and wood or coal to keep them warm.

Times Are Improving

WE can be thankful today that we live in a country where it is the intent of the people so to order their Government that all shall have work to do, all have some income, and all some leisure—leisure in which to enjoy the fruits of their labor and have time to read, to study, to play, to be a neighbor, and to grow mentally and spiritually. TIMES are getting better. In our rejoicing may we not forget the man and woman without a job, the home without income, and may every one of us who has something, even though it be little, share that little with those who have less, and in the sharing remember it is not so much the gift as what lies in the heart of the giver that counts.

MEAT COOKING CHARTS

THE principles of meat cookery are illustrated in a series of seven charts, prepared by the Bureau of Home Economics, U. S. Department of Agriculture. Each chart is 20 by 30 inches and is printed on heavy paper. *Copies are not available for free distribution.* They may be purchased at 50 cents a set from the Superintendent of Documents, Government Printing Office, Washington, D. C. Sets cannot be broken to supply individual charts.

Titles of Meat Charts

DO YOU KNOW MEAT CUTS AND COOK ACCORDING TO THE CUT?

ROASTING A TENDER CUT.

STUFFING LOW-PRICED TENDER ROASTS.

BROILING TENDER STEAKS AND CHOPS.

POT-ROASTING A LESS TENDER CUT.

BRAISING A LESS TENDER STEAK.

GROUND MEAT IN SAVORY WAYS.

FILM STRIP [Series 314]

An illustrated lecture on COOKING MEAT ACCORDING TO THE CUT, film-strip series 314, is also available. This series, consisting of 51 frames, can be purchased for 45 cents from Dewey and Dewey, Kenosha, Wis., after obtaining authorization from the United States Department of Agriculture. Blanks for this purpose will be supplied upon request to the Division of Cooperative Extension.

EXTENSION SERVICE
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THE RURAL COMMUNITY SHARES IN BENEFIT PAYMENTS

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In This Issue

WHAT is the beef cattle situation throughout the country? What is being done to improve this industry? Chester C. Davis, Administrator, Agricultural Adjustment Act, answers these questions for us. He talks of some of the activities of the U. S. Department of Agriculture, the Farm Credit Administration, and the Emergency Relief Administration to meet the emergency that had developed because of the drought. What the Federal and State governments are doing to control diseases of cattle is also discussed.

DIRECTOR W. H. BROKAW, of the Nebraska Extension Service, in discussing "Adjustment Program Influences Extension", says that agricultural adjustment has provided a common field on which men from various farm organizations have worked. It has brought about cooperation of these groups, a lack of which has so often proved to be the stumbling block in the accomlishment of sound extension programs. He believes that the growth that extension has made in its ability to organize information properly, to develop leadership, and to render service indicates a better future in which extension will receive a satisfaction in seeing some of the things which it has worked for enjoyed by farm families.

THREE MILLION farmers in thousands of farm communities are cooperating in adjustment programs. The December 31 figures showed that a total of $517,953,183.24 has gone in benefit payments to cooperating farmers; that the national farm cash income for 1934 was 20 percent greater than in 1933 and about 41 percent greater than in 1932. We know that this improvement in the financial condition of the farmer has not only benefited him but practically every other group in his community and has been a factor in bettering business conditions generally. These general statements on the beneficial effects of adjustment operations are illustrated clearly by stories of two typical counties—one in Indiana, the other in Illinois—which appear under the title, "Benefits from the Farm Viewpoint."

TWO EXAMPLES of how extension workers and teachers of vocational agriculture worked together in placing vital facts on the cotton situation before farmers in Georgia are given by Hart and Jefferson Counties.

Contents

On The Calendar

Department of Superintendents, National Education Association, Economics Department, Atlantic City, N. J., February 23–28.

Livestock Show and Rodeo, Tucson, Ariz., February 21–23.

Houston Fat Stock Show, Houston, Tex., March 2–14.

Fifty-ninth Annual Convention, Texas and Southwestern Cattle Raisers Association, Houston, Tex., March 12–14.

Southwestern Exposition and Fat Stock Show, Fort Worth, Tex., March 16–24.

National Education Association, Department of Rural Education and Home Economics, Denver, Colo., June.

WHEN the Whitman County (Wash.) Wheat Production Control Association had the task of measuring the wheat and contracted acreage of the largest wheat-producing county in the United States within a period of 6 weeks they saw the difficulty of completing the work in that time by survey crews using the cumbersome chain and wheel methods. They decided to make an aerial survey, and so successful was this method that Walla Walla and Garfield Counties also followed the same plan.

THAT the Federal milk license in the Boston market is proving beneficial to producers is indicated by the fact that during the first 4½ months under the license, as compared with the same period in 1933, there was a total increase in their net income of more than 1½ million dollars. One of the most important undertakings is the so-called "equalization" feature, which makes each distributor bear his share of the class 2, or in the Boston market, so-called "surplus" milk.

READING CLUBS for rural people are meeting with favor in North Dakota where the clothing specialist assisted the director of the State library commission to conduct the project.

THE EXTENSION SERVICE REVIEW is issued monthly by the EXTENSION SERVICE of the United States Department of Agriculture, Washington, D. C. The matter contained in the REVIEW is published by direction of the Secretary of Agriculture as administrative information required for the proper transaction of the public business. The REVIEW seeks to supply to workers and cooperators of the Department of Agriculture engaged in extension activities, information of especial help to them in the performance of their duties, and is issued to them free by law. Others may obtain copies of the REVIEW from the Superintendent of Documents, Government Printing Office, Washington, D. C., 5 cents a copy, or by subscription at the rate of 50 cents a year, domestic, and 75 cents, foreign. Postage stamps will not be accepted in payment.

C. W. WARBURTON, *Director* C. B. SMITH, *Assistant Director* L. A. SCHLUP, *Acting Editor*

The Beef Cattle Situation

CHESTER C. DAVIS
Administrator, Agricultural Adjustment Act

TO PRODUCERS of beef cattle, supply, price, and competitive conditions for this class of livestock are definitely encouraging.

Current quotations on fat and feeder cattle indicate a strengthened price structure for the industry. Most sales of cattle in Chicago late in November were at $6 to $9 per hundredweight.

Recent auction and private sales of purebred beef and dairy stock have shown substantial increases in average prices compared with those of a year ago.

Marked reductions in the national supplies of hogs and sheep in the last 15 months have improved the competitive position of beef in meat markets.

An increase in rural and urban buying power has been brought about by national recovery measures adopted in 1933.

Since the depression began, owners of cattle have culled their herds on a scale hitherto unknown in the industry.

Supplies of cattle in the United States are now largely adjusted to changed conditions and are tending toward a balance with the consumptive demand.

Beneficial Effects on Dairying

Dairy farmers are sharing in the benefits growing out of adjusted cattle supplies and those resulting from the national recovery efforts begun in 1933. The actual, as well as the potential, national market for milk and its products is more favorable to producers than it has been for several years.

During the first 9 months of 1933, cattle prices were at the lowest levels in more than 25 years, and a year ago the national surplus of cattle on farms and ranches was one of the chief troublesome facts by which the industry was confronted.

The all-time record number of cattle in the United States was 71,299,000 head in 1918. In 1920 our total cattle population was 70,325,000 head. By 1928 the number had fallen to 56,701,000 head. Cattle classified as "other than milk cows" declined from 48,870,000 head in 1920 to 41,290,000 at the end of 1933.

Dairy cattle increased from 22,129,000 head in 1928 to 26,062,000 head in 1934—the highest number of dairy cattle in our history.

Several million head roughly classified as "beef" or dual-purpose cattle are kept chiefly for milk and butter production. A considerable percentage of this production of milk and butter is marketed in some form.

When cattle kept for milk production are slaughtered for meat, they compete directly or indirectly with beef cattle in the meat markets.

Last year (1933) the Nation's total output of beef from cattle federally inspected was 4,540,956,000 pounds. To this quantity, steers contributed 52.02 percent, bulls and stags 3.89 percent, and cows and heifers 44.09 percent. Last year's veal production from calves federally inspected was 504,957,711 pounds.

The "Cattle Cycle"

The Nation's cattle population has swung up and down in fairly regular waves or cycles. Each upswing has continued for about 7 years; then the downward swing begins and lasts about 8 years. This is the 15-year "cattle cycle."

While cattle production has exhibited fairly regular periodic increases and declines, it has generally and steadily expanded. Consequently, almost every cycle has been higher than the one just before it.

If there had not been a widespread drought of great severity this year in the United States, our total cattle population would have increased for another year at least before it began to decline, in accordance with the behavior of the cattle cycle.

Cattle Purchases in Drought Areas

In May it became apparent that drought was developing over a wide territory. Personally and through their organizations, owners of cattle in areas where animals had begun to die for want of feed and water appealed to the Agricultural Adjustment Administration for

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help. As the drought increased in destructiveness and extent, it threatened the existence of millions of cattle. Both cattle and sheep were perishing.

An unprecedented emergency had developed and was spreading. It was imperatively necessary to meet it. Humane and economic considerations required that it should be met (1) by acting immediately to prevent further losses of cattle by starvation, (2) by killing and burying on ranch or farm cattle unfit for human food or too near death from want of feed to be removed to pastures in distant States, (3) by conserving scant feed supplies in those parts of drought areas where cattle could be maintained without threatened starvation, (4) by protecting owners from the complete loss of their cattle and their homes, (5) by greatly decreasing the forced flow of emaciated cattle from drought areas into already congested trade channels and thereby obviating a disastrous recession of market prices for all cattle, as well as other meat-making livestock, (6) by assisting as many owners as possible to reduce their cattle holdings to a point at which their herds could be maintained with the better animals as a nucleus and their business as cattle producers continued, improved, and developed, (7) by salvaging a vast food supply for distribution among needy people unable to buy food of any kind, and (8) by taking steps, indicated if not forced by a calamitous drought, toward adjusting the Nation's excessive cattle supplies to the consumptive demand and thus improving cattle prices to producers.

Early in May, plans had been made to meet the situation, in cooperation with long-established units of the Department of Agriculture, the Farm Credit Administration, and the Emergency Relief Administration. Following the creation of the Drought Relief Service, cattle buying was begun where the drought was most acute. By July 2 more than half a million head had been bought on parched western ranges and turned over to the Federal Surplus Relief Corporation, which had them processed for distribution among needy families.

Through to November 24, 1934, the Government had purchased 7,213,818 cattle on about 600,000 farms in drought areas in 24 States, as well as about 3,500,000 ewes. The cattle population of these 24 States includes a high percentage of dual-purpose and dairy cattle.

Texas, Nebraska, North Dakota, South Dakota, Kansas, Missouri, Oklahoma, New Mexico, Montana, Wyoming, Colorado, Minnesota, Utah, Arkansas, Arizona, and Nevada supplied the bulk of the Government's purchases of cattle in drought areas. The other States contributing to the total purchased in drought areas are Idaho, Wisconsin, Louisiana, California, Florida, Iowa, Oregon, and Illinois. About 75 percent of the total purchases consisted of old cows and inferior young she-stock.

Drought relief purchases have reduced the cattle population of these 24 States from nearly 50,000,000 head to 42,229,734 head. It is possible that more than 1,000,000 head additional will have been purchased in some of these States by the end of the year. In the event of a hard winter in the leading beef cattle States where the drought was severe, it is probable that the death rate in herds before grass comes will be above normal, and that the 1935 calf crop will be below normal.

A Kansas farmer facing a drought feed shortage sells some cattle to the Government.

Owners of cattle purchased by the Government in drought areas had received, up to November 25, 1934, the sum of $97,883,870, or $13.57 a head.

Cattle Removals by Disease Controls

Dr. John R. Mohler, Chief of the Bureau of Animal Industry of the United States Department of Agriculture, states that of the 15,000,000 cattle tuberculin-tested in the fiscal year ended June 30, 1934, the number reacting and slaughtered was 232,000. Seventy percent of all the cattle tested were dairy cattle. Later figures indicate a higher percentage of reactors because much of the testing has been and is going on in States in which increased funds have been provided for this work.

Present appraisals of cattle reacting to tests for tuberculosis are higher than those of the past year. At the end of the last fiscal year, the appraisals of reactors, including grades and purebreds, averaged $54.80 a head, while the average salvage value was $11.45. Usually combined Federal and State indemnities, plus salvage value, are somewhat less than the appraised value.

Under Federal testing for bovine tuberculosis, the State in which reactors are found and slaughtered pays an indemnity which usually exceeds the Federal indemnity. In the last fiscal year the average State indemnity was $21.41 and the Federal, $13.80. On this basis, owners of reactors slaughtered have received more than $46 a head.

In their efforts to control bovine tuberculosis, the Federal and all the State governments and several Territories are cooperating. When this work (begun in 1917) got well under way in 1918, almost 5 percent of tested cattle reacted; the most recent percentage of reactors is 1.5. More than 1,860 counties are on the accredited-area basis, which means that they are practically free from this disease.

It is estimated that, in the country as a whole, about 15 percent of the cattle is infected with Bang's disease or infectious abortion.

Under the LaFollette amendment to the Jones-Connally Act, funds were made available to the Agricultural Adjustment Administration for instituting a plan to control this disease and for dealing with mastitis in cow herds. Up to November 1, 1934, a total of 232,185 cattle had been tested for Bang's disease and 33,368 reacted. Approximately 14 percent of the cattle tested reacted. More than 20,000 head have been tested in each of the States of Virginia, Ohio, Minnesota,

(Continued on page 188)

Adjustment Program Influences Extension

W. H. BROKAW
Director, Nebraska Extension Service

FOR the past 18 months it has been the privilege of extension workers to take part in the most far-reaching and intensive educational activity our country has ever known. That impression was gained in the early days of the corn-hog program and has been renewed almost daily from watching the activities, reading a constant flow of letters and telegrams, and listening to phone messages without end. The improvement in letters, phone messages, and presentation of material by committeemen and others could be due only to careful study and preparation.

Committeemen and Farmers

Today even in the most remote sections you find committeemen and farmers as equally able to cope with problems arising in the program as those administratively responsible in State or Nation. The more than 3 million signers, together with office and field employees, constitute a great group who have taken part in this unprecedented educational movement.

Extension has been developing for years the leadership that is proving its worth in this program. Men who have carried a project or demonstration, assisted in carrying out programs, conducted community meetings, and led a boys' and girls' 4-H club were preparing themselves unknowingly for this period of service. After a period of war-time activity came years of study and trial of methods of production and marketing which may now prove their fruitfulness. It seems that the world moves forward in succeeding waves each preceded by a period of preparation and trial.

Thus in a study of the influences that the national agricultural recovery program is having on extension we find that it has brought about what we have been striving to do in extension for years—a systematic, careful, and thoughtful study by practically all farmers of their problems. Not alone the immediate production or marketing problem but the basic and underlying facts of world conditions and demands are essential for a complete understanding.

The farmer is willing to do things for himself; in fact, he prefers to do so. In these programs that we are carrying out we must keep this in mind and allow him to do so. The satisfaction and growth he will make in this program will come from his own thoughts and efforts, and the best thing we can do for him is to guide, but allow him the opportunity to make this growth.

Probably the most lasting influence that the national agricultural recovery program will have upon the Nebraska Extension Service and its cooperating farmers came from the corn-hog referendum.

When previously trained in extension projects or demonstration work most committeemen were able to state the situation clearly and answer questions satisfactorily, but a majority of the new leadership were unable to retain the whole presentation or to handle the questions that arose. The results of the referendum and subsequent surveys, letters and mail votes taken, inspired by an interest to learn why the large negative vote, have renewed our convictions, that we must take nothing for granted. We have long known that new facts and demonstrations need repeating again and again before they are fully understood and applied. Why should we have felt that this hasty training of community leaders would be ample preparation to meet the desire for information that has given trained and prepared leadership a crucial test? The contract signers came with their problems and misinformation, and an interest in the future program and needed definite knowledge in order to cast an intelligent vote. The negative vote was large, not so much from desire to abandon the program, but a protest against little misunderstandings unexplained and incomplete information and unanswered questions on the new program. Extension workers and experienced leaders will not soon forget the lesson relearned.

Educational Program

While the present program has much that is new and demands action on the part of the cooperator, it is primarily educational. It has stimulated rather than changed the extension program. The influence has probably been greatest in the field of the county agent, since his work is so closely linked with the county and community committeemen in direct contact with the contract signer. The number of county agents has been increased greatly during this period; in many counties the cooperative relationship is the same as in old organized ones. The permanency of these new and emergency agents is largely dependent upon the character of the service rendered. This is also true of the regular county agent. At no time since the inception of the work has he been on trial as at the present. Formerly his job was rendering information and service; while we talked in terms of organization it was but simple in comparison with present needs. His program of work must be carefully planned so that his office organization may function perfectly to render service and information to the larger group of county and community allotment committees, and contract signers. Not only must the personnel and field force be properly organized, but the county agent's office files and daily work must be carefully planned and he must have learned the value of time rightly used. The present county agent must be a general. The man who could manage a one- or two-man organization no longer fills the need. He must be able to care for much of the new work and nearly all of the old through trained leadership. The man who failed to see the value of leadership or failed to train leaders has passed out of the picture or soon will do so.

Field of Agent Enlarged

Through it all the county agent has enlarged his field of service, made vital contacts, found new leaders, and has worked long and hard days, but through it all has worked happily, for others have worked with him eagerly and intelligently to accomplish a definite task. County agents who have worked through the years have found this a most satisfying period.

The work of the past few months has renewed the enthusiasm of old supporters, for it has made possible some of the things the need of which they realized, and which they sought, but for which they had only hoped. It has provided a common field on which men from various farm organizations have worked. It has brought about cooperation of these groups, a lack of which has so often proved to be the stumbling block in the accomplishment of sound extension programs.

If the program brings about this one thing—cooperation of farm groups—it will be worth all the time and labor spent upon it. Here, at least, is a definite influence for common good.

The dropping of much regular work, such as dairy herd improvement, poultry record flocks, and other projects requiring some cash outlay or additional labor on the part of the cooperator, while charged to busy specialists or county agents at work on the emergency program, can be traced to dues, fees, or labor requirements which the farmer was unable to meet. With the return of fair crops and fair prices renewed interest will be found in these projects.

Better Future

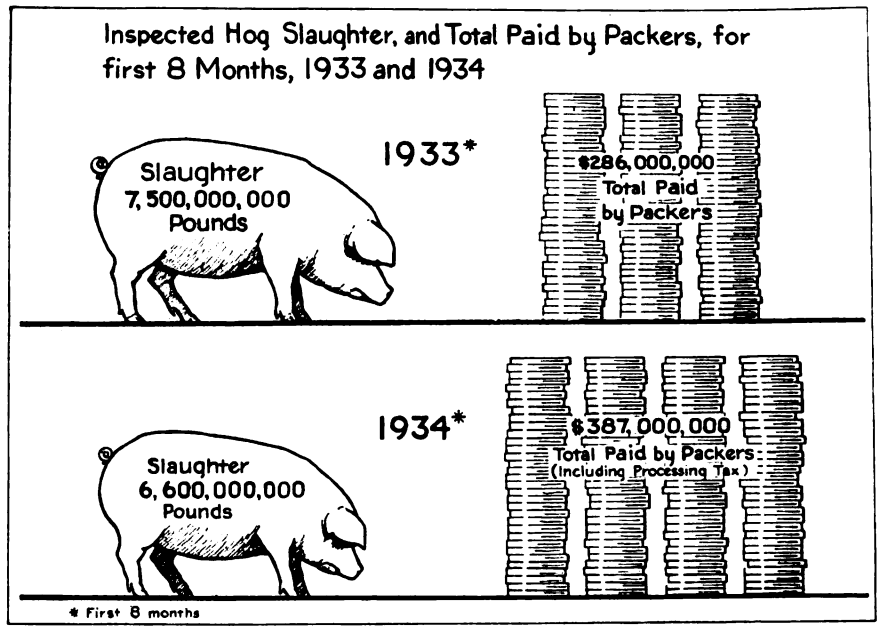
The growth that has come to extension not so much in numbers as in the ability to organize information properly, to develop leadership, and to render service, indicates a better future—a future in which extension will receive a satisfaction in seeing some of the things it has worked for enjoyed by farm families. The growth of the individual, the development of men and women leaders, the value of cooperation of farmers through this great educational movement are certainly paving the way to future betterment.

The part of extension in this program is one of education. We must remember that the welfare of our Nation is wholly dependent upon the training of its people. While the Nation makes its growth in the sciences fundamental to our advancement through highly trained leaders, these leaders must be backed by a people whose masses are informed, intelligent, raised above the fallacies prevalent in ignorance and superstition, believing in their Government and its activities. They must be able to understand fully their own business, its relation to government, and have a general knowledge of world conditions, if they are to succeed in their vocation and maintain happy and satisfying home life.

They may receive their fundamental training in common schools and colleges, but to meet their rapidly changing conditions and problems they must not stop there but be fully and accurately informed through life. This means a continuing education and with the agricultural population, agricultural extension must fill this need, remembering the way is never backward but onward.

A ROADSIDE market contributed 50 percent of the farm income when Mrs. Gideon Vernon, of Washington County, Ark., sold nearly $1,000 worth of farm products. The market is located near the farm home and Mrs. Vernon does this work in addition to her other home-making activities. The market is open from February to December.

Adjustment Raises Hog Income



Preliminary studies indicate that a substantial increase in hog income is resulting from the adjustment in hog marketings effectuated by the 1933–34 emergency hog-buying programs and the 1934 corn-hog production adjustment program of the Agricultural Adjustment Administration. The graph shows that the total estimated cost to packers for hogs slaughtered under Federal inspection during the first 8 months of 1934, including the processing taxes due, was approximately $100,000,000 larger than for the corresponding period in 1933.

This represents an increase of about one-third in total cost and of more than one-half in the hundredweight cost of live animals. At the same time, the total inspected slaughter of hogs for the first 8 months of 1934 was about 12 percent under the total for the corresponding period for 1933.

A part of this gain has been due to an increase in consumer's income and to some adjustment in tonnage effectuated by the shortage of feed supplies resulting from drought, but production control under the Agricultural Adjustment Act has been a large factor. Hog prices throughout the current marketing year are expected to average higher than for several seasons.

Corn-hog farmers in the United States will have an opportunity to hold gains made this past year by cooperating in the 1935 corn-hog program offered by the Agricultural Adjustment Administration.

WILD GAME and wild fruits have been canned for wintertime use by thrifty Routt County, Colo., farm women.

Mountain trout lured from the sparkling streams of the Colorado Rockies and sage chickens have been canned to add the flavor of fish and game to winter meals.

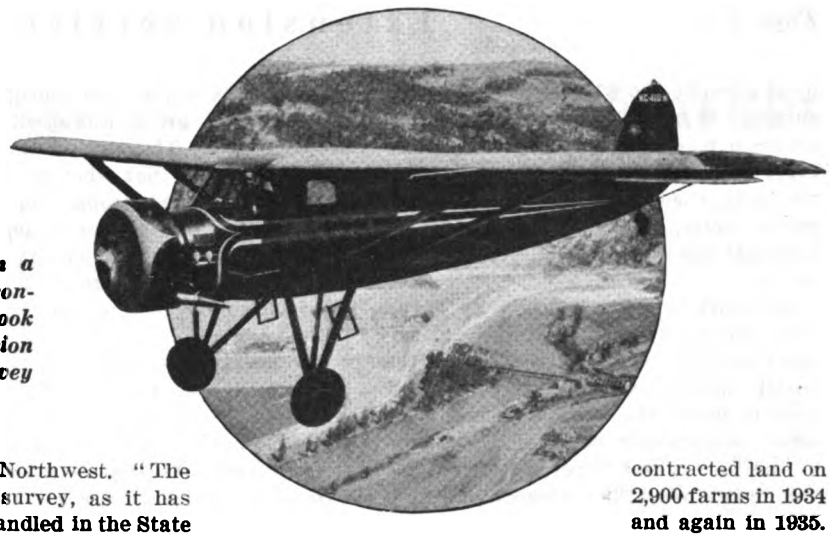
Wild thimbleberries, gooseberries, chokeberries, and service berries are among the native fruits which have been preserved.

At the achievement day more than 500 jars of canned meats, fruits, and vegetables were exhibited by women belonging to home demonstration clubs.

ANDREW SUNDSTRUM, formerly a 4-H club member of Beresford, S. Dak., and now a freshman at State College, is the new president of the Future Farmers of America, an organization composed of 82,000 vocational agriculture students in 47 States and territories. He was elected recently at the annual convention held in Kansas City.

He was also awarded the American Farmer degree at the convention. Only 58 such awards were made. He had to submit evidence that he had $500 invested in farming and that he had accomplished the 6 objectives of the organization.

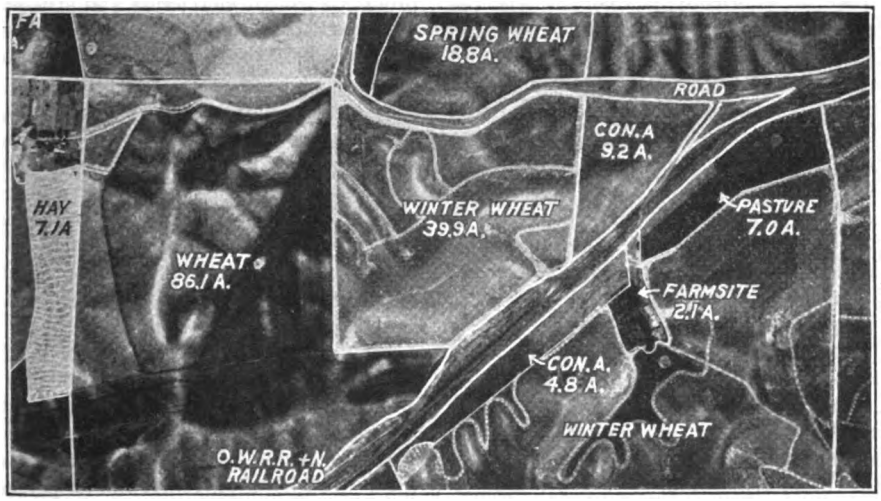
Aerial Survey of Wheat Acres



Faced with the problem of completing within a short space of time measurement of wheat and contracted acreage, several counties in Washington took to the air. This account, prepared by Extension Editor W. D. Staats, explains how the aerial survey was conducted.

WHITMAN, Walla Walla, and Garfield Counties in the State of Washington are thoroughly aerial-survey minded. The wheat production control association in each county has in its office an aerial picture of every farm in the county, showing each field, road, building, stream, hill, gully, and the flora. Although on a scale of 1,000 feet to the inch, each feature can easily be distinguished with the naked eye. Weed patches, wheat, oats, summer fallow, pasture, waste land, and hay fields can be identified with a little practice. Accurate measurements have been made of all wheat and contracted acreage, and measurements are ultimately to be made of all classifications of land. The survey not only provided the basis for compliance measurement at less cost than a ground survey, but gives each county an unexcelled basis for complete land classification, valuation, utilization, taxation, settlement, road building, erosion, weed control, and other agricultural projects and studies.

George E. Farrell, chief of the wheat section, was tremendously impressed with the aerial survey on his recent trip to the Northwest. "The aerial survey, as it has been handled in the State of Washington, offers unlimited possibilities not only in connection with the wheat adjustment program but with innumerable agricultural projects and studies now being conducted by the Agricultural Adjustment Administration", says Mr. Farrell. "I am not only amazed by the accuracy of the measurements obtained by the survey but by the other detail revealed in the pictures. There is very little doubt that the aerial survey will be adopted by other parts of the country where conditions justify it, not only for the value in compliance measurements but for the valuable permanent record of agriculture it provides."



Aerial photograph of a section of typical Pacific Northwest wheat land near Colfax, Wash. Farm sites, hay rows on the winter wheat, and windrows on the hay fields are easily distinguished.

Seven months ago, the Whitman County Wheat Production Control Association was confronted with the task of measuring the wheat and contracted acreage of the largest wheat-producing county in the United States, before harvest, then only about 6 weeks off. The association was faced with the problem of measuring 510,000 acres of wheat and contracted land on 2,900 farms in 1934 and again in 1935. Adding to the difficulty was the rolling topography of the Palouse country, with hardly a rectangular field in the county.

The association immediately saw that to measure the acreage in 6 weeks with survey crews using wheels and plane tables would require over 100 crews and might cost more than $50,000. They found that it would take at least a month to obtain enough wheels and plane tables. Enough qualified men could not be obtained for the survey crews and farmers were too busy to assist in the survey. The further the association went into the problem, the clearer they saw the impossibility of completing the survey within the limited time.

The only answer to the problem was an aerial survey. County Agent C. G. Izett and some of the directors were familiar with aerial surveys made in connection with the Pacific Northwest soil erosion project. An immediate conference with several aerial survey companies revealed that this form of land measurement was a perfected science and had been used for some years by the Army Air Corps and by the United States Forest Service. The percentage of error in measurement was shown to be less than 1 percent.

The association found that the items of expense in connection with the survey would be approximately as follows: For office equipment and clerical aid in computing the acreage and checking compliance, $10,000 for each year; for field work and supervisors for each year, $6,000; and for the aerial survey pictures which can be used for both years, $13,300; this amount to be prorated over the 2-year period. The first two items of this expense would be incurred regardless of the method used to make the survey. It is necessary to consider that the aerial survey was the only method that could be used to complete the survey within the limited time, due to the lack of trained men and available equip-

ment to make the wheel and plane table survey. As a result of the aerial survey, accurate maps have been assembled of every township in the county, covering not only the 510,000 wheat and contracted acres, but a complete picture of 1,300,000 acres of farm land within the county.

Negotiations were immediately begun with the wheat section of the Agricultural Adjustment Administration for the aerial survey. Although at first reluctant to grant the unusual request, the wheat section did so after being convinced that it was imperative if the job was to be finished in a reasonable length of time. As soon as permission was granted, bids were immediately asked from aerial survey companies in the region. Two other counties, Garfield and Walla Walla, confronted with similar problems in terrain and extent of farms, likewise adopted the aerial survey. Umatilla County, Oreg., adopted the aerial survey method a little later.

The actual survey was begun about the middle of June. Using airplanes especially fitted for altitude work and equipped with sensitive altimeters, electrically operated mapping cameras, directional gyros, drift indicators and oxygen equipment, the actual survey was begun about the middle of June and completed about a month later. The planes flew at an altitude of 14,000 feet above sea level, giving the pictures a ground scale of approximately 1,000 feet to the inch. Each picture covered a ground area approximately 7,000 by 9,000 feet and each overlapped 60 percent to compensate for distortion around the edge of the picture caused by the increased angle in relation to the camera lens.

Maps Marked

As soon as the developed pictures for a township were received in the county agent's office, they were assembled by half townships on ply-board, overlapped and fastened with transparent tape and thumb tacks. A field crew took a half township map showing a continuous picture of the region to each farm in the half township, and, with the assistance of the farmer, marked each individual field with the contract number and symbols indicating spring or winter wheat, contracted acres, summer fallow, oats, barley, pasture, or utilization of each field, at the same time having the farmer fill out and sign the necessary forms.

Each set of contract papers was facesheeted, maps originally submitted by the farmer attached and the assembled contracts and half township map given to the instrument man in the office. A planimeter, a special instrument used to measure plane areas, was used to measure each field. The arms of this instrument are set so that when the point of the arm is moved around the edge of the outlined area for three complete circuits, acreage may be read directly from its measuring wheel, provided each linear inch on the picture represents 1,000 feet on the ground.

The measurement was recorded and the papers passed on to the computer whose task was an easy one if the airplane maintained the scale of 1,000 feet to the inch. As the elevation of the Palouse country varies from 500 to 2,800 feet above sea level, variations in scale were present due to the rolling topography and air currents preventing the plane from flying at a constant height. Control lines to determine the true scale were made by using a ground crew with a transit and tape to make enough scale tests for a close check. The scale tests supplied data for plotting a chart, enabling the true scale of any picture to be determined immediately. This provided essentially correct measurement. Repeated checks of the aerial survey with ground surveys revealed less than 1 percent error in each instance.

Acres Measured

Only the wheat and contracted acres were measured in this process in order to expedite allotment payments. All the information obtained, together with the contract number, operator's name and address, and reduction basis for 1934 and 1935 were placed on 5- by 8-inch cards for permanent records. Cards were sent to all contracting farmers giving them the measurements of their wheat and contracted acres and advising them to call at the office where violations were indicated. Compliance papers were completed as soon as possible and sent in to the wheat section.

The office crew consisted of 6 planimeter men who could turn out about 100 contracts a day. Five assistants and supervisors assembled and mounted the photographs, prepared the field papers for the instrument men, recorded results, and checked the work. This crew worked under the supervision of a chief engineer in charge of the office. Two men were in the field making scale tests. Twenty field crews of two men each, working under a general supervisor, secured the desired field information previously mentioned. After the survey was completed one field crew was retained for the purpose of measuring the summer fallow being seeded for next year's crop. The office force was reduced accordingly.

Total administrative costs for the county total less than 8 mills per allotted bushel, the cost of the aerial survey making up 4 of the 8 mills. The average production for the county is placed at 10,461,715 bushels and the allotted bushels amount to 5,649,324.

Since making the survey, the county agent's office has had innumerable requests for measurements from farmers in regard to land sales, plowing and harvesting charges, grain fires and litigations. The county commissioners have appropriated $6,000 for a mosaic map of the county for the use of the county engineer and county assessor. Many farmers found out for the first time just how many acres they had in their farm, due to the inaccuracy of the old surveys. Although at first skeptical of the aerial survey, the farmers themselves are now the most enthusiastic boosters. It has proved accurate beyond a doubt, has saved the county thousands of dollars in expense, and enabled the compliance program to be carried out swiftly and efficiently.

Butter Quality Improved

Last year 61 farm men and women in Alabama were making and marketing sweet cream butter. The larger portion of the product was marketed at curb markets, while some farmers sold their product through merchants and still others marketed direct to the consumer. This product is selling at curb and other markets at a premium of from 5 to 10 cents per pound over creamery butter.

A cream separator is used in the process, the machine being equipped with special low-cost parts. The cream produced will test between 70 and 75 percent butterfat. F. W. Burns, extension livestock specialist, says, "The cost of the parts should not exceed 25 or 50 cents; they can be made by the farmer. One is a regulating cover for the small cream hole in the separator, and the other is a cream spout which has more slope to facilitate the flow of the heavier cream."

Butter made in this way will test, after working, between 80 and 85 percent butterfat. Butter can be made from the warm milk in 30 minutes, and it will score 90 to 92.

The amount the farmer produces is governed by the milk production on his farm. One farmer in the State is producing several hundred pounds of this butter each week, marketing it at several different markets.

The ease with which the butter may be made and the tastiness of the product have increased its popularity with producers and consumers alike.

Federal Milk License in the Boston Market

THE Federal milk license became effective in the Boston market on March 16, 1934, and all distributors handling fluid milk for consumption in the Greater Boston market may continue in business subject to the terms of the Federal license. The terms of this and other milk licenses are established after consultation with the important producers' organizations interested in the market. In fact, there would be no license if the producers did not request one.

The purpose of the license is to benefit the milk producers whose milk is consumed in the Boston market. It will prove its worth in so far as it supplements the work of the cooperative organizations and helps them to attain certain goals which have been difficult to reach in the past.

The point in all licenses which immediately attracts the attention of the public is the fixed price to producers. In the Boston license the price established for fluid milk was $2.95 per hundredweight, f. o. b. railroad delivery points in the Greater Boston market, for milk containing 3.7 percent butterfat. This is approximately 6⅛ cents per quart and represented a substantial increase in the then existing price to producers. This price applies only to milk which is consumed in its fluid form. There are two classes of milk in the Boston market—class 1, or fluid, and class 2, or milk which is consumed in the form of cream. The price for class 2 is based upon the market quotations for fluid cream in the Greater Boston market. On October 1 the class 1 price was increased from $2.95 per hundredweight to $3.26 per hundredweight, while the class 2 price continued to be based on the current market quotations for cream.

Equalization

Although both producers and the public think of this price as the important fact in connection with the Federal license, probably the most outstanding undertaking is the so-called "equalization" feature. Briefly, this makes each distributor bear his share of the class 2, or in the Boston market, so-called "surplus" milk. In the past there have been times when the composite price (the price made up of both class 1 and class 2 prices) paid the farmer by different companies, varied nearly 2 cents per quart or 90 cents per hundredweight, due solely to the volume of surplus handled by the different dealers. For example, in a market which has a 50 percent surplus when its entire supply is considered, some dealers might handle as little as a 20 percent surplus, while others might have 70 percent or more. Thus the producer's price was affected materially by the dealer's practice in handling surplus milk. Under the equalization, if the market has a 50 percent surplus, every producer is paid on this basis. The dealer who handles a smaller share of the surplus than the market average pays into an equalization pool, or fund, the difference between the price based on the market surplus, and the price based on the actual surplus handled by him. On the other hand, the dealer who is carrying more than the market surplus pays his farmers the market price and depends upon a payment from the equalization pool, or fund, to reimburse him for the difference between this price and the relatively low price based on his actual amount of surplus.

Important Undertaking

This is an extremely important undertaking in the Boston market. For a number of years attempts have been made to get all producer elements in the market on a basis which prevented one from undermining the other in the competition for fluid milk sales. It was common practice for a group carrying a large percentage of surplus to sell fluid milk at a cut price, since by so doing it could return a higher price to its producers. For example, a cooperative or a privately owned company with a heavy surplus which was selling for $1 per hundredweight, while class 1 or fluid milk was selling for $2 per hundredweight, could improve its income by moving as much of the surplus as possible for, say, $1.50 for fluid purposes. This would cause other handlers of milk to reduce their prices to prevent the loss of their fluid sales. Often the low price of milk in the Boston market was due to the destructive competition between producing elements.

The Federal license has recognized the principle of equal distribution of surplus and has eliminated the possibility of a group's undercutting the recognized fluid price in order to reduce its volume of class 2 milk. Many who are familiar with milk marketing in New England believe that this accomplishment is by all odds the outstanding contribution of the Federal license in the Greater Boston market.

Along with this, of course, is a complete audit of the distributor's books. Attempts to audit the market are not new. Some of them have been reasonably successful and have covered a large percentage of the milk sold in the market. The Federal license has greatly improved this work, which is the basis for the equalization payments.

No discussion of a Federal license in a milk market which uses a base rating plan would be complete without some mention of the producers' bases. Nothing except price affects the producer so vitally as the base he obtains. Under the Federal license all producers whose milk is sold for consumption in the Greater Boston market have a base. The Boston license differs from most in that it recognizes a base for the various cooperative organizations. This base is the summation of the individual bases granted producers who are members of these organizations. The market administrator pays the organizations upon these bases. The organization may in turn reestablish bases among its members. However, this action in no way affects the payment due the organization from the sale of its milk.

Equity Among Producers

It is highly important that bases reflect real equity among producers. Equity among producers is extremely difficult to determine in a highly complex milk market. One of the criticisms of the Federal license has been its rigidity in matters such as bases. In the Boston market a considerable degree of flexibility has been developed. For example, producers whose milk is delivered directly to the distributors' plants in the city have been given bases representing 85 percent of their deliveries during the base period, while practically all other producers have been given a base representing 61 percent of such deliveries. This recognizes the adjustments which producers near market have made in the past, and also recognizes that due to their location they have certain advantages which any price plan must take into consideration. There are some producers who have obtained bases other than these two percentages, depending

upon their location and their actual performance in the past. A producer can have his base changed if sufficient evidence is available to show that such a change is justified.

Another feature in connection with bases is that a producer must deliver 75 percent or more of his base through any four consecutive "pay periods" if he is to maintain his base. The pay period in Boston is half a month. This gives the producer an added responsibility in supplying the market as compared with the usual practice in the past.

Producer-Distributors

One of the difficult problems in the handling of any milk market is fair treatment of producer-distributors, or men who both produce and peddle their own milk. These men have always been independent of any marketing plan. They have had no base-surplus experience and their price experience has been an individual matter. Their business is conducted under different conditions than those of the so-called wholesale producer. At the present time in the Boston market a producer who sells his own milk and does not buy from another producer is exempted from the equalization pool up to 250 quarts per day, which is about the average retail wagonload in the market. Above this amount, his sales must be equalized with the remainder of the market. There are many reasons why a complete equalization of a producer-distributor's sales is unfair, and there are many arguments to show why he bears some responsibility to the market as a whole with regard to the amount of surplus which is carried by other agencies. There is no one problem which is more difficult to handle fairly and which is generally conceded by those working with the licenses to be more open to change and adjustment than the handling of producer-distributors.

Since the purpose of the license is to benefit producers, the following table of prices in 1933 and in the comparable periods in 1934 give some indication of its success. The following figures have been published by the market administrator:

Net prices per hundredweight received by producers for all milk in the Boston market

Month	1933	1934
March 16-31	$1.12	$1.79
April	1.13	1.70
May	1.15	1.60
June	1.35	1.59
July	1.45	1.75

The market administrator states: "Since the deliveries of milk by producers during these 4½ months under the license have exceeded 2½ million pounds per day, the total increase in the net income of the producers during these 4½ months as compared with the same period in 1933 is in excess of 1½ million dollars."

The license has brought into existence new conditions. Persons interested in milk marketing have had to adjust their thinking. Among the leaders in assisting the public to understand these new conditions have been the extension economists in the New England States. Several have greatly assisted both farmers and consumers to understand what the license is and what it attempts to accomplish. The continued operation of the Federal milk licenses will open a wider field and a greater need for the trained marketing specialist.

Farmers Form Truck Marketing Association

Extension workers have aided a group of truck growers' associations in the southern part of Arkansas in working on a market development program during the past 3 years. The sponsors had in mind the threefold purpose of improving quality, securing greater bargaining power, and advertising products of the area among the trade. These associations formed a federation known as the "South Arkansas Truck Growers' Association", and adopted the "Pine Cone" as a uniform brand. Products have been shipped the past 2 years, and members have received prices averaging substantially above those prevailing in nearby markets.

A number of the associations have purchased cars of certified seed cooperatively and effected a saving, as well as improving the quality of the crops produced. Sweetpotatoes, potatoes, and tomatoes are the main crops shipped by growers of this area. The sales contract is made early each year with a reliable sales agency to handle car-lot sales. The managers of member associations also have the privilege of making sales to local buyers if the occasion warrants.

A 4-H club potato marketing project was sponsored by the extension service in Saline County. A number of the club boys who had commercial potato plantings as projects enrolled in a county organization for uniform production and marketing of the crops under the direction of the county agent. Good seed of one variety was obtained and planted at about the same time, and similar cultural methods were followed. As a result of these uniform methods, the crops matured about the same time and were of superior quality. They were carefully harvested, preventing bruises and sun scald. The potatoes were packed in branded bags and shipped to the central market. Due to superior quality, this car brought 5 cents per hundredweight above the quoted top in the market in which it was sold and netted 25 cents per hundredweight more than potatoes were bringing in the home market the day the car was shipped.

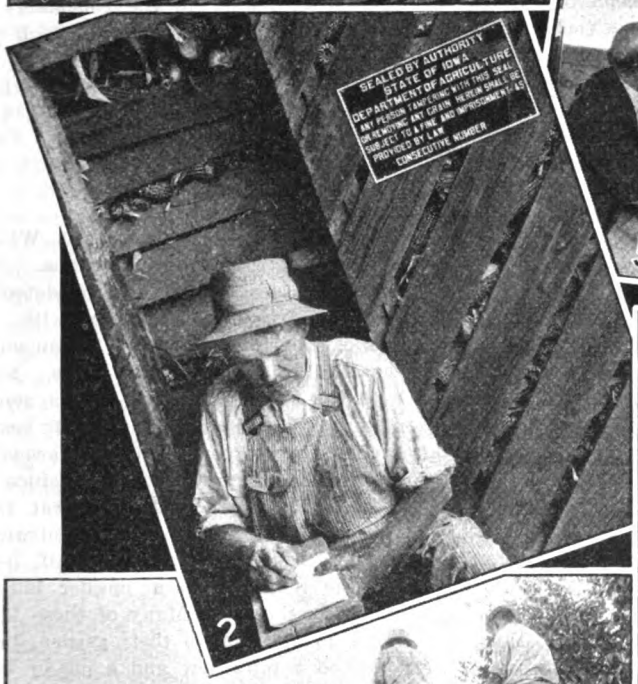
A production and marketing improvement program, which was started 3 years ago, is being carried on in Franklin and Logan Counties. Progressive farmers realized that the growers producing better than average quality potatoes were not getting paid according to real value as their crops were being mingled with those of lower quality, all receiving the average price. Associations were organized of potato growers who agreed to follow recommended production practices and load and sell their potatoes cooperatively at harvest time.

The prices received by these associations have averaged well above those of nearby cash markets every year, according to J. H. Heckman, Arkansas marketing specialist. Numbers of inquiries have been received from members of the trade who handled these cars. Because the high-quality product satisfied the customer and the branded bags told where to locate the producer, the products of 1 year are helping to sell those of the next, Mr. Heckman points out.

THE Louisiana Potato Association shipped 6,000 bags of certified seed potatoes to Cuba. The association believes in salesmanship so members made a tour into Florida to find possible markets for surplus certified seed potatoes. George L. Tiebout, Louisiana extension horticulturist, served as technician on the educational and sales promotional tour.

FOUR 4-H club members of Montgomery County, Tenn., made history for their county recently, when they cooperated in the sale of the first carload of black walnuts ever shipped from the county. Eighty-three boys delivered 31,000 pounds (600 bushels) of hulled walnuts, for which they received $300 in cash. The firm that purchased the nuts has wired an order for another car.

Along the Highways and Byways of Adjustment



1 New Mexico farm home which the Agricultural Adjustment Administration benefit checks helped to build.

2 An Iowa farmer figures his profits on sealed corn.

3 California tokay grapes shipped under Agricultural Adjustment Administration marketing agreement.

4 The metal tag shows this cotton comes within the Bankhead cotton allotment.

5 An Oklahoma debt adjustment committee saves a farm from foreclosure.

6 Texas farmers receive their benefit payment checks.

A County Consumer Council at Work

County consumer councils are being organized through the National Emergency Council for the education and protection of the consumer. These organizations are made up of local people who have become aware of the dilemma of the consumer and are willing to work with others in finding solutions to local consumers' problems. County extension agents are often members of this organization since its achievements will help farm families as consumers. An active county consumer council in Maricopa County, Ariz., is described in the following article by Grace Ryan, home demonstration agent.

THERE are indications that the county consumer council of Maricopa County, Ariz., will be able to justify its existence as a part of the National Emergency Council during the coming months, due to the opportunity for growth through service which is apparent to its members.

The council came into actual being June 28, 1934. The council members agreed that apparently the first need of the group was information about the purpose of the council, its potential service to the community, and its field of operation. As an outgrowth of this feeling came a plan whereby at each meeting, the chairman provided a speaker from the different code authorities who gave information as to the progress of that particular code in Maricopa County. There was general agreement among council members that these informative talks proved highly valuable.

Coincidental with this phase of activity for the members, the council began active work on committees designated by the county chairman. Four such committees now function — organization, standardization, price and complaint, and publicity.

The standardization committee and the price and complaint committee may have functioned more actively than other committees because they possess greater potential value in actually solving consumer problems.

The standardization committee attacked a pertinent problem, the investigation of standards of canned fruits and vegetables in the local stores. The members of the committee reported excellent cooperation from merchants.

The appraisal made by this committee indicated the need of more informative labeling and a request of this type was made direct to several national canners.

The next step for the standardization committee was an inquiry on standardization in the dry-cleaning industry in the county.

Activity of the price and complaint committee, planned and directed by the county chairman acting in the absence of the chairman of the committee, has consisted of a survey of local prices as applied to certain commodities. This information will be released to the county council after an analysis of results. An additional activity of this committee has been the successful adjustment of definite consumer complaints.

Publicity progresses through the channels of the local and State press. The chairman of the publicity committee indicates cooperation from a theater in the nature of a film depicting the members of the council on a tour of inspection of local business houses.

Organization of branch councils may follow at the discretion of the county chairman who has appointed a committee to make a survey of the need for such groups in the county.

Such, then, is a résumé of the initial activities of the Maricopa County Consumer Council. There is evidence of a growing interest on the part of merchants and general consumers. Each member of the council senses the need for a constructive and unified effort to make the council function efficiently. Each senses, too, the opportunity for service. In the minds of members is a pertinent question as to the expedient type of service to be rendered.

The writer believes that there is an unlimited opportunity in the field of direct-consumer education. There are many mediums for this service, such as established organizations of consumers, homemaker groups, educational agencies, and radio contacts. It seems distinctly putting the "cart before the horse" for any group to seek to adjust the consumer to the complexities of the existing system without first having helped him get a birdseye view of his status in the economic set-up. Education of each and every consumer should be one of the first duties of the council.

Groundwork for such an educational approach has been laid in Maricopa County since 1930, through the efforts of the Arizona Agricultural Extension Service. Groups of farm women have met with the home demonstration agent and made a study of consumer problems and of goods and services available on their local markets, and of the market machinery. Information has been given them regarding the serious problem of consumer behavior, with reference to cooperation with the merchants of their communities, in an effort to correct some of the abuses practiced by the unthinking consumer. The factual material and services which the county consumer council has to offer would fall on more fertile ground if practical educational appeals were made through every possible avenue.

It appears that there is little question that the consumer council has a definite service to render to the consumers of Maricopa County, the value of which will probably be in direct proportion to the degree of mutual understanding which the agency can stimulate among producer, distributor, and consumer.

MOST of the tenants in Wilson County, Tex., are Mexicans. Just a few years ago their diet consisted of tortillas, frijoles, and carne, with the bulk of it bought with money advanced by the landlord on a monthly basis. Now, with the advice of county agents, scores of them grow vegetables, including beans, carrots, beets, peas, potatoes, sweetpotatoes, and other articles of produce on their farms. Landlords find that they have been able to reduce their advances to these tenants by at least half, leaving the tenant with a smaller indebtedness in the fall. Many of these Mexicans, in addition to their garden, have obtained a milk cow and a pig or two. The effects of the program are very evident in the appearance of the children, whose general health is much improved by the more varied diet.

NEW JERSEY poultrymen are registering their flocks with the State police, and receive in return a register number. This number they are tattooing upon the wing of the birds. One hundred and twenty-two poultrymen in 18 counties have tattooed 104,842 chickens, ducks, and turkeys. This work is carried on in an attempt to reduce losses from stolen birds. The number is a positive identification of the birds and aids in obtaining a court conviction in case of theft.

Benefits from the Farm Viewpoint

A farmer in Illinois and a county agent in Indiana offer their views on the Agricultural Adjustment program

How I Look at Adjustment

HERE in La Salle County, Ill., 55 percent of our crop acres in the last 2 years were planted to corn, so when we speak of agricultural adjustment, we think of corn and hogs. We had 3,360 applications for corn-hog contracts, and it is interesting and significant that of this whole number, there were only 35, or about 1 percent, that could not or would not go along at the time of final signature.

Under the corn-hog adjustment plan, our contract signers rented over 61,000 acres to the Secretary of Agriculture, and altogether the benefit payments on corn and hogs will bring into the county about $1,100,000.

We are in the area that was hard hit this year by drought and chinch bugs. On a great many farms in the county there will be no grain to sell, and on some farms not even enough to feed the livestock. To such farmers the corn-hog payments are a godsend; they constitute the only cash income the farm will know this season. This together with the release of the contracted acres for forage production furnish a splendid illustration of the good this program can do in providing a form of insurance against such emergencies.

Corn Loans

Last spring our farmers sealed about 3,000 cribs containing more than 5 million bushels of corn, receiving a loan of 45 cents per bushel at that time. More than 3,000,000 bushels of this corn have now been sold, at least two-thirds of it for 60 cents per bushel or more, and much of it for 75 cents per bushel. There can be no doubt that without the corn-sealing plan, a great deal of this corn would have been sold last winter for 25 or 30 cents per bushel; the year before it was 18 cents per bushel. The corn loan brought this added price to the farmer instead of the speculator, and kept the corn in the country where much of it is going to be needed for feed through the coming winter.

Business Ahead

Just the other day, I went to see a carpenter in the nearby village to get him to make some repairs on my corncrib before husking. Imagine my surprise to have him tell me that he had more work engaged than he could do in a month. For the last 3 years he has spent most of the time just tinkering around home. Now the farmers who had corn to sell this summer have a few dollars that they can spend for some of the repairs that have been needed for a long, long time, and the whole community benefits by the money being spent.

Our farmers are not soon going to forget the lessons learned in the adjustment program. Many of them have realized before that a more moderate production of the basic crops would bring in a greater money return. But always before when an effort was made by any number of farmers to cut down on the acreage of any crop, a lot of other farmers would think it a good time to increase, and so the effort to balance production with demand would be defeated.

A Lesson in Cooperation

We have in this adjustment program a wonderful lesson in the power of cooperative effort in fitting our production to the demand.

We know that this could not be accomplished in such an industry as agriculture without beneficial legislation. We know that the administration of the adjustment program has not been perfect. Some mistakes have been made which can be avoided in the future.

But with the hope and confidence that the experience of this year will help in changing these objectionable features, our farmers have voted by more than three to one, for an adjustment program in 1935.—J. V. STEVENSON, Ottawa, Ill.

What Adjustment Has Meant to Our County

It is a fact that La Porte County farmers and landowners have received 1,449 Government corn-hog checks which totaled $119,200 and more than 500 wheat adjustment checks which amounted to $30,000. Before the present contracts expire our county will receive approximately $370,000 in adjustment payments. However, there are other values which might be even more beneficial to our farming business than this cold cash.

Our county is situated at the lower end of Lake Michigan. We grow about 67,000 acres of corn, 32,000 of wheat, and a similar acreage of oats per year. We are well situated for the marketing of these grains as well as for the marketing of $400,000 worth of hogs and $730,000 worth of dairy products. Normally, we have a surplus of grains for our livestock. Due to the drought this year the grain crops yielded only one-third of normal. This winter we will have to ship in thousands of tons of grain, or let our animals go hungry. Adjustment payments will help purchase some of this feed. These facts are mentioned because they must be considered in deciding what the adjustment program has really meant to our county. The contract signers produced 25 percent fewer hogs, about 22 percent less corn, and 20 percent less wheat acreage. This resulted in the freeing of 15,000 acres from grain production, which were used mostly for soil-building leguminous crops, such as soybeans, alfalfa, and sweetclover.

La Porte County has passed through the most serious drought in our history, but fortunately the thousands of dollars in adjustment payments have acted as insurance to compensate our farmers for the poor crops. This is true because the base period for the contracts were normal years. The corn-hog contracts as well as the high price of corn compared to the low price of hogs greatly helped to reduce our hog numbers to more nearly match our supply of corn. Since the Government released the acres taken out of grain production for pasture and hay, we have had much more pasture and will have much more hay, including 4,000 more acres of soybean hay, for this winter than if we had no adjustment program at all.

Benefit Payments

Now let us consider what farmers have done with all of this money which they have received in order to make it possible for them to afford to adjust their production to demand. Recently this question was asked before a group of nine corn-hog and wheat contract signers. One reported he immediately used his check to pay the premium on his life insurance, which would otherwise have gone delinquent. Several reported they used it for paying their interest and taxes. The largest wheat check that came to our county was used to pay

delinquent taxes. The existence of the contracts also provided credit for many farmers to finance their operations until adjustment payments arrived.

However, the four points which will total of higher value than the cash received are as follows:

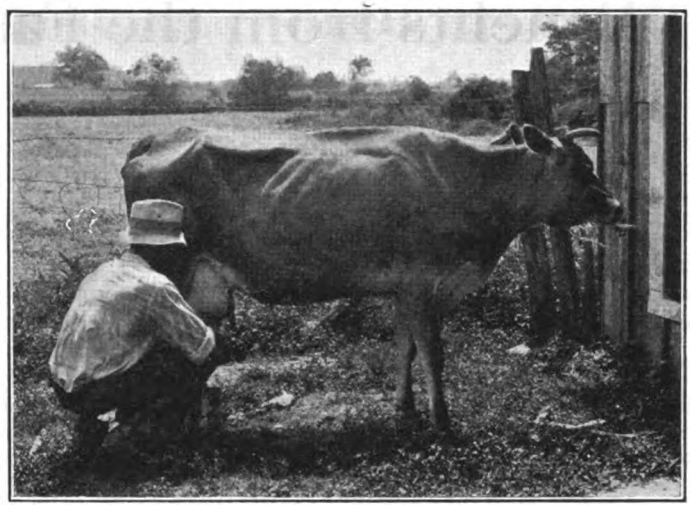
1. The reduction in the number of brood sows resulted in the more rigid culling of the breeding herd and better feeding and management of the pigs, with cheaper cost of production and a higher quality of product.

2. The program resulted in better land utilization because of more pasture and hay acreages, a result which should ultimately raise both our livestock and grain prices. The reduction of corn and wheat acres encouraged our farmers to use only the most productive acres and the best of seed with the result that they harvested a higher yield per acre at a cheaper cost per bushel. The increasing of production per unit and improving the quality of farm products have always been aims of our county programs of extension work.

3. The national program has raised the price level of our products for sale until it is nearing the 1910–14 parity price.

4. The program has taught us as farmers that we can cooperate to help solve our economic problems to improve our welfare, and increase our purchasing power for buying the things we need for our homes and families. One of the biggest results of the adjustment program in La Porte County is that we have learned better how to work together. We made a united effort to do a big job and succeeded. This experience will make us better qualified to meet the big problems of the future, which must be solved if we are to raise the general standards of living on the farm, the aim of the present Agricultural Adjustment Administration and the cooperative extension work which we have carried on for years.—O. W. Mansfield, County Agent, La Porte, Ind.

Massachusetts 4-H club members and leaders are keenly interested in the contest recently opened by the 4-H department of the Massachusetts State College to obtain 4-H plays. George L. Farley, State leader of 4-H club work, has announced that the contest will be divided into two parts, one for 4-H boys and girls and the other for 4-H leaders. The winner of each contest will be awarded as a prize a week at Camp Gilbert, the 4-H State club camp, next summer.



The live-at-home idea is spreading among the negros of the South. In Alabama 95 percent of the negro farmers working with extension agents have grown sufficient food and feed for their own use. The Mississippi tenant farmer shown above milks his own cow and grows his own garden.

New Negro Agents

Twenty-seven negro farm demonstrators have been added to the staff of the Alabama Extension Service by a cooperative agreement. These men are working in counties having a high negro population and not having a regularly employed county extension worker. They have been chosen upon the recommendation of the extension office and are paid from funds of the Federal Emergency Relief Administration in the State.

While these men are hired by the relief administration they are responsible to E. C. Dobbs of the negro extension work at Tuskegee Institute, and to the local work director of relief. The men employed in this rural rehabilitation work act as instructors to farm families on relief rolls, aiding in improving general farm practices through improved methods as recommended by the Extension Service. Not only will they teach improved agricultural and home-economic methods but they are devoting considerable time to new sources of income from home industries.

The 27 negro farm demonstrators are located in 16 counties and the distribution of their numbers is based upon the number of negro families on relief rolls within the county. A very definite plan of work for these farm families has been suggested and outlined with very definite extension background. The outline includes both men and women of the family.

The personnel of these workers is taken from lists of unemployed graduates in agriculture and home economics. Mr. Dobbs in a report to T. M. Campbell, field agent in negro work for the Extension Service, says, "At least 95 percent of the families now being supervised by these farm demonstrators have been able with the use of oxen, mules, and other equipment furnished by the Federal Emergency Relief Administration, to grow sufficient food and feed to supply their families and livestock for the coming year, most of them having some to spare."

The Beef Cattle Situation

(*Continued from page 178*)

and Wisconsin. Applications for testing 890,000 head for Bang's disease have been made by their owners in these and other States.

Regulations governing the mastitis plan have not yet been completed. Under the plan the elimination of cows will be limited to those showing marked physical evidence of mastitis. This work will be supervised, as is Bang's disease testing, by the Bureau of Animal Industry, in cooperation with State livestock sanitary officials. The same rate of Federal indemnity which is paid for reactors to the tuberculin test, will rule in the Bang's disease and mastitis work. For a purebred registered animal, the maximum is $50 and for a grade $20. Salvage values also will be received by the owners.

Reading Clubs Established

READING in the farm home is one of the minor projects in the extension program for North Dakota. The director of the State library commission generously offered her assistance in preparing and presenting such a project. Miss Cook, the director, had done some work of this nature in connection with city women's clubs but had very little experience with rural women. Inez LaBossier, North Dakota extension specialist in clothing, drawing from her background of experience with rural women, assisted Miss Cook.

The project was started in three counties, first, because they were on Miss Cook's schedule; and, second, because they had home demonstration agents in the counties who could closely supervise the work. There were 43 women's clubs in the 3 counties with a total of 741 members.

Local leaders were sent to a series of training schools. The first meeting was a discussion of reading in general, reasons for reading, why people read, what they hoped to get from reading, the physical make-up of books, and building the home library. The second meeting dealt with reading for adults, the types of reading suitable for the adult mind being discussed. An effort was made to adjust this material to the various levels of the individual club members. They were urged to read books of a higher type than those to which they were accustomed, thus raising their own levels of appreciation and enlarging their previous experience with books. A "book menu" was suggested and discussed. All types of books were included in this "menu" so that each member of the group would be sure to find something which suited her needs and tastes. The third discussion took up books for children and discussed suitable books for ages, types, and interests for all the younger members of the family. The methods of creating children's interest in reading, how to supervise their reading, and how to guide their selection of books were some of the points which the mothers greatly appreciated. Many of the women stated that they found this discussion most helpful since it enabled them to select their child's reading material with greater confidence and to guide the child more carefully in the formation of his reading habits.

The State library commission cooperated in lending books to the home makers' clubs. The books were made up in packets to meet the needs of the entire family reading circle. In some of the towns where some library facilities are available books have been lent to rural readers with the same privileges extended to the local town people.

During 1932–33 the reading service reached 741 club women, 231 women who were not members of clubs, while the total, which includes children and other members of the family, was 1,210. Two hundred and fifty-three families are reading more magazines, 250 families are exchanging magazines, and 258 homes have arranged to exchange books. More than 200 women believe that they are better able to supervise their children's reading as a result of the project. During the period, 1,760 books were obtained in cities and in the State for this service.

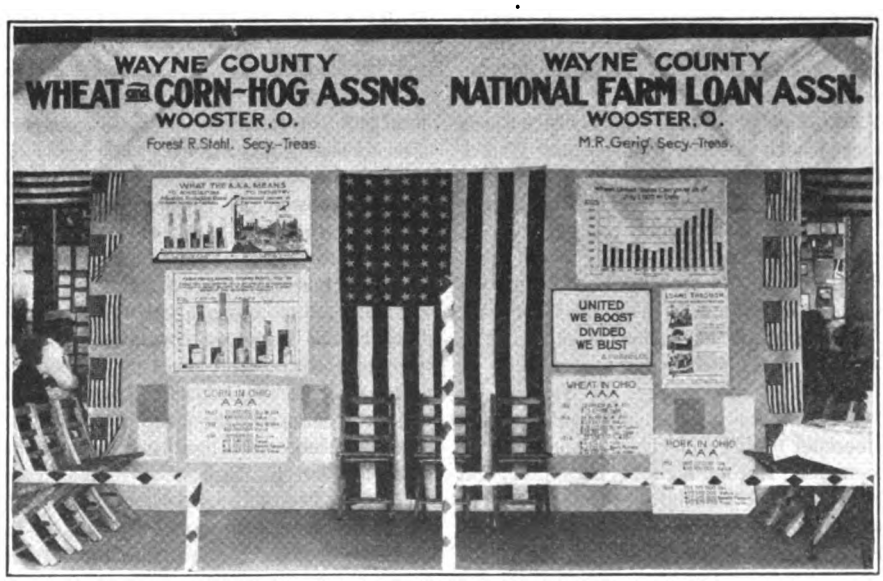
In 1933–34, the second year of the project, the work is being expanded to include five additional counties. The subject-matter material has been revised and new and additional book lists have been made for the new year. One hundred and ten clubs are enrolled in the eight counties which took part in the project during 1933-34.

Leaders and older 4-H club members have been invited to take part in the activity although it is felt that a special project should be worked out for this group.

THE relief canning program and activities in Clackamas County, Oreg., were carried out in two canning centers, equipped under the supervision of the county home demonstration agent. Various relief agencies aided in the enterprise. These two centers were open free to the persons on relief rolls and to others at a very small charge. The products which were canned consisted of vegetables, meats, and fish. Two hundred and twenty-eight people used the canning centers and canned 39,286 quarts of food valued at more than $7,933.

In addition to this activity, the extension agent spent much time in other educational work, including demonstrations of drying equipment for fruits and vegetables and other methods of food preservation.

ARANGE-MANAGEMENT course is being offered for the first time as a home-study course by the North Dakota Agricultural College. There is an increasing interest in land uses, erosion control, forest planting, returning more acres to pasture, and similar problems of the range which this course will cover. As another indication of the present trend in agricultural thought, it will be of much interest to county agents, foresters, and farmers.



THIS booth attracted a great deal of attention at the Wayne County, Ohio, fair. It was erected by the Wayne County Wheat and Corn-Hog Association and the Wayne County National Farm Loan Association at a cost of less than $10. Some of the chart material came from Washington and some material reflecting local conditions was made locally. The paid attendance at the fair was 50,402, which was the largest in 85 years' history of the fair. Thousands of farmers examined the charts. The local wheat association has about 1,000 members, the corn-hog association 600 members, and the farm loan association, 350 members.

Stedman Retires

John Moore Stedman, specialist in the Office of Cooperative Extension Work, United States Department of Agriculture, retired from active service on November 30, 1934, after 25 years with the Department. Following his graduation from Cornell University in 1888, Mr. Stedman entered the field of teaching, first in Cornell University and later in Trinity College, N. C., Alabama Agricultural and Mechanical College, and the University of Missouri. While at the University of Missouri as professor of entomology and working with the experiment station in the capacity of entomologist, he became associated with the early farmers' institute work of that State, and in 1909 he came to the Department of Agriculture to take charge of that work which later merged with the newly developing Extension Service. For a number of years Mr. Stedman made a feature of reporting the development of extension work in foreign countries. Recently he has been associated with the section of extension studies and teaching in the development of a program of extension research. Mr. Stedman has published many papers on biology and entomology, as well as on various phases of extension work. He is a member of the American Association of Economic Entomologists, Entomological Society of Washington, Entomological Society of America, American Association for the Advancement of Science, St. Louis Academy of Science, and Sigma Xi.

COUNTY extension workers in Alabama have held, since September 1, 1934, a total of 797 meetings on the cotton informational program, with an estimated attendance of more than 110,000 people.

Carrying Cotton Facts to Georgia Farmers

COUNTY agricultural agents and teachers of vocational agriculture have united their efforts to carry to every cotton producer in Georgia vital facts on the cotton situation. The extension workers in the State have held 1,500 community meetings with an estimated attendance of 75,000 in the period between November 1 and December 15.

Hart and Jefferson Counties are representative of counties throughout Georgia in the way in which they have carried on their educational programs in connection with the cotton plan.

In Hart County the county agent, L. C. Westbrook, and the 7 vocational teachers have held 73 meetings at which the cotton situation has been discussed. Included in this number were the evening classes held by the teachers. More than 900 farmers had the various phases of the cotton program, including the Bankhead law and replacement crops, explained in detail. This number is approximately 75 percent of the farmers in the county.

The office of county agent, Gordon H. McGee, in Jefferson County has been continually crowded with farmers making inquiries regarding the program for cotton production and its various phases. The county agent and teachers cooperated in holding meetings in every community in the county, 708 farmers having attended the 8 meetings. These were in addition to the evening classes held by the teachers with the cooperation of the county agent.

In Jefferson County, a circular letter was addressed to the leading farmers of the county and they in turn were requested to notify their neighbors of the series of meetings. An article was placed in the county newspaper calling attention to the series of conferences, giving the date, time, and meeting place.

In both of these counties, as in most Georgia counties, the county agents and teachers have obtained information for presentation in the cotton house organ, "Cotton Production Adjustment", and from other bulletins and circulars of the cotton section. In addition, local information has been assembled and used at the meetings.

In all of the meetings the farmers have been active in the discussions, bringing up questions of importance in determining their attitude toward the program.

The county agents report that those already in sympathy with the program had become more convinced that they were taking the right position, and most of those who came to the meetings to oppose the program changed their attitude when the facts were placed clearly and concisely before them.

In Jefferson County, eight men, including the county agent, made a survey of opinion concerning the retention of the Bankhead law. During the course of 1 day they contacted 443 farmers; 410 of whom signed a petition expressing themselves as favorable, and only 33 were opposed to continuing the law. The canvassers were instructed not to attempt to influence the farmers in their statements. "The large portion in favor of the law may be taken as evidence of the value of the educational meetings", says County Agent McGee.

Another benefit which has come from the meetings is that of relieving the load upon the county agent's office staff. Farmers have been satisfied by the discussion of the program and situation as presented at the meetings and night classes. A great deal of the uncertainty on the part of farmers has vanished.

In Hart County the discussion of replacement crops for the rented acres added impetus to the crimson clover seed production project already under way in the county. The area devoted to this crop has greatly increased and it has become one of the county's principal cash crops. Crimson clover is now a fixture in the county not only for seed production but as a soil-building crop.

AT THE fourth annual 4-H club rally day held in Sullivan County, Tenn., there were 820 club members and local leaders present. The rally was sponsored by the agricultural committee of the chamber of commerce. County school busses delivered the boys and girls to Anderson Park, Bristol, where they were given 4-H caps and organized for a parade, led by the Bristol High School Band. The parade was followed by a meeting at which attractive prizes were awarded to members doing outstanding work during the year.

THREE new recordings of 4-H club songs have been made. Pride O' the Land, the national 4-H club march, by Goldman, is a Brunswick record; no. 6967. The Plowing Song and Dreaming, both by Buchanan and Parish, have been recorded by Victor-R. C. A. on record no. 22455.

Arkansas Home Demonstration Councils Active

COUNTY home demonstration councils in Arkansas are gathering a momentum which is making itself felt among rural women. These county councils and the State council, which meets each year, are helping to make the views and opinions of farm women articulate and to bring to them information of current developments which affect the home. The county councils include representatives of each of the community home demonstration clubs in the county, which meet from 1 to 4 times a year to discuss and support the local program for the home.

The newer developments in agricultural adjustment and other phases of the recovery program are coming in for their share of discussion to keep the program in line with changing conditions. The live-at-home program is always the central theme with its effort to raise the standard of living. Old-fashioned community recreation activities are interesting the women, and they are discussing and studying ways and means for recreation at the county council meetings. Relief is also a current problem and cooperation with the established agencies to relieve suffering and help farm women to help themselves is a live topic for discussion and planning.

One-third of the farm women in Arkansas are members of home demonstration clubs and send representatives to the county councils. During the 6-month period from December 1, 1933, to July 1, 1934, 55 councils held 106 meetings. An average of 112 women attended each of these meetings. A total of 11,780 women delegates representing 829 communities took part in the council discussions and helped plan the program for the coming quarter or year.

The State council of home demonstration clubs has for the past 2 years met with the State rest camp held at the National Guard camp 11 miles from Little Rock. The camp staff and crew of workmen are also lent to the more than 1,200 women who fill the camp to capacity. Each woman pays 50 cents toward the cost of cooking and $1.50 for meals unless she brings her groceries from home.

The council hears reports from each of the 57 county councils represented. The women conduct debates on vital questions of the day, hear men and women prominent in science and Government discuss important topics with which they are working and indulge in much serious discussion. Assembly singing, quartets, plays, and dance numbers also take their place in the program. Other camp activities such as games, archery, swimming, a song contest among counties, a water carnival, and home industries and handicrafts add much to the good time at camp and give the women many new ideas to carry back to their county councils and their home demonstration clubs.

The camp not only pays its way but has a surplus in the treasury each year. The executive board of the State council voted to offer $50 in cash prizes to the 10 county councils staging the best fall garden show. Every county held a fall garden show in connection with the annual home demonstration achievement day. These prizes added much to the interest of the occasion.

Two Department Officials Honored

At the Ninth Annual Convocation of the National Honorary Extension Fraternity, Epsilon Sigma Phi, held at the Willard Hotel in Washington, D. C., on November 21, 1934, by unanimous vote there was conferred upon Hon. M. L. Wilson and Dr. C. B. Smith of the Department of Agriculture the distinguished service ruby, this being the highest honor of the fraternity. This is the first time in the history of this organization that more than one such award has been made in a single year.

Assistant Secretary Wilson, a native of Iowa, began his extension career in 1913 as county agricultural agent in Dawson County, Mont., being the first county agent appointed in that State. He became county agent leader in Montana in 1914, in which capacity he served until 1922. He and Director F. S. Cooley were responsible for the rapid development of extension work in that State. From 1922 to 1924 he was extension economist in Montana and came to the Department of Agriculture in 1924 as chief of the Office of Farm Management, returning to Montana in 1926 as chief of the Department of Economics and extension economist. He was responsible for the development of the domestic allotment plan of agricultural adjustment, and when this plan was enacted into legislation by the Federal Congress he came to the Department at the request of Secretary Wallace to head the Wheat Section of the Agricultural Adjustment Administration. In August 1933, he was appointed director of the Division of Subsistence Homesteads of the Department of the Interior, and in July 1934, he was appointed to his present position as Assistant Secretary of Agriculture.

Dr. Clarence B. Smith is a native of Michigan. He came to the Department of Agriculture in 1896 as accountant and abstractor in the Office of Experiment Stations. In 1907 he was placed in charge of the Section of Field Studies and Demonstration of the Office of Farm Management of which Dr. W. J. Spillman was chief. With the passage of the Smith-Lever Act in 1914 he was made chief of the Office of Extension Work, North and West, and as such made valuable contributions to the organization of extension work in the 33 northern and western States. Perhaps Dr. Smith's greatest contribution to extension work during these years was his insistence that extension work be put on a sound farm-management basis. He was a real pioneer in the field of applied agricultural economics. He sought in every way to see that the programs of the county extension agents were based on sound information. With the consolidation of the Office of Extension Work in the South and the Office of Extension Work in the North and West in 1921 he became chief of the new Office of Cooperative Extension Work. In 1932 he was made Assistant Director of the Federal Extension Service, in which capacity he still continues.

AT LEAST 345 farmers in Webster County, Mo., produced sufficient legume hay for their home needs during 1933, which is a 50-percent increase over the 1932 record. More than 445 farmers produced drought-resistant pasture for their herds of cattle, pasture being provided for at least 4,304 cows. It is estimated that $10,000 worth of dairy feed was produced by 240 dairymen raising late-fall and early-spring pasture from wheat, rye, and winter barley.

APPROXIMATELY 85 percent of the world's supply of redtop seed is produced in 12 counties in southern Illinois. During the 12-year period 1922–33 approximately 204,000 acres have been harvested annually for seed, the average production per acre being 54 pounds. Extension workers in the district have been active in promoting this project and have issued a bulletin on the subject.

Director Long

"Born of the landed gentry of North Carolina, polished in the chivalrous courtesy of old Virginia, and living his more mature years in the finest traditions of South Carolina, W. W. Long was a true friend, a noble gentleman, a prince among his peers, and a lover of all humanity." Thus did his coworkers in extension speak of the sterling character of the man.

W. W. Long had been director of extension work in South Carolina for 22 years. Under his able leadership, South Carolina has steadily advanced to the front ranks in all lines of agricultural efficiency. Previous to his position in the Palmetto State he had spent 20 years as a servant of the people in the United States Department of Agriculture. Director Long began his public service before his twenty-first birthday in the Legislature of North Carolina and later served in the internal revenue department of that State before coming to Washington in 1893.

Dr. Long died at his Clemson College home November 13 following a stroke which came upon him while actively at the duties of his office on November 12. He rests on the beautifully wooded knoll overlooking the Clemson College campus.

4-H Members Feed Corn Huskers

4-H CLUB members, farm women, and farmers of Black Hawk County, Iowa, recently joined cooperatively to feed the visitors at the State corn husking contest. May Anderson, home demonstration agent, and Paul B. Barger, county agent, say that a cooperative enterprise of this type has aided greatly in other cooperative efforts in the county.

In making arrangements for this project it was necessary to organize several committees operating under the direction of a head committee made up of representatives of the different club groups, the county home demonstration agent, and the county agricultural agent.

More than 300 4-H boys and girls assisted in serving between 20,000 and 25,000 visitors at the husking contest. More than 1,400 home-made pies were donated by 700 women for the contest and every pie tin was returned to the owner, an indication of the efficiency of the organization. Four hundred gallons of hot coffee was served. The number of hot dogs consumed would, if laid end to end, go a long way in satisfying hungry appetities.

The chief activity was housed in a large tent 50 by 100 feet, where 12 complete units served the food. Each of these units was made up of a supervisor, a cashier, a checker, and 6 servers from the 4-H clubs. At tables to the rear of the serving counter worked 5 women who prepared the food for the unit. In addition to these there were 2 people to transfer food from the preparation table to the serving counter and 2 men kept the supply of coffee for the unit up to standard. The coffee was made in a large tank outside the tent. There was also a supply man for each unit to see that other supplies did not become exhausted. The wieners were cooked in large kettles outside the tent and transferred when needed. Small stoves at each of the serving units kept the food hot.

The entire project operated smoothly and in the end the county clubs had cleared between $300 and $400 on the day's work. Again the value of cooperation between groups in such a project had been demonstrated.

Circular letters were sent to members of the farm bureau and to the parents of 4-H club members asking their cooperation in the work. The home demonstration agent reports that other farm women have complained because they were not asked to donate, and they indicated their willingness to cooperate in future projects.

Each person asked by the general committee expressed his willingness to aid in every possible way. They furnished equipment and food and gave freely of their time to make the effort successful.

Exchanging Farm Products

Extension programs in Jefferson County, Tex., emphasized the need for the farm production of sufficient food and feed crops to assure the farm family and livestock of having a year-round food and feed supply. A survey of 150 farms in the county showed that all of them were producing food in home gardens for the family and that most of them maintained a small flock of poultry. However, only 45 of the 150 were producing a supply of food and feed to meet the year's farm requirements for the family and livestock. Twenty-five families had one or more milk cows and a few raised swine for home meat.

The educational work necessary to accomplish the task was carried out through mimeographed circulars which made recommendations regarding the amount of food or feed required for 1 person or 1 animal.

Later a survey of the county revealed that farmers, for the most part, had some surplus products on the farm while other products were lacking. The county extension workers aided in establishing a barter, trade, or exchange system among the farmers of the county which enabled them to obtain necessary supplies in return for surpluses on their own farms. Community meetings were held at which farmers filled in blanks naming the surpluses they had and the type of food or feed crops they were lacking. A bulletin was prepared from the data on the blanks and circulated to the farmers. This enabled farmers in the county to balance needs against supplies within the county without cash expense. Several commercial firms cooperated in the plan, accepting commodities in payment.

MORE than 2,700 cans this season is the record of "El Club Progressivo" women's extension club of San Luis, Colo. This total includes 1,019 glass jars—pints and quarts; and 1,672 tin cans—no. 2 and no. 3. The products canned include 22 different foods.

The club, after organizing in July of this year, bought a 16-quart pressure cooker and an automatic tin-can sealer, which were used cooperatively by the 16 members. Funds are being raised now to buy a larger cooker for next year, according to Robert Crites, the county agent.

Retrospect and Prospect

CHESTER C. DAVIS

Administrator, Agricultural Adjustment Act

HISTORY is claiming 1934. Our plans of a year ago are written now as records; our hopes for 1934 are past achievements or failures now. New plans and hopes are forming for 1935.

The 3,000,000 American farmers who are voluntarily cooperating with their neighbors in the agricultural adjustment programs have by this very action registered an active approval of them. They have said: "So far, so good."

But they are also saying: "What next? What of the future? What are the plans?"

That is as it should be. A planned economy requires more planning, more looking to the future, than did the old method of every man for himself. In the old days, the individualist lived on hope, and often a blind and helpless hope it was. It was picturesque and heroic—but often it was wasted and futile and cruel. There are too many hazards that hope cannot surmount.

Today the American farmers retain and cherish the full measure of that hope. But they endeavor to add something to it, to reinforce it with an admixture of planning. They believe the trinity of hope and hard work and planning will prove more fruitful than either hope, or hard work, or plans alone.

Much has been accomplished, the record shows.

It shows that the huge price-depressing supplies of the basic surplus commodities have been lessened partly through the drought, partly through the operation of the adjustment programs.

The record also shows that supplies are still ample for our needs. Allowing for normal consumption of wheat, we will have, next July 1, a normal supply of around 125 million bushels in spite of two successive short crops in 1933 and 1934. The cotton supply, in spite of the short crop this year, is still far above normal.

True, there is a shortage of feed for livestock. This was caused by the record number of cattle and hogs that had piled up during the years of unbridled production, and by the disastrous drought. This feed shortage was greatly relieved through various activities of the Adjustment Administration, the emergency hog-buying program of a year ago, the reduced pig farrowings of last spring, and last fall, and the drought cattle buying that began last June. The feed shortage was still further relieved by the millions of acres of land that, under the adjustment programs, were put into grass and pasture instead of into cotton and wheat.

This record we are examining shows that the estimated total farm income for 1934 is actually higher than the average for the last 5 years—in spite of the disastrous drought. It is 19 percent larger than it was in 1933, and 39 percent more than in 1932. While prices of things farmers buy have been going up, the prices of things farmers sell have been going up faster, and consequently, farmers can buy more things with their 1934 income than with their 1932 or 1933 income.

It is gratifying to note that the processing taxes on the commodities concerned take care of the benefit checks to farmers, which by the end of the year amounted to more than half a billion dollars, thus adding enormously to farm purchasing power under a program that is self-supporting financially.

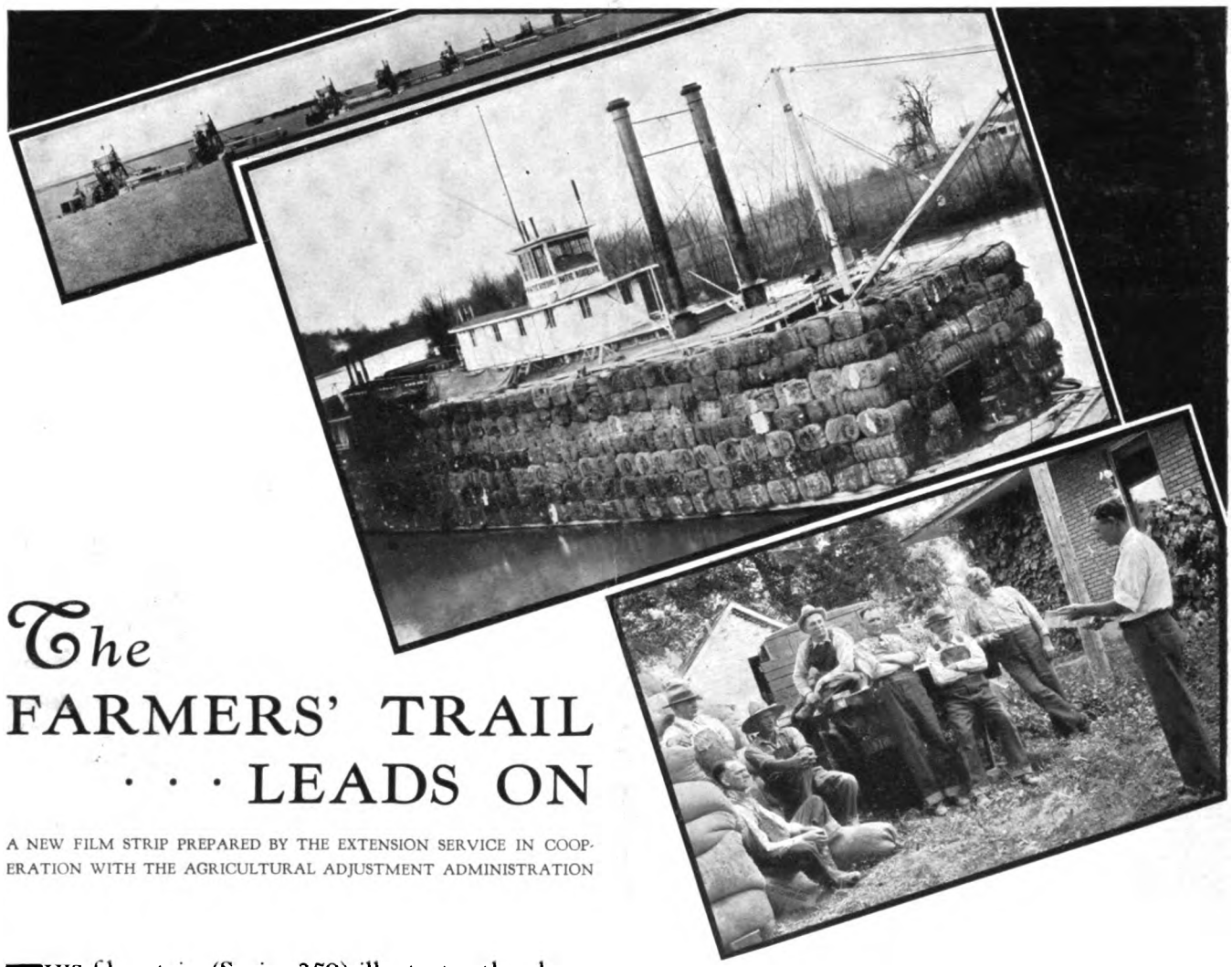
Those things the record shows.

As for the future, we know that some 600,000 wheat farmers are cooperating under contract in control of wheat acreage, which provides for a slight increase in 1935 over last year's plantings. A corn-hog program and cotton and tobacco programs for 1935 are also projected and will provide for some expansion of production. Marketing agreements in effect on many commodities extend benefits to more than a million additional farmers. These things the future promises.

Many of the other immediate possibilities that the future holds, depend directly on decisions that will flow from the country itself during 1935.

Shall we continue adjustment or shall we abandon the plans and go back to the old planless way of doing things? Shall we plan our production with an eye to our probable demand or shall we throw an increased production on the domestic and foreign markets for whatever it will bring? Shall we allow the production to be restricted—too late—after 5-cent cotton and 30-cent wheat have starved production down, or shall we plan it as a Nation now?

To me, the most assuring hope we have for 1935 is the fact of the 3,000,000 farmers who are cooperating in the programs today. It is on this cooperation I have my hope for the coming year.



The FARMERS' TRAIL · · · LEADS ON

A NEW FILM STRIP PREPARED BY THE EXTENSION SERVICE IN COOPERATION WITH THE AGRICULTURAL ADJUSTMENT ADMINISTRATION

THIS film strip (Series 350) illustrates the changes which have taken place in both production and marketing of American farm commodities during the course of the last generation, and also the farmers' efforts to meet these changes, assisted by the Government.

The series was prepared from material assembled by the Field Information Section of the Agricultural Adjustment Administration.

The film strip is available for purchase at $1.44 from Dewey & Dewey, Kenosha, Wis., after first obtaining authorization from the United States Department of Agriculture. Blanks for this purpose will be supplied upon request to the Division of Cooperative Extension.

E X T E N S I O N S E R V I C E
UNITED STATES DEPARTMENT OF AGRICULTURE, WASHINGTON, D. C.

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