Extension Service Review

VOL. 2, NO. 1 JANUARY, 1931

PLANNING THE YEAR'S HOME DEMONSTRATION PROGRAM

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

Table of Contents

The EXTENSION SERVICE REVIEW is the official organ of the Extension Service of the Department of Agriculture. It is issued monthly throughout the year. The subscription price is 50 cents a year. All subscriptions should be sent direct to the Superintendent of Documents, United States Government Printing Office, Washington, D. C. Single copies may be obtained at a price of 5 cents each. For postage to countries that do not recognize the United States mailing frank, 25 cents a year should be added. Remittances should be made to the Superintendent of Documents by coupon, postal money order, express order, or New York draft. Remittance in currency will be at the sender's risk. Postage stamps, coins defaced or worn smooth, foreign money, and uncertified checks will not be accepted.

CERTIFICATE.—By direction of the Secretary of Agriculture, the matter contained herein is published as administrative information and is required for the proper transaction of the public business

Extension Service Review

VOL. 2 WASHINGTON, D. C., JANUARY, 1931 NO. 1

Making Progress in Farm Economics

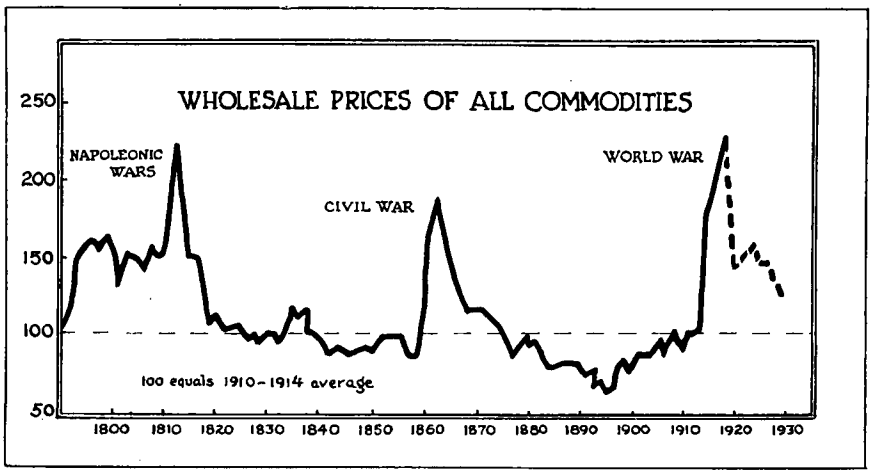
B. H. CROCHERON

Director, California Extension Service

THE depression in prices of deciduous fruits grows more severe. As the years go on more fruits are affected and prices generally sink lower. Not only this, but farmers have less stored capital and less credit with which to meet the situation. Gloom prevails through the deciduous-fruit regions of the State.

Many people act as though this were an unforeseen condition. They claim to be as surprised by the continued depression as though it had never been predicted or forecast.

As a matter of fact, Thomas Forsyth Hunt, late dean of the college of agriculture, went over the State in 1919 under the auspices of the agricultural extension service. He addressed large farm audiences, telling them that they might expect a steadily declining price level. He said it was not a time to expand plantings. One of his expressions was, "This is the best time in 30 years for farmers to get out of debt. It is the worst time in 30 years to get into debt." But people went on feverishly planting. Prices were high. Few took the warning seriously, although the far-sighted and earnest speaker addressed audience after audience until his strength was exhausted.



Beginning in 1919, this chart, without the dotted line, was shown to many farm audiences in California. It shows how prices have fallen suddenly after each war. Extension workers predicted that there would be a similar fall in prices after the World War. The dotted line shows the extent to which their predictions were fulfilled and how price fell after the World War from 1919 to 1930

In January, 1925, another speaking campaign was started to warn the farm people. Statistics had been gathered, computations had been made, the facts were clearer. Over 200 addresses were delivered to as many audiences, urging curtailment of acreage, urging diversification in farming, and urging studies in marketing. We know this is a fact, because we made those speeches ourselves. But prices for most crops, while not so high as in 1919, were still reasonably profitable. People listened politely, said the talk was interesting but gloomy, and went home. Nobody did anything about it. From that time to this the agricultural extension service has never ceased reiterating that the agricultural depression would be severe. Remedies were proposed. A special bulletin was written about them (Calif. Agr. Ext. Circ. No. 18, April, 1928), and a long train of cars traveled about the State graphically depicting the situation.

The above history is related, not to say "We told you so," but in the hope that if similar warnings are issued in the future they will be heeded more generally than in the past.

Farm Economics Studied

Meanwhile the farm advisers diverted much of their work from problems of production to problems of economics. Farm advisers concentrated their teachings on five points, which are here reiterated from an address delivered to the farm advisers at their annual conference in 1925. These points are repeated because they stand the acid test of experience. We propose to keep right on working along these lines:

1. Teach the fundamentals of agricultural economics, its possibilities and limitations.

2. Emphasize the applications of sound economics to farm practices. Economics apply to individual farms with even more force than to groups of farms. By which we mean, get farmers to study their farm management, including costs of production, and help them to make such studies when they desire help.

3. Advise growers who are interested in forming new marketing agencies whether their proposed plans are likely to succeed, as judged by previous experience. If not, help them to draw up amended plans, that they may have greater chances of success.

4. Assist existing marketing associations by pointing out to growers the limitations and difficulties under which such associations are placed, so that they may not expect too much from such associations and will stand by them in times of discouragement. Help the cooperatives to realize their need of close cooperation and counsel with their members and, wherever possible, create opportunities for officials and members to meet together for mutual help.

5. Show farmers that the surest field for success is in good farming and in good farm economics. Speculative single-crop farming is not good farm economics unless the farm is so well financed that it has liquid capital to carry over the periods of inevitable depression. Diversified farming tends to eliminate such deep depressions as it also eliminates the occasional high peaks of success. By so doing it makes permanency possible on smaller capital. In

25727—31

general, proper diversification makes better use of both farm labor and capital.

Farm Board Assisting

Meanwhile a new force has come into the picture by the organization and subsidy of the Federal Farm Board. This governmental agency, equipped with large amounts of money and almost limitless authority, has stepped in to help solve the farm problem. It is forming great cooperative organizations and lending them large sums of money. Its agents are everywhere active at focal points of farm depression. Through this agency a new principle has been introduced—the destruction of the surplus. The Federal grape plan holds out great hope for the grape industry. Not to be outdone, the canners of peaches put a similar plan into effect and are financing the destruction of the peach surplus. If these plans can be made to work, they will offer a chance for us to get through this period of depression less painfully than otherwise. The plain fact is that we are growing more fruit collectively than our customers want at the prices we want to charge. We must either (1) find new customers, (2) induce old customers to eat more, (3) destroy our surplus, or (4) submit to low prices. None of these things looks very easy or offers a very happy solution. They seem to be the only ones in view.

Meanwhile, not everyone is suffering. Some farmers, growing these same crops, are making money. They are the men on the best land who are getting high yields by means of their land and good methods. Furthermore, they have enough land so that if the profit per acre is smaller than formerly there is still enough margin to support the family. These fortunate farmers are more numerous than most people realize. They usually keep quiet, so are not easily manifest. The records in our office show, however, that they are not as infrequent as some people suppose. Many of them are willing to give large credit to the farm advisers whose counsel they have taken and whose work has resulted in the maintenance of many a farm family which would otherwise have failed.

New Federal Farm Board Publications

THE Federal Farm Board announces that the following three publications, which were issued in November, 1930, may be obtained free of charge by requesting the Director of Information, Federal Farm Board, Washington, D. C., for copies of them:

Bulletin No. 1, Fruits and Vegetables: Guide for Setting Up Local Cooperative Marketing Associations, by Harry C. Hensley, senior economist, Division of Cooperative Marketing, 28 pages. In this publication definite suggestions are given which may be used as a guide in organizing local associations for the cooperative marketing of fruits and vegetables. The suggestions treat the entire process of organization, including making the preliminary survey, financial arrangements, marketing agreements, and meeting the requirements of the Capper-Volstead Act. The bulletin states that local associations established in accordance with these suggestions will be eligible to affiliate later with regional or national agencies which may be formed for the marketing of fruits and vegetables. There are seven appendixes, which give a model outline of survey, organization agreement, marketing agreement, articles of incorporation, by-laws, consent and waiver, first meeting of members, and minutes of first meeting of directors, and the Capper-Volstead Act.

Bulletin No. 2, Practical Experiences in Feeding Wheat, 14 pages, gives the conclusions reached from recent studies on feeding wheat to livestock which have been made by 25 State experiment stations. These experiments were carried on with hogs, beef cattle, dairy cows, lambs, laying hens, and horses in every section of the country except New England. The results show that wheat and corn are practically interchangeable in livestock rations, but that in no case should wheat be fed without supplementary feeds. As wheat and corn are practically interchangeable, the relative prices of the grains should determine which can be fed more profitably at any particular time. Although the bulletin gives some complete rations, it recommends that the details for individual cases should be worked out with or obtained from the county extension agent or the State agricultural college.

Circular No. 2, Grow Less—Get More, 4 pages. This circular gives concisely the Federal Farm Board's reasons for stating that it is impracticable for the American farmer to attempt to compete in the world wheat market; that it is possible for him to compete in the world cotton market; and that in general there should be a closer regulation between production and potential consuming demand, which means decreased production of most farm commodities. The reasons are supported by pertinent facts and analyses of the relationship between total production and prices in former years.

Summer Courses for Negro Extension Agents Provided

Summer schools for negro extension agents will be held again. The trustees of the Julius Rosenwald Fund have notified the Office of Cooperative Extension Work, United States Department of Agriculture, that money from their fund has been made available for holding negro summer schools—$15,000 for two schools in 1931 and $12,000 for two schools in 1932.

With an allotment of $20,000 from this fund for the purchase of laboratory equipment and the salaries of teachers, three schools for negro extension agents were held at Orangeburg, S. C., Nashville, Tenn., and Prairie View, Tex., during the summer of 1930. These schools were organized and conducted through the Extension Service of the United States Department of Agriculture in cooperation with the white and negro agricultural colleges in the Southern States. The schools were under the direction of E. H. Shinn and Mrs. Ola Powell Malcolm, both of the Washington office. Approximately 300 negro extension agents were enrolled.

Courses Given

Short unit courses, lasting from two to four weeks, were given in the following subjects: Agricultural economics, agricultural engineering, farm machinery, news writing, dairying, swine production, marketing, soils, crops and fertilizers, extension methods, rural social organization, home gardening and fruits, home beautification, cotton, poultry, foods, food conservation, rural sanitation, and home improvement. A special effort was made to have the courses simple, definite, and practical, so that they would adequately meet the needs of the agents. The schools in 1931 and 1932 will follow the same general plan as that used in 1930.

At a meeting of the trustees of the Rosenwald Fund the home demonstration workers made an exhibit of the work done in the schools during the summer of 1930. This exhibit attracted much attention, and for the most part has been moved to the trustees' office in New York, where it will remain indefinitely.

It is reported that the spirit and interest of both teachers and agents at these schools were unusual. The agents demonstrated their appreciation of the opportunity given them to attend these schools for better training by the earnestness with which they performed their various duties.

Following Through with the Interstate Early Potato Committee

J. R. HUTCHESON
Director, Virginia Extension Service

THE year 1928 was a disastrous one for the growers of early potatoes in the South Atlantic States. However, the low prices received by potato growers from Florida to Maryland that year resulted in one worth-while development. It taught representatives of the Bureau of Agricultural Economics, extension workers, cooperative associations, and farmers in this territory that a different and much more intensive type of outlook work would be necessary if early potato production were ever to be stabilized. This realization eventually led to the organization of the interstate early potato committee.

I have been asked to state in as few words as possible just how this committee was set up and what it has accomplished to date.

The Problem

The total production of early potatoes in Maryland, Virginia, and the Carolinas in 1927 was 23,000,000 bushels, which sold for $33,000,000. The growers in these same States produced 26,000,000 bushels in 1928, for which they received only $11,000,000. This resulted for a time in complete demoralization throughout the early-potato-producing section. However, the Eastern Shore farmers are not folks who take a beating lying down. The officers of the cooperative exchange, farmers, bankers, dealers, and others realized that, since potatoes were their main source of income, something must be done to improve conditions before another year. They therefore got in touch with the State agricultural college and the State conservation and development commission and asked these people to make a survey and suggest some plan for bringing order out of chaos. The representatives of these organizations in Virginia got in touch with representatives of similar organizations in the other early-potato-producing States and made a rapid but complete survey. This survey indicated three things:

1. That the problem confronting the early-potato industry was a long-time problem.

2. That it was a regional problem.

3. That it was a problem which could be solved only by the closest possible cooperation between those who financed potato production, those who grew the potatoes, and those who sold the potatoes.

Stabilization Committee Becomes Active

These facts were presented to a mass meeting at Norfolk, Va., in the fall of 1928. This meeting was attended by farmers, bankers, seed dealers, fertilizer dealers, managers of cooperatives, independent dealers, and extension workers. Every phase of the potato-growing industry was discussed, and there was a unanimous demand for the setting up of an interstate potato committee to help stabilize production. Such committee was immediately set up, with the director of extension service in Virginia as temporary chairman. The membership of the committee was composed of a leading farmer, a leading dealer, the director of extension, and an alternate from each early-potato-producing State, two representatives of the Bureau of Agricultural Economics, and one representative of the Federal Extension Service.

This interstate committee began work immediately and set up subcommittees in each State to work along the following lines:

1. Advance market information and acreage stabilization.

2. Speculative credit stabilization.

3. Supplementary crops and enterprises.

4. Closer market coordination and improved marketing practices.

In order to correlate the activities in the several States concerned, the extension services and the United States Department of Agriculture cooperated in the employment of an executive secretary of the committee in the person of A. E. Mercker, who maintained headquarters in the Bureau of Agricultural Economics.

The committee did not put on an acreage-reduction campaign, but obtained all facts in regard to the prospective carryover of the old crop, intentions to plant, and outlook information, and put these in the hands of growers, bankers, and dealers through newspaper articles, mass meetings, personal letters, and personal contacts. Bankers gave the information to bankers, dealers to dealers, and growers to growers. This intensive campaign was kept up from early in November until the 1st of April, when the last potato had gone into the ground.

Cooperation Obtained

Cooperation was almost 100 per cent, since everyone connected with the early-potato industry had lost money the previous year. Bankers, small and large, carefully watched the applications for money for potato production, and where these applications seemed excessive they gently but firmly vetoed them. Dealers who had been in the habit of advancing large sums for the purchase of seed and fertilizer cut such loans from 30 to 50 per cent, and growers agreed to cut their plantings from 10 to 50 per cent.

The net result of the activities of all concerned was that potato acreage was cut at least 25 per cent all the way from South Carolina to Maryland. The price paid growers in 1929 averaged about $3.75 per barrel, instead of $1.25 per barrel which was received for their 1928

crop. The early-potato section as a whole had the most prosperous year since 1920. The growers in Maryland and the upper Virginia counties averaged more than $4 per barrel for their entire crop.

The Second Year

Realizing that the second year was the real test, the members of the interstate committee began an intensive campaign of education with growers, dealers, and bankers early in the fall of 1929 and continued it until the 1930 crop was planted. The Bureau of Agricultural Economics got out its information on intentions to plant several weeks earlier than it had ever been issued before. This report, together with the 1929 prices, indicated that there would be a considerable increase in potato acreage throughout the entire early producing territory and that the increase would be particularly large in Maryland and Virginia. This information was put in the hands of everyone interested in early-potato production.

The results of the second year's work varied from section to section and from State to State. Where the growers, bankers, and dealers cooperated and held acreage within reasonable limits, satisfactory prices were obtained. Where such cooperation was lacking, everybody lost money on the 1930 crop, and the only thing that prevented a repetition of the low prices received in 1928 was the low yields due to a poor season. Lack of coordination in marketing activities between selling agencies also helped to lower the price in certain sections during the 1930 season.

Committee to Continue Work

The interstate early potato committee as originally set up was financed with the idea that the plan would be tried out for two years, and if not successful would be discontinued. With such varying results during the 1930 season, there was, therefore, considerable apprehension as to whether the work would be continued ofter 1930. However, when the committee was called together during August of this year, representatives were present from every State from Florida to Maryland, and these growers, dealers, and extension workers unanimously went on record asking that the committee be continued and that plans be made for financing the work of the committee for the next three years. This is conclusive evidence that those concerned believe that much good can be accomplished from this new type of outlook work.

The activities of the interstate committee to date have demonstrated pretty clearly the following things:

1. That there is a safe acreage for each State beyond which it is not wise to plant in a normal year.
2. That those who advance credit for early-potato production have more influence on the acreage planted than do the growers themselves.
3. That with real cooperation between growers, bankers, and dealers, acreage can be controlled within reasonable limits to the financial advantage of all three groups.
4. That extremes of weather easily demoralize prices where there is lack of cooperation between marketing agencies.

Xenophon, who lived in Athens, Greece, about 2,280 years ago, said: "Agriculture is an art which will enrich those who diligently practice it, provided they understand it; but if they do not understand it, it matters not how hard they may labor at it, it leaves them in poverty."

Home Management Defined

JUST what is home-management project work? This question, Miss Mary Rokahr, extension economist, home management, of the Federal Office of Cooperative Extension Work, reports is one that comes to her most frequently, since home management seems to be an all-embracing subject.

The home-management specialists and State leaders of the Western States who met in conference at Bozeman, Mont., have assisted in answering this question by clearly defining home management as follows:

The home-management projects include the consideration of the standard of living of the family; the use of time, money, energy, and other resources; the equipment and processes involved in household operations; and the development of appreciations, attitudes, and ideals of the family group.

This definition places home management in the field of home economics on the same plane that farm management holds in the field of agriculture, in that it includes certain elements involved in a number of projects. In home management it includes aspects of nutrition, clothing, house furnishing, and child development. The technical phases should, where possible, be handled as separate projects, but the maintaining of a balance between these various interests as they affect family decisions remains a home-management problem. Where adequate assistance is available in these other projects, the effort in the home-management project can be proportionately limited to standards of living, the use of money, time, effort, and other resources, and the development of appreciations, attitudes, and ideals.

Objectives of Project

Extension workers are always interested in the objectives of any project work that they undertake. The Western States specialists and leaders state the objectives of the home-management program in four units of work.

1. The determination of family needs, on the one hand, and the resources available for family uses on the other, and the guidance of the thinking of family groups, to the end that the standards of living of the rural family may represent the best possible adjustments.
2. The improvement of the household plant.
3. The improvement of practices in housework, in purchasing, in child development, in the conduct of family life, and in the carrying out of all other household functions.
4. The correlation of household demands into workable time, money, and energy budgets.

The program of the Western States that will carry out these objectives is to emphasize cost-of-living studies, home accounts and budgets, kitchen improvement, installation of water and sewage-disposal systems, management of time and labor through standardization of processes, and furnishings and equipment.

Women Serve Canned Meal

Robbing their storehouses, which had been filled with canned foods in preparation for the hard winter that stretches ahead of them as a result of the devastating drought, a group of farm women, constituting the home-demonstration council of Claiborne Parish, La., served a local professional club with a canned dinner. Members of this organization declared that it was one of the most bountiful meals the club has enjoyed this year. Everything served had been taken from cans of home-grown products from Claiborne Parish farms. The meal consisted of vegetable soup, string beans, sweetpotatoes, pickles, beef roast, corn bread, home-canned peaches, and homemade cake. The council members have encouraged a parish-wide program of canning and have made it possible for the rural women to buy cans at wholesale prices.

Wise Buying of Food

The University of Maryland has launched a new course which is intended to help buyers of food to make their selections of products, and consequently enable them to spend their money more intelligently.

It is pointed out by those in charge that about ten and a half billion dollars is spent annually for food. While, within recent years, a great deal has been done by Government agencies, Federal, State, and local, along the line of establishing recognized standards and grades of food products, a need has been felt for more general knowledge on the part of those who do the buying regarding various points that should be considered in determining the relative quality of products offered for sale.

Purpose of Course

The primary purpose of this new course is not to train those who may become professional inspectors of food products, but rather to give practical information to buyers, whether they are buying on a small scale for home use or on a large scale for restaurants, hotels, chain or other retail stores.

Products studied include fruits, vegetables, canned goods, poultry products, grains and flours, dairy products, meats, and sea foods. The course is open to advanced undergraduates, graduates, and those outside who desire to attend.

A feature of the course is the demonstrations which have been given in connection with the several food products. Excellent illustrative material has been provided for each session of the class, and lectures and demonstrations are being given by persons who have had years of actual experience in the purchase of food products.

The course was arranged by the department of agricultural economics, in cooperation with the College of Home Economics, the Maryland State Department of Markets, and the United States Department of Agriculture. Dr. S. H. DeVault, head of the economics department, and S. B. Shaw, of the Maryland Extension Service, are in direct charge.

The ancients used butter as a skin ointment after it had been buried in the ground for a hundred years and had turned red with age, according to E. S. Guthrie, professor in dairy husbandry at the New York State College of Agriculture.

Roadside Markets Accredited

Roadside marketing has been placed on a reliable and profitable basis in Bergen County, N. J., by an accrediting system. The need for such a project became urgent when farmers' roadside markets developed into a profitable business and unscrupulous hucksters and producers opened up stands selling inferior and stale produce as high quality, fresh, home-grown produce. Without any means of knowing which were the reliable stands, the consumers' confidence in all roadside markets was being lost, and operators of stands were condemned as a group in newspaper editorials.

Sign Used at Stand

The plan established by W. Raymond Stone, Bergen County agricultural agent and chairman of the agricultural committee of the Bergen County Chamber of Commerce, provides that in order to have his roadside market accredited the farmer must apply to the local chamber of commerce for a sign which would identify his stand as an accredited roadside market, and must agree to (1) produce at least 50 per cent of all products offered for sale on his market, (2) purchase for resale only those products which are bought direct from a near-by farm, and (3) display only well-graded products of high quality. If the chamber of commerce considers that the farmer will conform to the standardization rules, for $5 it rents him a sign, like the one illustrated here, stating that the roadside market is approved by the Bergen County Chamber of Commerce. All accredited stands are required to keep up to the prescribed standards at all times, and it is expressly understood that violation of any of the rules governing market standardization will be sufficient cause for the compulsory removal of the sign. In fact, several applications for accrediting signs were turned down because it was thought that the applicants could not or would not conform to the standardization rules. In addition to this accrediting service, the chamber of commerce prepares printed matter that also aids the consumers in locating reliable sources of high-quality farm products.

Marketing under this plan began in 1929, and now 22 producers are selling under the "Approved roadside market" signs. At the close of the second season these farmers recognize that this plan of marketing, with its standardization feature, has solved their problem of how to dispose of farm products at a good profit. Furthermore, it has shown them how to overcome the unfair competition of the unscrupulous, who, unchecked, would destroy public confidence in farmers' roadside markets.

Federal Specialist In Agricultural Engineering

S. P. Lyle, formerly head of the division of agricultural engineering at the Georgia State College of Agriculture, University of Georgia, has been appointed extension specialist in the division of agricultural engineering of the Bureau of Public Roads. He will act under the joint direction of that division and the Office of Cooperative Extension Work as a liaison officer between the Department of Agriculture and the State extension forces in matters relating to extension work in agricultural engineering. This work, conducted during the last three years by L. A. Jones on a part-time basis and now to receive Mr. Lyle's entire time, is designed to facilitate cooperation among the extension agricultural engineers in the States and to place at their disposal the technical aid of the Department of Agriculture,

Mr. Lyle enters the service as senior agricultural engineer (extension specialist) after six years as State leader in the agricultural engineering extension service in Georgia. His experience covers 21 years in power farming, research, teaching, and extension work in agricultural engineering, and he is the author of a number of bulletins and articles. He holds the degree of B. S. in agricultural engineering from Kansas State Agricultural College and M. S. in agricultural engineering from Iowa State College.

Child care and training specialists meeting in the conference room of the Secretary of Agriculture

Child Care and Training Conference

THE rural child, rural parents, and rural communities as they affect constructive child development received concentrated attention during a 2-day conference in Washington, November 24 and 25, by extension specialists in child development and parent education.

Goals of the extension program in this field, content of programs, effective means of organizing, methods in teaching, teaching devices, correlation of this project with other subject-matter projects, cooperation with other agencies engaged in this field, and implications of the White House conference were considered.

Dr. C. B. Smith, Chief of the Office of Cooperative Extension Work, opened the conference and sounded the keynote of the meeting as a desire to determine what is the present situation regarding the child care and parent education in the extension program, what are the existing problems, and how the situation is to be met.

The group elected Edna E. Walls, of Illinois, to serve as chairman and Grace E. Frysinger, of the Federal Office of Cooperative Extension Work, to serve as secretary of the conference.

The conference was conducted on a discussion basis, each person having well-defined responsibilities for presenting data and leading discussion or for summarizing the discussion of a major topic.

Recognition was voiced as to the effective training given to children in many rural homes. The father, as well as the mother, was considered throughout the conference. Constructive suggestions for the normal child formed the basis of all discussions.

Goals for the extension program in child development and parent education were first considered. The outstanding goals for the home were so outlined as to give to parents information that will develop a sense of confidence which will make possible the optimum development of the child and the parents, and to aid parents in creating a wholesome living environment for the child based upon affection and understanding.

The need of having the community recognize its responsibility to the child was emphasized. The group voiced its recognition of the need for effective coordination of all agencies functioning in this subject-matter field in any given area—local, State, and national.

Discussions of needs of the family from the viewpoint of the parents and from the viewpoint of the extension specialist developed the facts that recognition by parents of problems in child development usually grow out of specific problems, such as matters of discipline, habit formation, character or religious training, recreation, sex education, and sharing in family finance.

Needs of Parents

The specialists indicated that additional needs of parents were to understand that the child's behavior is largely a product of his environment, to have a more objective attitude toward their children, and to learn more of the fundamental nature of the child and of the laws of learning.

Efficient organization for carrying on this project, content of the program, methods of teaching and correlation of this project with other home-economics projects, with other departments of the colleges, and with outside agencies were discussed.

At present major emphasis in this project is given to habit formation, means of developing self-reliance, and educational play, while family relationships and the influence of heredity also are presented. The need was recognized of having State 4-H club leaders and county club agents, as well as local leaders of 4-H club work, understand principles of child training.

Discussions Summarized

The final session of the conference was devoted to summarizing the discussions. The group was unanimous in its recognition of the need of further research in the field of child development and of especial need of such research in relation to rural conditions. They urged that a specialist in this field be employed in the Federal Office of Cooperative Extension Work. The specialists recorded their desire to extend the findings of the White House Conference on Child Health and Protection to rural people through the extension program.

Suggestions as to the outlook in the general field of child development and parent education were presented by Dr. Louise Stanley, Chief of the Bureau of Home Economics, and by Anna Richardson, child development specialist of the American Home Economics Association.

After a presentation of a summary of the group discussions by the conference secretary, Grace E. Frysinger, the meeting ended with a presentation by the director of extension, Dr. C. W. Warburton, as to the interest in this project by the United States Department of Agri-

culture and a statement of the outlook for the project in the extension program.

Representatives of 16 States attended the conference. Nine of these States employ full-time specialists as follows: Certie Reynolds, Georgia; Edna E. Walls, Illinois; Mrs. Alma H. Jones, Iowa; Mrs. Ruth D. Morley, Massachusetts; Mrs. Lydia Ann Lynde, Michigan; Mrs. Bell O. Fish, Minnesota; Edith D. Dixon, New Jersey; Dr. Margaret Wylie, New York; and E. Faith Strayer, Oklahoma, while Florence Imlay, Kentucky; Essie M. Heyle, Missouri; and Wanda Pryzluska, of Ohio, act as part-time specialists in this field in their respective States. Minnie Price, State home demonstration leader in Ohio, represented that State in the absence of Miss Pryzluska.

Others of the extension service who attended included Margaret McPheeters, foods specialist, Maryland; Julia O. Newton, State home demonstration leader, Minnesota; Mary E. Thomas, nutrition specialist, North Carolina; Norma M. Brumbaugh, State agent, home demonstration work, Oklahoma; Marjorie E. Luce, State home demonstration leader, Vermont; Mary Callopy, State home demonstration leader, Wyoming; and members of the Federal Office of Cooperative Extension Work.

Nevada to Emphasize Marketing

Stronger emphasis on the marketing of agricultural products, as a policy of the Nevada Agricultural Extension Service, has been announced by Cecil W. Creel, director of the service. Establishment of a department of agricultural economics and marketing manned by two agricultural economists, an increased amount of time spent on marketing work by district and county extension agents, and fuller coordination of extension work in Nevada with the Federal Farm Board are involved in the new arrangement.

Objectives

The objective of the new work will be to furnish adequate agricultural-economics service to the farmers of the State, and to cooperate with the Federal Farm Board in its program looking toward the nation-wide organization of cooperative marketing of all major commodities. Simultaneously with their marketing work, the new specialists will carry on a farm-management project to determine production costs of the various major agricultural commodities raised in Nevada.

Living-Room Improvement

KNOWING that the women of German township liked the home-furnishing work they had done several years before, a living-room project was started in 1928 in Montgomery County, Ohio, which is still in progress, says Eunice Teal, home demonstration agent of that county. "By the close of that year we had 65 demonstrators, 190 assistant demonstrators, 391 women reported as being reached by demonstrators and assistant demonstrators, and 514 on the mailing list to whom subject-matter articles were sent, making a total of 1,160 women reached directly or indirectly with this project." The total number of changes reported was 1,320.

In conducting the project, conferences were held first with the assistant State home demonstration leader and the home-furnishings specialist, at which a plan for the coming year was worked out. This plan was presented to the home-extension council and then to the women at the farm women's camp, who approved it.

Aid Given Individuals

The plan was to give much individual help. As a result, letters and news articles announced that any woman not satisfied with her living room could receive personal help with her problems by signing up as a demonstrator. If, on the other hand, she wishes to receive subject-matter articles which could be sent out every few weeks, she could sign up to receive the literature. Information was given through the newspapers and through an exhibit put on by the home demonstration agent at the county fair. It was thought best to have only five or six demonstrators in each township and a personal visit would be made to each home. In order to obtain the allotted number in each township it was necessary for the home agent to make many personal calls on women in the more backward communities.

Demonstration Requirements

Each demonstrator was asked to make at least one change and as many more as possible, but the change did not need to involve expense. She was also asked to attend and invite at least two other women to the two meetings to be held in her township. A score card was used in scoring each of the 65 living rooms visited, although the important part of each visit was the discussion of the room by the specialist, which included her answers to the questions asked and her suggestions for changes. A visit was made by the specialist and home demonstration agent in October and another in November. The homes were of different types. Some of the husbands and young people were as much interested as the women.

Work Done

The two meetings in each of the 12 townships were well attended, there being an average of 15 present at all 24. At the first meeting the subject of room arrangement was discussed and demonstrations were given. At the second meeting suitable accessories, such as lamp shades and pillow tops were made by the women.

Changes Seen

In April and May a second visit was made to the 60 demonstrators who had completed their changes, which were most interesting to see, such as repapered walls, new curtains, furniture rearranged into interesting groups, an old chair unrecognizable in its new slip cover with a refinished antique table by it; and touches of color from the addition of a few magazines and books, a bowl of flowers, or pretty candles.

Interesting comments were made by the demonstrators. For instance, Mrs. Ward Marshall said that after she moved the flowers from in front of her choicest window and placed Mr. Marshall's comfortable chair there, he came in and sat down in it and said, "Isn't this fine! Isn't this fine!" He sits there now to read, has a good view down the road, and enjoys his new corner very much.

Mrs. W. F. Gorsuch removed a part of the wide frame from one of her pictures and now for the first time she says her friends really see the picture instead of the frame, for when they come in they remark, "Why, you have a new picture."

Achievement Day

At least 250 persons attended the achievement day which included visits to to five very interesting living rooms. Three of these were visited before noon and then a program was enjoyed at the church, where lunch was served to about 200 persons. Short talks were given by guests, the State home demonstration leader, home furnishings specialist, the hostesses, and some of the other demonstrators.

Extension Service Review

Issued monthly by the EXTENSION SERVICE of the United States Department of Agriculture Washington, D. C.

The Extension Service Review is published in the interests of workers and cooperators of the Department of Agriculture engaged in extension activities. It contains official statements and other information necessary to the performance of their duties and is issued free to them by law. Others may obtain copies of the Review from the Superintendent of Documents, Government Printing Office, Washington, D. C., 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, Extension Work*
C. B. SMITH, *Chief, Office of Cooperative Extension Work*
J. W. HISCOX, *Chief, Office of Exhibits*
RAYMOND EVANS, *Chief, Office of Motion Pictures*

REUBEN BRIGHAM, *Editor*
F. A. MERRILL, *Associate Editor*

JANUARY, 1931

Clear Thinking

Extension work in 1931 seems certain to be subject to unusual stress. In every county the agricultural situation is difficult. Low prices for wheat and cotton, crop failure in the drought area, and general economic depression are reflected on the farm in decreased purchasing power, impaired financial credit, and the threat of a lower standard of living. It is a resourceful extension agent who, under present conditions, successfully meets each day's emergencies, yet finds a way to keep the program of his county for permanent agricultural improvement moving steadily forward.

With county extension agents working under unusual stress and pressure, with little time afforded them for uninterrupted thought and planning, there is a greatly increased obligation on the part of the State extension division to think out the situation clearly and to organize in simple, direct, and easily applied form the facts the county extension agent and his people should have in organizing their program. It would seem more than ever the part of wisdom for each State extension service to review its many lines of endeavor, its long-time objectives, the economic situation and trends, and the emergencies in existence or likely to arise. With such a review as a basis, 9 or 10 clean-cut, easily understood objectives for the year could be formulated that would find a logical place in every county program and on which agents, supervisors, and specialists all could concentrate. With these definite objectives in mind, the encouragement or expansion of activities not contributing vitally to them could be avoided. Such a step at the present time would do much to clarify the situation for the county extension agent and would give him more certainty of action in the face of the host of conflicting demands now being made on his time and efforts. If the cooperative extension service is to meet the present complex and trying situation, clear thinking and concerted action must prevail.

Thrift

The picture presented by State chairmen at the second National Drought Relief Conference in November was not a happy one. Disastrous crop failure over a wide area, reduced credit, actual lack of food supplies, and the undernourishment of children are not pleasant things to contemplate. One of the few bright spots in the picture was the stout resistance put up against distress and demoralization due to drought conditions by that old-fashioned and half-forgotten virtue of thrift.

The drought has been most sustained in parts of Maryland, Pennsylvania, and Virginia, and particularly in the sections of these States occupied by the Pennsylvania Dutch, who for generations have been the embodiment of frugality, thrift, and competence. These thrifty Dutch communities were reported to the conference to be in a better position to meet the difficulties of the coming winter, both from the standpoint of finances and actual food and feed supplies, than families in many sections where the drought has been less severe. Money in the bank to draw on in time of need, a reserve of meat, canned fruits, and vegetables against a lean year—these are what make the situation of the Pennsylvania Dutch enviable in the present crisis.

Extension workers in many States have emphasized the live-at-home idea. In fact, in those sections of the drought area where there has been concentrated effort to produce on the farm as much of the family food supply as possible the drought has affected the morale and the condition of farm families the least. It may be that along with its efforts to make the producer more highly efficient and to improve methods of distribution and marketing, extension can well afford to place some emphasis on the two old precepts of living well within one's income and putting aside something for a rainy day. It is possible that the idea of thrift could be encouraged to a point where there would be reserves in every county sufficient to tide over any period of agricultural distress like the present.

Questionnaires

Undoubtedly the questionnaire has its use in extension work, but that use should be sparing. Extension prides itself on personality. The questionnaire is impersonality itself. Extension builds its success on human contacts. If anything will freeze human impulses, it is the receipt of a questionnaire. The two—extension and the questionnaire—are incompatible.

When a grave and sudden emergency arises, when certain facts must be had immediately, we are justified sometimes as extension workers in using the questionnaire. When no emergency has arisen, when only information of one sort or another is desired, there can be little justification for the questionnaire. Usually the county extension agent who has earned the respect and confidence of his people can turn to certain men and women in each community and be assured that he can depend on them to give him the information he needs. He may visit these cooperators in county extension activity in person. He may call them over the telephone. He may bring them together for an informal meeting. Whatever the method he uses, it is man to man, another human contact, strengthening by one more such contact the bond of sympathy and confidence between him and his people.

Obtaining the information through human contacts means more work, more thought, more planning. It is not a lazy man's way. Yet every contact, if tactfully made, means another person interested, a new viewpoint added, and greater sympathy and support for the extension program of the county.

An educator in another field, harassed from receiving questionnaires without number, recently formulated three questions that might well be considered by anyone who is tempted to send out a questionnaire. They are:

What are your qualifications for asking these questions?

What are your qualifications for analyzing the answers received?

What guaranty will you give that the information furnished will be put to any use?

What Is 4-H Club Work Accomplishing for Agriculture

CHARLES A. KEFFER

Director, Tennessee Extension Service

Ted Martin and his cotton

THIS discussion, while confined to Tennessee experiences, will find application in every part of the United States.

Tennessee has over 38,000 farm boys and girls enrolled in 4-H clubs for the year 1930, a gain of 7,000 over 1929, which was itself a record year in membership. Enrolled in crop and livestock clubs are 22,245 working with 15 different crops and classes of livestock. More than 16,000 girls are working in projects of especial interest to them—gardens, canning, poultry, cooking, housekeeping, and sewing. Club work is being conducted in 82 of the 95 counties in Tennessee, and the county farm and home agents have the assistance of over 1,000 volunteer leaders. What are club boys and girls doing? A few examples are given.

It is not claimed that the projects noted represent results that may be looked for under average or even exceptional farm practices. The club boy's father is usually glad to let him have the best land for his crop project and first consideration in the care of his animal project. But may it not fairly be claimed that these outstanding results have a unique value in calling the attention of farmers to the value of best methods? Will not these experiences better enable these boys and girls to adapt these practices, to some extent, to larger acreage or numbers of livestock when they come to operate a farm on their own responsibility?

Experiences of Boys

In 1929 Ted Martin produced 3 bales of cotton on a measured acre in McNairy County, Tenn., at a cost of $82.15, with a profit of $179.45. He used 200 pounds of Chilean nitrate and 400 pounds of superphosphate, half at planting time and half as a side dressing just after chopping. We present herewith a picture of Ted and his bales.

Malloy Patterson, of Cheatham County, Tenn., a member of the New Hope Club, received $240.80 for the tobacco he grew on a half acre.

Harry Wheat, of the Decaturville Club, made 98 bushels of corn, this being the best yield that has ever been reported in Decatur County. He made $1.59 per hour for all the time he worked, valuing the crop at $1 per bushel.

Tennessee farmers, in common with those of other Southern States, need to add more livestock to their cash crops without reducing the returns from cotton, tobacco, and other crops. What is club work doing to better this condition?

Bankers Interested

Last week I attended a conference of bankers interested in agricultural developments. They wanted to see some 4-H club work. The county agent of Gibson County took us to the town of Milan, where the two banks had lent the money to the 4-H club with which to buy purebred Jersey calves, and 14 boys and girls had their calves ready for inspection. To the extension workers present the enthusiasm and interest of the visitors were most encouraging.

A group of Knox County club boys have been feeding pigs for the last several years, 610 pigs having been fed, exhibited, and sold. Local packing plants provided prizes, and 12 contests were held. The boys followed the advice of the agents and kept records of their work. The average feeding period was 112 days; the total weight gained, 108,580 pounds; and the total profit, $6,514.80.

At the fifth annual fat-stock show 500 head of cattle from 25 counties were exhibited, 4-H club members entering 235 head. The grand champion club calf, fed and shown by Miss Hattyleen Bonner, of Warren County, sold for 25 cents per pound.

The Blue Springs Girls' 4-H Club, of Bradley County, was awarded the first prize of $100 for the best exhibit of canned products from a Southern State in a national contest sponsored by the Hazel-Atlas Glass Co.

A Shelby County club girl, Miss Dorris Strong, was awarded a $100 scholarship in the home economics department of the University of Tennessee for making the best record in poultry work in 1929. Her year's work, which was her fourth in poultry club work, netted her $372.31.

These are but examples; every club boy and girl is doing similar work. There is an element of competition in our 4-H club work. Boys and girls like contests all the way from the marble age through basket ball, baseball, and football. It is a fine thing to win. Indeed, I sometimes think we have made prize winning too large a factor in our club work. But when the competition inspires good work, when the contestants are taught to be good losers—good sports—as well as to be good winners, the contest is well worth while.

The father and mother of every club boy and girl are being taught better practices by the boy and girl, consciously and unconsciously, and every parent takes pride in the good work of the child.

Influence of Club Work

But the best that club work is doing is its effect on rural sociology. Club work is making rural life more attractive, not only because it teaches more profitable ways of doing things but because it makes for better citizenship. Club boys and girls are being made farm-minded. Their interest in rural life is increasing; they are looking at farming as a business worthy of the best effort of the best

minds. They are losing the intense individualism of their parents and are thinking in terms of organized effort.

Nothing that the agricultural extension service is doing has a potential value at all comparable to 4-H club work; for the successful club members, already recognized by his boy or girl associates, accustomed to working and playing with the other members of their club are developing qualities of leadership that will find full expression in the community life of the neighborhood in which they make their homes a few years later on.

"Read-the-Label" Radio Talks

Radio talks are making an important and effective contribution to support a program of the "read-the-label" campaign of the Food and Drug Administration, United States Department of Agriculture, according to Solon R. Barber, in charge of the information service of the administration. These "read-the-label" talks, which are presented by W. R. M. Wharton and W. W. Vincent, are being given to acquaint the consumers with the pure food laws and the real contents of packaged and canned foods and drugs.

Women Study Labels

Since the Food and Drug Administration started its radio "read-the-label" campaign it has received thousands of letters commenting upon the talks and asking for more information on how to buy foods and drugs more wisely and economically. Women's clubs seem to have taken up the study of labels in a body, and some housewives have invited their friends in to hear the talks at radio parties. Educational institutions, realizing that the home maker should have a knowledge of the food laws, have written for copies of the talks for use in domestic-science classes. Manufacturers have commended the service and expressed their belief that information acquired by the consumer will increase the sale of quality foods and drugs.

Stations Broadcasting

These talks are broadcast by the Food and Drug Administration over a chain of National Broadcasting Co. radio stations through the cooperation of the Department of Agriculture Radio Service. The stations now broadcasting Mr. Wharton's talks on Mondays at 10 a. m., eastern standard time, include: WSB, Atlanta, Ga.; WAPI, Birmingham, Ala.; WBZA, Boston, Mass.; WLW, Cincinnati, Ohio; WFLA, Clearwater, Fla.; WJAX, Jacksonville, Fla.; WREN, Kansas City, Mo.; KFAB, Lincoln, Nebr.; WHAS, Louisville, Ky.; WIOD, Miami, Fla.; WJZ, New York, N. Y.; KDKA, Pittsburgh, Pa.; WRVA, Richmond, Va.; WHAM, Rochester, N. Y.; KWK, St. Louis, Mo.; WSUN, St. Petersburg, Fla.; WBZ, Springfield, Mass.; WEBC, Superior, Wis.; and WRC, Washington, D. C. The stations now broadcasting Mr. Vincent's talks on Thursdays at 9.45 a. m., Pacific standard time, include: KECA, Los Angeles, Calif.; KGO, Oakland, Calif.; and KHQ, Spokane, Wash.

Boys Make Profit on Tomatoes

THIS last year a most successful boys' 4-H tomato club was conducted in Copiah County, Miss., by F. J. Hurst, district club agent, and G. L. Hales, county agricultural agent. The stated goal was to enroll in the tomato club a group of boys from 15 designated communities, each of whom would grow 1 acre of tomatoes under the direction of the county agent and local club leaders. This project was arranged in an effort to teach farm boys, through actual field demonstrations, the best methods of tomato production, and then, through these demonstrations, to lead the adult farmers to adopt improved methods.

The county advisory committee, composed of four local educators and the county agent, formulated plans for enrolling the members and organizing the clubs; passed on applications for membership; selected local club leaders; determined the requirements for club membership; prepared subject-matter instruction for club members and club leaders; arranged for financial aid, if necessary, in the purchase of seed, fertilizer, spray material, and crates; completely handled the prizes; and prepared and published the report of results, based on the reports of the individual club members.

Local Club Leaders Cooperated

The local club leaders cooperated in holding enrollment meetings, aided in presenting the plan, secured applications and made recommendations for membership, aided members in the selection and measurement of their club acres, supplied them with copies of all club literature, saw that they understood instructions and kept accurate records, aided in preparing programs for and attended club meetings, visited members' demonstrations, supervised the harvesting, and signed and turned in the completed record book of each member.

The club members competing grew 1 acre in tomatoes and kept accurate records. They were scored on the following basis: Largest yield of marketable tomatoes, 30 per cent; greatest profit, 30 per cent; record book and story, 30 per cent; and attendance at meetings, 10 per cent. There were three cash prizes for each of the 15 communities and four cash prizes for the county at large. Some of the leading business men in the county contributed $1,000 in cash for prizes. Mr. Hurst reports that these business men will provide $1,000 a year for the next four years in order to foster this educational work as a part of the long-time plan of farm-development work in Copiah County.

Results

Tangible results of the first year's work, according to the records of 26 boys, showed an average yield of 601.5 crates per acre, whereas 254 crates per acre had been the average State yield for the last four years. The club boys sold their crates of tomatoes for an average price of $0.446 and received a gross return of $268.29 per acre, at an average cost of $148.12, thus giving them an average profit of $120.17 for their work.

Mr. Hurst reports also that a similar project was carried out in Hinds County, Miss., by J. R. Williams, county agricultural agent. While the boys in this county cultivated one-quarter of an acre each instead of 1 acre, the average results for the 19 boys making complete reports show that the yields averaged 628 crates of marketable tomatoes per acre. These were grown and marketed at an average cost of $186.12 per acre and sold for $346.68, leaving the club boys an average profit of $160.56 per acre. The larger average profit in Hinds County is accounted for partially by the fact that the tomatoes were sold at an exhibit contest, where they brought about one-third more than the regular market price.

Kansas Women Write Extension News

"We have conducted recently a county-wide writing contest among the various women's clubs of Montgomery County, Kans.," says Vernetta Fairbairn, home demonstration agent. "This contest was authorized by the county advisory committee last August. We felt that such a contest would obtain wider public attention for home demonstration work and at the same time develop the club reporters and stimulate interest among the members."

Previous to the contest, it was the custom for the home demonstration agent to report all club meetings to the local paper, which resulted in a sameness in the reports of club meetings and a lack of interest on the part of the newspaper men to print them, for it was just another club meeting, and there would be two or three more just like it to-morrow.

For this reason the contest was launched. The instructions included an example of a well-written first paragraph of a project report for a woman's club. This paragraph contained all the five "W's"—who, what, when, where, and why, and the one "H," how, with the emphasis on what and who as follows:

Members of the Valley Women's Club learned many new ways of preparing, cooking, and serving common vegetables and fruits at their monthly meeting held Thursday afternoon at the homes of Mrs. William A. Brown, Mrs. Henry Smith, and Mrs. Fred Jones. The two leaders of the club had attended the meeting in which Miss Florence Doe of the State agricultural extension service showed them how to prepare these dishes from the most common vegetables. The lunch at noon was entirely of the dishes prepared during the forenoon in Mrs. Brown's kitchen. At no time of the year are meals harder to plan and get than during this season when the last year's inadequate supply of stored and canned vegetables and fruits is almost gone, all the women said. The new ways of serving the few things that are left will take the sameness from them and the family will not tire of having them often.

Club Reporter's Notebook

Each club reporter kept a notebook of her own stories. If the paper failed to print what she sent in, a personal call was made to the newspaper office to see what was the matter. The reporter then learned that there were farm women waiting to read these reports and write-ups. Some of the women were not content to report just club meetings, but also wrote of individual achievements through the extension work. Three of these write-ups appeared in farm magazines. The number of news items almost doubled during the contest, their news value increased, and they were given to the papers more promptly. Another result is that the club women are reading reports from their own clubs and those from other clubs. The news-writing contest was so successful last year that the county advisory committee voted to repeat it this year, and to send the winning reporter to the farm and home week at Manhattan.

Home Expenses Cut

Afton Township Homemakers' Club, in Ward County, N. Dak., has found a unique way of cutting household expenses. By pooling their winter requirements of canned vegetables and purchasing from local grocers in wholesale lots, they not only saved money but added variety to their family diets. Samples of food to be purchased were first obtained and carefully examined. The order was then placed with the merchant whose goods and prices were most satisfactory. Forty cases of spinach, tomatoes, peas, and corn were bought.

Minnesota Uses Outlook Information

Outlook information has been used extensively by commodity specialists in Minnesota since 1922, according to William L. Cavert, extension economist in Minnesota. These commodity specialists receive their outlook information principally from State and national outlook reports, extension conferences, and personal discussions with the economic specialists.

The dairy and livestock workers have found outlook information especially useful in their projects. Generally they give outlook material as a preface to their regular meetings, but in some cases the programs are presented jointly by the commodity and economic specialists. Charts showing cyclical and seasonal trends in prices have proved to be effective in conveying to the farmers the probable future situations. Because of the outlook information given at extension livestock meetings last fall, a number of Minnesota farmers, Mr. Cavert reports, were influenced to carry their breeding herds through the low-market period when otherwise they would have sold them.

A New Jersey Marketing Institute

A 4-DAY marketing institute was held at the New Jersey State College of Agriculture and Experiment Station, October 28–31, to consider the possibilities of establishing an extension marketing program, reports Roger DeBaun, extension editor in New Jersey. After general talks on marketing, the program was divided into four periods, each of which was devoted entirely to one of the following major commodity groups: Fruits and vegetables, poultry and eggs, milk, and purchasing and selling farm supplies. This arrangement enabled any farmer to participate fully in those parts of the program in which he was particularly interested without attending the entire institute. It also tended to increase the interest and attention of those present by preventing the overlapping of several programs in which some might be interested.

Subjects Discussed

Among the 42 men who addressed the institute were agricultural agents, commission merchants, producers, managers of cooperative organizations, and economists from the State and United States Departments of Agriculture, experiment stations, and agricultural colleges. The scope of the institute may be indicated by the titles of some of the talks given; these included the Federal Farm Board—its Policy and Progress; Roadside Markets; Farmer and City Markets; Auction Markets and Consignment Selling Experiences; Edible Quality of Peaches in Relation to Demand; Hatcheries as an Egg Market; How to Manage a Successful Farmers' Cooperative Buying Association; and Service Costs of the Retail Feed Store.

Mr. DeBaun reports that frequently the views of the economists and producers conflicted, and resulted in rather thorough discussions of the controversial issues. These discussions helped each group to appreciate the problems and point of view of the other group. The facts gathered from the institute will be disseminated through the county extension agents and news stories.

Club Members Enjoy Life at Camp Wilkins

Two reasons why club members enjoy life at Camp Wilkins. Here they combine instruction in such farm and home pursuits as terracing, judging, and sewing, with recreational activities like swimming and life saving

LAST summer the sixth annual Camp Wikins was held at Athens for the women and 4-H club members who were selected as outstanding representatives of their community clubs in Georgia, reports G. V. Cunningham, State boys' club agent. In the first six weeks of summer the women and club girls held their camp, and in the last six weeks the club boys held theirs. To accommodate as many different people as possible, a new group attended each week.

Ideal Location

Camp Wilkins is proud of its fine location and permanent building on the campus of the Georgia State College of Agriculture. The camp building is on the top of a hill which overlooks the surrounding country. At the foot of this hill is a spring in a grove of trees, where camp fires and picnics are enjoyed. On the other side of the hill is a lake, which conveniently permits boating and swimming as a regular part of the program. A feature of the daily hour devoted to swimming is the 5-minute lesson in life-saving. Mr. Cunningham reports that the boys showed more interest in this than in any other feature of their recreation. This work is particularly valuable, as many country boys who come to the camp do not know how to swim.

Included in the educational program at this camp were classes and demonstrations in judging livestock and poultry, culling poultry, terracing, nutrition, clothing, and etiquette. Advantage was taken of the opportunity to use the facilities of the various departments of the colleges, such as laboratories and farming experiments, where the club members could see what science is doing for agriculture.

Instruction Given

The educational program at Camp Wilkins included work in poultry, livestock, judging, terracing, gardening, nutrition, clothing, and etiquette, and to a large extent used the facilities offered by the various departments of the college, such as the laboratories, classrooms, and farming experiments and demonstrations. Those who had been at the camp before were given the privilege of selecting one of several courses of instruction and spending their entire week on that course. This arrangement made it possible for those who had taken the general program to specialize in some one line in which they were particularly interested. Certificates in poultry culling and terracing work were given to all boys who made an average of 85 or over. Such a plan has many practical adventages. For instance, one boy reports that as a result of the terracing instruction given to him at the camp, he now has enough work lined up to keep him busy terracing land during all of his spare time from school.

Administration of Camps

This year those managing the camp were 4-H club boys and girls who previously had attended the camp as delegates from their home communities and are now working their way through college. The administration of the boys' camp was simplified by selecting a group of club boys to help with each meal, either as servers or dishwashers, and by delegating to boy leaders much of the responsibility of running the camp, especially the discipline. Each day these leaders held a meeting to arrange for the daily general assembly and the weekly closing program. A chairman of the leader group was selected who, among other things, introduced the 4-H club musicians who performed over the radio each Friday during a special program from the camp.

Each evening after supper and vesper services, boxing and pillow fights were held until dark, and then the campers went to the movies. The last night at camp the afternoon radio program was repeated for the group, along with the display of other talent which may have shown up during the week. Thursday of each week during the camp was set aside as "recreation day," when the county agents were privileged to take their groups to Stone Mountain or other places of interest. For those who remained at camp the regular schedule was followed.

Projects Based on Cost Analysis

Enterprise cost-analysis studies have made a substantial contribution to the economic and practical aspects of farm-management projects, according to Harold E. Wahlberg, county agricultural agent of Orange County, Calif. They provide new angles to subject matter for projects that were getting old and shop-worn in the county extension program.

Such is the experience in Orange County, where at first it was difficult to create interest in cost analysis on the part of the grower and even the extension agent. Five years of record keeping and cost analysis have now clearly proved to both farmer and agent the value and merit of this work. At present seven enterprise cost studies are under way in Orange County with the cooperation of 149 growers. The crops being studied include oranges, lemons, walnuts, avocados, lima beans, poultry, and honey.

The extension service and the cooperators are finding that summaries and analyses of cost records become more valuable as they accumulate from year to year. The long-period studies furnish trends and averages that are helpful in analyzing the causes and effects of many cultural operations as they are reflected in the producers' cost reports.

The practical and business-headed farmer will stop, look, and listen when he is confronted with cost data covering a fair cross section of the industry in which his enterprise is represented, particularly where he has comparative figures of his own to match with the average of other individual enterprises.

Studies of Orange Orchards

We have been able to show by means of these studies where production and quality, and in turn income per acre, have been materially affected by certain definite excesses or deficiencies in field operations. For example, the orange cost studies for the past four years show definitely that excessive water usage, reflected in high irrigation costs, tends to reduce yields and to depreciate quality of fruit. The extension service had previously made numerous field observations and investigations which pointed in that direction, but it was not until the cost analysis covering 60 representative orchards over a period of four years was available that the truth was driven home. Excessive cultivation in citrus orchards, revealed in heavy cultivation costs, has tended to reduce yields and income. It has been difficult to change the usual practice of heavy cultivation in our citrus orchards. The cost analysis has done more than all the previous campaigns to convince the grower of the advantages of conservative cultivation.

The pocketbook complex, which accentuates the attitude of the farmer to-day toward eonomic production, finds a tangible and substantial basis in these cost studies. They have the business and economic appeal that is so necessary in present-d a y agricultural production. They furnish a new light and an up-to-date complexion for many of the projects that the agricultural extension agent is carrying in his campaign to improve farm income and make the rural home a better place in which to live.

Calendar

Southern States Extension Conference, Atlanta, Ga., February 2 and 3.

Association of Southern Agricultural Workers, Atlanta, Ga., February 4–6.

Eastern States Extension Conference, New Brunswick, N. J., February 24–26.

Central States Extension Conference, Lincoln, Nebr., May 11–14.

Western States Extension Conference, Logan, Utah, about August 15.

Better Hives for Bees

Bees kept in modern hives will produce about four times as much honey of superior quality as bees kept in gums or in box hives, according to C. L. Sams, North Carolina extension apiarist. To demonstrate this to local farmers, Mr. Sams arranged for 13 beekeepers to transfer 5 colonies to modern hives and leave 5 colonies in the old gums as a check. This demonstration was not fully completed, because the farmers promptly transferred all of their remaining 196 colonies to modern hives when they saw the rapid gains made by the better-housed bees.

Some North Carolina beekeepers winter their bees in the warm eastern part of the State and, as soon as the spring crop is harvested, move the hives to the cooler mountain sections in time for the summer sourwood and basswood flows. At the end of summer the bees are returned to the warm sections for wintering. This migratory apiculture permits the beekeepers to take advantage of two full crops each year.

4–H Club Boys Increase Income

4-H club members in Chenango and Otsego Counties, N. Y., have larger money incomes than boys who have never had contact with junior extension, according to a study made last summer by Howard W. Beers, of the department of rural social organization of the New York State College of Agriculture. Figures for 304 boys of club age show that those with 4-H club experience not only have more income, but they get it in different ways. The common types of boy income are spending money received irregularly from parents, wages received from parents or from employers, receipts from the boy's own property, and allowances. Among the boys with 4-H experience there is relatively less income received as spending money or wages and more as receipts from property such as milk or livestock.

Another effect of club work is an increase in the amount of property owned in the boys' own names. This increase in amount of property indicates the extent to which club work is making young business men out of the boys. A similar effect is the increased amount of money saved by 4-H boys.

The length of time that boys had belonged to 4-H clubs seemed to govern the influence of these clubs. The tendency for 4-H club work to increase money income is much more pronounced after the boys have been club members for five years or more. Similarly, the average value of property and savings combined increases steadily with the number of years of membership.

In discovering these differences of club work in parts of Chenango and Otsego Counties the college used figures for all boys of club age that lived at home on their fathers' farms and worked less than half of their time away from home. About one-third of the boys were 4-H club members, one-third were former members, and one-third had never belonged, so the results of the club work could be readily isolated.

Rabbit Recipes is the title of an 8-page leaflet which has been issued recently by the United States Bureau of Home Economics. This leaflet gives information about domestic rabbits and contains recipes, such as rabbit chop suey, rabbit en casserole, rabbit salad, and rabbit à la king. While the supply lasts, free copies may be obtained from the Office of Cooperative Extension Work, United States Department of Agriculture, by requesting Department Leaflet No. 66, Rabbit Recipes.

A Winter Curb Market in Florida

Here is a curb market that is not open during the summer months. It is in its second year at Holly Hill, Volusia County, Fla. The women of the community found a ready and profitable sale for fresh vegetables and flowers at this market, says Orpha Cole, Volusia County home demonstration agent. Miss Cole has cooperated with the women by giving demonstrations on the preparation of foods to be sold at the market and has assisted in the location of sources of planting stock for vegetables and flowers.

Farm Outlook for South Determined

THE existing economic situation in the South and the probable outlook facing the farmers in 1931 were discussed at a regional outlook conference held at Atlanta, Ga., November 10–14. Representatives of the extension services and agricultural colleges of 11 Southern States, the Extension Service and the Bureau of Agricultural Economics of the United States Department of Agriculture, and the Federal Farm Board took part in the discussion.

An outlook report was issued which summarized the existing and prospective conditions with reference to the principal southern farm commodities. The outlook was released well in advance of 1931 production activities and has afforded the farmers of the South with a practical basis for the readjustment of their production plans to market conditions as a factor in improving their income. The report includes a summary of the facts concerning the long-time and present outlook for southern agriculture, the demand for southern products, credit conditions, and the market situation with respect to more than a dozen classes of crops and livestock.

After the outlook reports were completed the conference discussed the practical application of the economic information to local conditions. The report of a committee, of which Director D. P. Trent, of Oklahoma, was chairman, was considered and adopted. This report, which outlined an extension outlook program for the Southern States, recommended that a regional outlook meeting be held annually in the South. It urged that increased emphasis be placed upon effective methods of interpreting and disseminating economic information; that State outlook reports be prepared cooperatively by research and extension workers; that consideration be given to training extension workers in the preparation, analysis, and extension of economic information; that it is important for the various subject-matter specialists concerned and the economists to cooperate in the preparation of programs and plans in order that they may be backed by the appropriate economic data.

The increased use of news releases, monthly publications, circular letters, the radio, charts, graphs, and other visual media was recommended, but it was suggested that these methods be timed properly in relation to field activities and carried on only with a full understanding of the work being conducted in the various communities and counties. The value of providing county agents with brief, condensed, and practical economic statements at regular intervals throughout the year was pointed out.

The report also discussed the advisability of handling acreage-reduction movements on a systematic, year-round basis, rather than as periodic emergency campaigns, by keeping continually before the farmers the importance of low production costs, good yields, high quality of products, economy in utilization of labor and capital, and balance in the farm business.

Livestock Furnishes Market for Crops

With the emphasis placed on increasing the net income from livestock, furnishing a suitable market for field crops, and assisting in the maintenance of soil fertility, the beef-cattle work in Missouri was carried on by J. W. Burch, T. A. Ewing, and H. M. Garlock, specialists in animal husbandry.

Thirty cattle-feeding demonstrations were completed, 815 farmers adopting better practices in beef-cattle feeding. On one farm 22 yearling cattle were fed in a dry lot to furnish a market for the alfalfa hay produced on the farm and to provide manure for top dressing. On a ration of corn, oats, linseed meal, and alfalfa hay the cattle gained an average of 2.48 pounds each day for the 163-day feeding period. The average feed cost per steer was $60, including $13.20 for 1,760 pounds of alfalfa hay at $15 a ton. These cattle returned a profit of $23.13 each, exclusive of labor charges, the value of the manure, and credits from allowing hogs to clean up after the cattle.

Ten beef-herd demonstrations made an average profit of $29.47 per calf, after deducting the cost of the grain for fattening the calves and the maintenance of the dams. Spring calves which were grain fattened netted an average of $12 a head more than calves of similar quality and breeding which had not received grain.

Schedule State Extension Conferences, 1931

A number of State conferences of extension workers are to be held in 1931. Dates for these meetings have been announced as follows:

Arizona, Tucson, January 5–10.
California, Berkeley, January 5–10.
Colorado, Fort Collins, January 12–15.
Delaware, Newark, January 21–23.
Illinois, Urbana, January 12–16.
Maine, Orono, February 3–6 and July 7–10.
Maryland, College Park, January 19–23.
Montana, Bozeman, January 27–31.
Nevada, Reno, January 12–15.
New York, Ithaca, March 23–28.
Oregon, Corvallis, January 5–10.
Virginia, Blacksburg, January 6–10.
Washington, Pullman, January 5–9.
West Virginia, Morgantown, January 27–31.
Wyoming, Laramie, January 12–17.

State extension conferences for the present year have already been held in Georgia, Hawaii, Indiana, Iowa, Louisiana, Massachusetts, Michigan, Mississippi, Missouri, New Jersey, North Carolina, North Dakota, Ohio, Rhode Island, and South Dakota. District conferences are planned by Arkansas, and have already been held by Oklahoma and Texas.

Conference of Older Club Members

For the first time this year Connecticut divided its 4-H club week at the college into two sections. The first week was devoted to a program of agriculture, home making, and rural life for older boys and girls 16 to 24 years of age. The second week was devoted to boys and girls under 15 and was conducted in much the same manner as the usual 4-H short course.

This first older club conference group came to the college on Saturday and stayed until the following Friday morning. All were either club members or former club members. Some were young men or women who had passed out of club work as active members but were local leaders, while others were former club members employed in various vocations, who came back to this conference for the information and inspiration of the week. Assembly programs and evening camp fires were features of the week, the activities being made up entirely of the excellent contributions of the members in attendance at the camp.

Two hours of the morning program were devoted to advanced instruction in agriculture and home making. A second hour was devoted to group conferences. This older members' conference was broken into smaller group conferences, which each day discussed home standards, farm standards, and personal standards. These group discussions were directed largely by the county club agents in the State, and the classes in agriculture and home making were taught by members of the college faculty and extension organization. Each day from 11 to 12 o'clock, a discussion lecture course was given on family relations by Robert G. Foster, field agent in club work, of the Office of Cooperative Extension Work. This course included also the opportunity for individual conferences in the afternoon on personal and social problems of the young people.

Recreation

A varied recreational program was directed by Miss Willma Jeppson, of the R. C. A. Victor Co. (Inc.), and the latter part of the afternoon and early evening was devoted to such free activities as the members chose, including archery, swimming, and other sports.

There were 130 young men and women in attendance at this first conference, and the results this year seem to indicate the desirability of having the short course at the college divided on the basis followed, thus making it possible to provide an adequate program of an informational and social nature for both the older boys and girls and for the younger group the second week.

Older Farm Boy and Girl Clubs

THE older farm boy and girl problem is being met in Kentucky by a special club project under the supervision of Carl W. Jones, who is devoting his time to this work as a State specialist. The clubs are for young men and women from 18 to 24 years of age and are organized on a project basis similar to the 4-H clubs. However, the projects undertaken are on a more difficult and larger scale. Some typical projects are keeping complete farm accounts, including cost accounts, caring for an entire orchard, handling a poultry flock, farming 5 acres, and beautifying the farmstead.

Utopia was adopted as the name for the clubs, because it is hoped that club activities will make the rural communities become like Sir Thomas Moore's Utopia. It will be recalled that in his famous book Sir Thomas Moore describes an imaginary community with ideal social and economic conditions. In commenting on why the word "Utopia" was used, T. R. Bryant, assistant director, says:

There are many rural districts where, from the viewpoint of boys and girls, nothing ever happens. The year goes round, and there is scarcely a neighborhood picnic or even a Christmas tree at the schoolhouse or church. Nobody ever starts anything. In such communities boys and girls 12 to 15 years of age feel the dullness and resolve to escape when they are able to do so. At this age they are too young to escape, but when they become 18 or 20 years of age something happens, and it happens with greater certainty if they are alert and capable. These alert and capable young people are exactly the ones who would do most for the countryside if they were interested enough in their work and associations to remain.

An organized group of young people 18 to 24 years of age is very likely to start something. At the regular meetings of the Utopia clubs these young people find social satisfaction. At the meetings open to the whole neighborhood, plans that have been conceived by the young people are explained and the cooperation of the adults is solicited. Here start the plans for various community enterprises, which vary all the way from a picnic to the building of a community house. The community is now starting to become a Utopia; at least it is becoming a pleasanter and a more interesting place in which to live.

Influence on Community

Although the Utopia clubs in Kentucky are rather young, Mr. Bryant reports that their influence is being manifested in the community life. The activities of these clubs foster plays, pageants, games, picnics, and contests. Many of the clubs are working to give their communities community houses, and one club has already bought an old church and equipped it as a community house.

To meet youths' desire for clubism and ceremony, a crescent-shaped pin has been adopted and a simple but impressive pageantry or ritual has been worked out for these clubs. The ritual is based largely on the political order and nomenclature described in Moore's Utopia.

Keeping Home Accounts in Illinois

Home accounts are kept by 400 farm home makers in Illinois in cooperation with the State extension service, reports Mrs. Ruth C. Freeman, Illinois home accounts specialist. The plan for this study in Illinois requires that each county carrying the project shall have a minimum enrollment of 15 women who will keep home accounts for a least one year and then send their records to the university for summarization, and that the extension specialist shall visit each county carrying this project four times during the year. Three visits are made to group meetings, and one individual conference is had with each account keeper.

Group Meetings

The first group meeting is for the purpose of discussing the need and importance of a complete knowledge of the family income and expenditures, thus assisting the women in starting their accounts. About a month later the second meeting is held, when the records are checked and questions which have arisen during the first month of account keeping are answered. Mrs. Freeman believes that this is always the most interesting meeting, because most of the questions asked are of mutual interest and reveal many of the money problems in the homes.

The third group meeting is held at the end of the year, when the records are closed, preparatory to sending them to the university, and the next year's budget is planned. The women base their budgets largely on the past year's record and try to provide for the adjustments necessary to secure more satisfactory spending for the family.

Conferences with Individuals

When the year is about half over the specialist holds an individual conference with each account keeper in her own home. In these individual conferences personal problems that are not brought out in the group meetings are discussed. The specialist also helps the cooperators to clear up any problems which might complicate the account keeping. At this time a survey is made of the factors which affect the plane of living on the farm. This survey supplements the home-accounts records by giving a more complete picture of the standard of living maintained by the family.

Mrs. Freeman points out also that an increased appreciation of farm living comes to the women who are keeping home accounts for the first time. A summary of 70 farm home accounts for last year shows that a similar plane of living in a small town would have cost an average of about $2,500 a year. In addition to giving them a definite idea of their own expenditures, the account-keeping project acquaints the home makers with the collective experiences of other cooperators. These collective experiences serve as a standard by which the individual woman can gage her own expenditures.

The records showed that food raised and consumed on the farms of those keeping accounts last year was worth slightly more than all the other food used on these farms.

Survey of New Hampshire Cooperatives

A special survey of all cooperative associations in New Hampshire during 1929 has been made by E. H. Rinear, assistant agricultural economist at the University of New Hampshire. The purpose of the survey is to provide basic information for the establishment of sound regional marketing and purchasing cooperatives, as the Federal Farm Board can not help individual cooperatives except through regional organizations. As an indication that the trend in New England at the present time is toward regional cooperatives, Mr. Rinear points out that already a preliminary meeting has been held for the development of a large dairy cooperative for the six New England States, and that plans are being considered for the development of potato and apple cooperatives for the same States. The Federal Farm Board is assisting in this work.

Report Made

A preliminary report of the survey was made to the Federal Farm Board in November. This report indicated that in New Hampshire there were 11 buying organizations, which purchased $4,000,000 in grain, fertilizer, and groceries, and 6 marketing cooperatives, which sold $802,815 worth of milk, butter, cream, cheese, dairy cows, poultry products, and apples. The sale of apples alone through cooperative channels was listed at approximately $51,000, and one shipping association exported virtually $22,000 worth of dairy cows. In addition to these organizations, definite cooperative handling of milk and cream amounted to $720,000, and members of bargaining associations sold milk estimated at over $5,000,000.

A Farmers' Forum Dinner Club

The first "farmers' club" in Louisiana was organized last summer in East Carroll Parish (counties are called parishes in Louisiana) by County Agent C. A. Rose. This club, called "The Planters Club," has about 45 members, who represent over 60 per cent of the cultivated acreage of the parish. The activities of this club, which are parish-wide, are directed toward business, educational, and social objectives.

Once a month an evening meeting and dinner are held in the community club building of the parish seat. After dinner the planters discuss their mutual problems and then listen to a lecture on a timely farm topic by some representative of the college of agriculture. For the first meeting of the club, Dr. C. T. Dowell, dean of the Louisiana State College of Agriculture, addressed the farmers, and for the second meeting, C. W. Davis, district agent for northeast Louisiana, discussed Winter Legumes for East Carroll Parish.

Business Transacted

At the first two meetings the planters, among other things, adopted a code of ethics with reference to employing labor from other plantations, agreed on a standard price for picking and ginning cotton, and attended to some of the business of the parish drought committee.

Mr. Davis reports that the planters of his parish are showing as much interest in this intelligent discussion of their problems as the members of similar organizations of business men in that locality are showing in discussions of their problems.

4-H Clubs Give Food for Unemployed

New York 4-H club members are fulfilling the heart "H" of the club pledge this year by setting aside a part of their harvest and turning it over to town and city welfare agencies to be used for children of the unemployed. Although the drought reduced to some extent the yield from club members' projects, there is a little to be spared from almost every farm when there is a real need in the towns and cities. The slogan is, "A real service to our community and our country."

How Farmers Are Building Their Own Marketing Machinery

NEW BULLETIN of the Federal Farm Board describes in detail how more than a million farmers in the United States producing over 40 different farm commodities are laying the foundation for successful noncompetitive marketing agencies under the provisions of the Agricultural Marketing Act.

> "*Farmers are gradually controlling*," says the Bulletin," *a greater volume of their products as they move through marketing channels to the processor or ultimate consumer. By collective action, growers are extending their marketing system, strengthening their position in bargaining on central markets, developing a credit system that will make them more independent, and improving their chances of adjusting production to prevent troublesome surpluses.*"

THE BULLETIN discusses the organization set-ups of the various national sales organizations and the advisory committees, tells how the local, State, terminal, and regional associations are affiliated with the national sales agencies, outlines the chief functions and activities of each, and explains how the entire marketing machinery thus created operates.

COPIES OF THE PUBLICATION MAY BE PROCURED BY WRITING TO FRANK RIDGWAY, DIRECTOR OF INFORMATION, FEDERAL FARM BOARD, AND ASKING FOR—

FEDERAL FARM BOARD BULLETIN No. 3

"FARMERS BUILD THEIR MARKETING MACHINERY"

There is a great need that both rural and urban people should get more of a complete understanding of the educational, social, and economic significance of extension work in agriculture and home economics.

—A. C. TRUE.

U. S. GOVERNMENT PRINTING OFFICE: 1931

Extension Service Review

VOL. 2, NO. 2 FEBRUARY, 1931

GOOD PASTURAGE IS INDISPENSABLE IN THE DAIRYING PROGRAM

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

The EXTENSION SERVICE REVIEW is the official organ of the Extension Service of the Department of Agriculture. It is issued monthly throughout the year. The subscription price is 50 cents a year. All subscriptions should be sent direct to the Superintendent of Documents, United States Government Printing Office, Washington, D. C. Single copies may be obtained at a price of 5 cents each. For postage to countries that do not recognize the United States mailing frank, 25 cents a year should be added. Remittances should be made to the Superintendent of Documents by coupon, postal money order, express order, or New York draft. Remittance in currency will be at the sender's risk. Postage stamps, coins defaced or worn smooth, foreign money, and uncertified checks will not be accepted.

CERTIFICATE.—By direction of the Secretary of Agriculture, the matter contained herein is published as administrative information and is required for the proper transaction of the public business

Extension Service Review

VOL. 2 WASHINGTON, D. C., FEBRUARY, 1931 NO. 2

Developing Dairy Extension

O. E. REED

Chief, Bureau of Dairy Industry
United States Department of Agriculture

WHAT are the aims and purposes of a dairy-production extension program? How do the extension agents and specialists fit into the program which has for its ultimate goal a better economic status and a high standard of living for the people engaged in this basic industry, the dairy industry?

The real motive back of all the scientific and research investigations of our Federal and State research organizations and experiment stations is the gaining of new knowledge which can be applied to the problems of those engaged in industry.

The extension specialist may be properly called a liaison officer who makes and maintains contact between the group of scientists and research workers and the people who are engaged in the commerce of the industry. His work is, or should be, twofold—that of extending to the industry, through extension channels, the results of the research and experimental findings of laboratory and farm, and of making a study of the needs of the industry in order to help the research group better to apply their efforts to the present practical problems in the field.

Meeting of extension specialists of Bureau of Dairy Industry. Left to right: J. B. Parker, dairy subject-matter extension specialist for the Eastern States; A. B. Nystrom, specialist for the Central States; O. E. Reed, chief of the Bureau of Dairy Industry; J. H. McClain, specialist for the Southern States; and R. C. Jones, specialist for the Western States. These specialists are cooperating through the Office of Cooperative Extension Work of the United States Department of Agriculture with State extension divisions in supplying the results of dairy research and experimental work to the dairy industry in all the States in their respective regions

Extension Programs

As I see the situation, there are two reasons why more of our specialists do not carry out this large and complete program: Either the specialist does not have enough time to consider more than one side of the problem, or he is not sufficiently trained in the sciences and practices of the industry to enable him to carry out the larger program.

A well-rounded extension program demands just as highly trained personnel as does research work or the profession of teaching. I believe the present trend is in the direction of a demand for better-trained extension personnel. This demand is being recognized by many extension specialists and agents who feel the necessity for additional training and are taking up graduate work. There is certainly as great an opportunity for rendering real service to agriculture and the country at large through a well-organized plan of extension work as there is in the teaching and research fields.

The aim of the most successful extension worker in dairy production is, then, to make a constant study of, and to extend the facts and general information regarding practices in, the breeding, feeding, economics, and management of dairy cattle, and in the sanitary production and marketing of milk and cream, to the end that the production and economic phases of the dairy industry will be placed upon the most efficient basis.

In order to promote the correlation of dairy research and dairy extension work, a cooperative arrangement has been worked out by the Office of Cooperative Extension Work and the Bureau of Dairy Industry of the Department of Agriculture. Under this arrangement, which is already in operation, four Federal dairy extension field men have been employed, one for each of the four main administrative extension regions of the United States. The work of these men, as outlined by the cooperating agencies, will be, in general, along four major lines: First, to work out with the research staff of the Bureau of Dairy Industry, from the results of its dairy-production investigational work, and from the research work of other agencies as well, those features which will result in more efficient dairy production when they are applied in practice; second, to work out, with the Office of Cooperative Extension Work, the extension methods which will be the most effective for getting the research findings into practice on the farm; third, to work with the State dairy extension specialists and other State extension agencies in extending the subject matter of their programs by the use of these methods; and fourth, to study both subject-matter work and successful extension methods as found in the field.

It is necessary also to make a study of conditions in the territory to determine the present status of dairying, the

32892—31

trends, and the needs for specific lines of endeavor, in order to correlate the research work and the application of extension methods. The work involves cooperation with the State extension directors and their dairy extension specialists, in developing the most effective types of dairy programs, and a study of the application of the dairy programs in the field to determine their relative effectiveness. Specific work along the various lines has already resulted in greater effectiveness in a number of directions, and in the addition of new phases of subject matter.

Program Development

An analysis of the dairy extension projects that are now being carried on by the State extension specialists and agents shows that, with few exceptions, they are confined to feeding schools, selection of herd sires, organizing dairy herd-improvement associations, and similar educational and service work. Great progress has been made in teaching the fundamentals of feeding, and, through the dairy herd-improvement associations, much has been accomplished toward a better understanding of the necessity of better selection of breeding animals. But in the very important field of improving the quality of dairy products, very little has been accomplished thus far through our extension organizations, because of a lack of activity built around definite and well-organized projects in this field.

For the most part, dairy extension programs have been planned to meet the needs of beginners in the production field, and although this effort has been fruitful of results, such a program does not entirely meet the need of those farmers and dairymen who are more advanced in their methods and practices. It has been demonstrated that a considerable number of dairymen are eager for a more advanced program. The real progressive dairyman who is a leader in his community is willing to accept facts that have been developed through research, because he has an ever-increasing faith in the work of the experiment stations. The extension worker should, then, develop a program that will meet the current needs of these leaders; and the application of the principles taught to these leaders will, in turn, serve as a demonstration for better practices in their community.

Applying Results

Only too frequently the reason why the dairyman fails to apply the best knowledge in his business is the fact that it is difficult to present the technical information to him in such a simple, readily understandable way that he can grasp it and apply it. It should be the duty of the dairy extension specialist to work out, in cooperation with the research staff, the application of the results so that the dairyman can understand and use them. For example, let us consider the application of Mendel's law as applied to the inheritance of the production of milk and the percentage of fat in dairy cattle.

For years Mendel's law has been known to the scientist, but not until recently have investigators shown how the application of the law might be used for the improvement of our dairy cattle. At the National Dairy Exposition in St. Louis last year the division of dairy-cattle breeding, feeding, and management investigations of the Bureau of Dairy Industry held a school for the purpose of demonstrating to the educator and the breeder the scientific facts underlying the improvement of dairy cattle. In this school the laws of inheritance, which have heretofore been considered too complicated to put over to the layman, were taught by means of photographic charts and the herediscope, a simple mechanical device developed for the purpose of illustrating the chance transmission of various characters from parent to offspring. When the breeder or dairyman becomes familiar with the laws of inheritance as applied to dairy-cattle breeding, he at once sees the necessity for having production records on all the animals in his herd, and for using only sires of known ability for transmitting high production. This school of dairy-cattle breeding as conducted at the exposition is now being duplicated by dairy extension men in many States. We believe that as a result of this extension teaching of the scientific principles of breeding, the next few years will see a very rapid improvement in the dairy cattle of this country.

Feeding and Management

In respect to the feeding and management of our dairy herds, we find many instances where practices which were once considered to be the best known are still being followed although they are now out of accord with present-day knowledge. Results of experiments which shed new light upon the relative value of feedstuffs have been published in experiment-station bulletins, but they have not yet been generally adopted by farmers and dairymen. The value and use of comparatively new grasses and plants in relation to milk production, and methods of curing and handling these crops in order to obtain the greatest food value from them, may be cited as an example.

Then, there is the question of the application of research in relation to the sanitary production of milk and cream on the farm. This field has been much neglected. Methods have been worked out which can be made use of in the improvement of the quality of milk, not only in the adult field but also in the junior field, particularly through the 4-H club groups. The importance of sanitation in the production of milk and cream in relation to the consumption of fluid milk and cream, and in fact, of all dairy products, can not be overemphasized. The use of new machinery, such as milking machines and other equipment, offers to the large as well as the smaller producer the means for producing economically a better and more wholesome product. Information as a result of investigations along this line is available, but it awaits inclusion in the extension program.

Then, there is the problem of coordination and correlation of the State dairy extension program with the soils and crop and home demonstration extension programs. Joint projects can be, and should be set up, with the dairy group and these other groups of extension workers all cooperating.

Literature

Finally, the question of dairy extension literature and publicity in general should be given more consideration. More written material for publication as bulletins and as articles for the press, which will adequately interpret the findings of the research work, should be made available, so that these results can be put into actual practice on the farm and in the farm home. In general, we find that there is a great lack of interpretative publications of this kind that are available for distribution among the producers.

National 4-H Radio Program, March 7

Music by Austrian and German composers will be broadcast by the United States Marine Band on the March 7 4-H radio program as follows:

Hungarian Dance No. 5---Brahms
Ride of the Valkyries-----Wagner
Traumerei----------Schumann
Blue Danube----------Drdla
Minuet in G----------Beethoven
Liebestraum----------Liszt

To determine the condition of the health of the preschool child in rural Nevada, the State agricultural extension service has been engaged in a survey of rural families in nine Nevada counties. Only children under 6 years of age were included in the survey. In interviewing the families, the county and district women extension agents have asked among their questions whether the children have ever received a health examination.

Annual Farm Inventory in New York

DURING December, January, and February several thousand farmers in New York State are taking an inventory of their farm business, according to M. C. Bond, farm management specialist in that State. Most of these farmers have taken inventories in previous years and therefore are able to figure out the financial progress made in 1930 and compare it with other years. A large number of these farmers are also filling out the credit statement in the back of the inventory book and filing a copy with the local bank.

Some years ago Dr. C. E. Ladd, now director of extension in New York, prepared a farm inventory book. For several years the farm management demonstrator with the cooperation of the county agents held farm inventory meetings. Some of these were in the nature of a school at a community hall or farm bureau committeeman's home, where each farmer was given an inventory book and pencil and filled in the major items as the specialist explained the inventory book, page by page. Of course it was impossible to enter all items at such a meeting, so farmers were urged to complete the work at home.

A farmer discusses his credit statement with his banker

Inventory Meetings

Other meetings were held at barns. These gave a good opportunity to help farmers set values on equipment and small tools, and learn how to estimate the amount of hay in the barn, silage in the silo, and grain in the bins. This kind of meeting teaches the farmer that the taking of an inventory requires little time, and it shows him the satisfaction to be had from knowing what he owns and owes and what his net worth is.

These two kinds of meetings are still in use but are no longer attended by a specialist from the college. Many county agents discuss farm inventory at meetings during the winter months and help farmers take their first inventory. The college plays a less important rôle in the field work as this service grows. County agents and rural bankers make most of the contacts with farmers, supply them with inventory books, and assist in taking the inventory and filling out the credit statement in the back of the book.

This inventory work as carried on at present takes the form of a campaign. The first full week in January is designated as inventory week. The college supplies posters announcing farm inventory week. These are distributed by county agents to grange halls, feed stores, milk plants, and other places where farmers congregate. They are also distributed to all the rural bankers by the key banker appointed in each agricultural county by the agricultural committee of the New York State Bankers Association.

The college supplies county agents and rural bankers with inventory books without charge. These are distributed to farmers at meetings, by mail, and by farmers calling at the farm bureau office.

Credit Statements

One of the more recent developments in the work is the credit statement blank in the back of the inventory book. This blank has been approved by the Federal Reserve Bank of New York as a desired type of statement supporting loans to farmers. Many rural banks now require that farmers, like other business men, file a credit statement at the bank as a basis for credit. The agricultural committee of the New York State Bankers Association has indorsed the inventory campaign of the extension service for several years. Key bankers have cooperated in many ways but especially by acting as contact agents between all rural banks and the college. Many key bankers work very closely with the county agricultural agent in this inventory work.

Rural banks that require a credit statement are in a better position to determine the amount of credit they can safely extend each farmer and they also have information which is essential in giving each farmer sound financial advice. Some bankers require only credit statements for all agricultural loans above a certain minimum, such as $200, $500, or $1,000. From the point of view of both the banker and the farmer, the credit statement has helped to bring im-

provement in financial condition and more businesslike methods.

From a check-up in four counties last year it was found that 31 per cent more farmers took inventories in 1929 than in 1928 and about 4 per cent more filed credit statements with their bank. Last year the college sent out about 16,000 farm inventory books.

Radio talks are given by county agents at their county stations and by agents and farm management specialists at the larger stations in the State. County agents are also supplied with outline talks on the value of farm inventory and credit statement. Articles appear in the agricultural press during December and January.

To the county agents, bankers, and college specialists, one of the gratifying things about this work is the large number of farmers who tell the value of the inventory and credit statement to them. Some report a loss by fire and because of the inventory a prompt and satisfactory adjustment; others better business methods in purchasing feed, seed, and supplies, such as paying cash and getting a discount; and still others a more careful study of their business followed by reorganization and improved financial condition.

Extension Work Among Young Men

Recognizing that a rather wide gap existed in extension attack between the time boys' and girls' club work leaves off and the extension work with adult farmers begins, J. C. Hale, county agent in El Paso County, Colo., began blazing a new trail in 1927. He organized the farm science club composed of young men, each of whom had been a 4-H club member for several years. Each member was assigned an individual project of his own—a man-sized project. Some of these projects included variety tests of crops, feeding demonstrations, keeping of farm records, and records of tractor operations.

In addition to these individual demonstrations the club itself has undertaken each year something of a county-wide or community-wide nature such as the planting of trees along the highway, establishing a tree nursery, taking care of exhibits at the county fair, and furnishing leaders to 4-H clubs.

The club holds monthly meetings at which the members have worth-while discussions of the progress made on their individual projects. The county agent meets with them and sometimes arranges for other members of the extension or college force to address them. This effort, which is now three years old, has demonstrated a successful line of attack in doing extension work with young men and developing a separate set of appeals to which they respond.

Tree Planting in Wyoming

Tree-planting work in Wyoming under the Clarke-McNary Act began four years ago and now is an established project, according to W. O. Edmondson, extension forester and horticulturist in that State. During 1927 and 1928 the work was handled entirely through the department of experiment farms of the University of Wyoming, but an extension forester was employed in January, 1929. Since then the department of experiment farms has continued the work

Chokecherry and other native shrubbery were used around school buildings and homes

of distributing 1 to 3 year old seedling trees from the State farm at Lander, Wyo., while the extension service has carried on an educational campaign through such activities as encouraging the planting of trees, emphasizing the proper preparation of the ground for planting, and drawing plans for shelter belts. Under this arrangement 43,000 trees were distributed to ranchers for shelter-belt plantings in 1929. In 1930, although orders were received for 110,000 trees, only 87,000 trees were available for distribution. In addition to this distribution, it is estimated that about 45,000 other trees were planted in 1930. Plans are now being made to have about 160,000 trees available for distribution this year.

The Great Plains Experiment Station at Mandan, N. Dak., has been sending trees for shelter belts into Wyoming for the last 12 years or so, and it has been found that where shelter belts have been planted the farmers are thoroughly convinced of their practicability. In such sections the demand for trees is keener than in the sections where there are no actual demonstrations of the value of this protection.

School Yards

The extension workers in the counties are trying to realize the following goal: "To have a protection of trees around every rural schoolhouse in the State." Mr. Edmondson reports that although this work is rather new, shelter belts and ornamental shrubs have been planted around many of the school buildings. The school boards, and women's clubs in some communities, take the responsibility for the supervision of these plantings. They believe that the trees will serve as future monuments to the honor and memory of the children, and in some places they have named the trees for certain children. This is found especially desirable where the trees are planted at an Arbor Day exercise by the children themselves. All this activity in schools stimulates the interest of the children.

Last April 700 shelter-belt trees were planted in two hours on the west side of the farm buildings on a private ranch to furnish protection from the strong west winds and drifting snows. This work was under the supervision of Mr. Edmondson and F. A. Chisholm, Park County agricultural agent; the local Smith-Hughes teacher assisted with 25 boys from his class. The ranch owner plowed out 350-foot furrows, two boys distributed the trees at intervals along these furrows, and the other boys planted the trees. It took an average of one minute to place a tree properly and pack the dirt well around the roots. This arrangement saved the farmer labor and gave the boys practical experience and information in establishing shelter belts.

Railroads and the State highway department are also taking advantage of the distribution of these trees. They use the trees not only for the beautification of the rights of way, but to prevent the snow from drifting onto the tracks and roads.

The varieties of trees which have proved hardy in most sections of Wyoming include box elder, blue spruce, chokecherry, cottonwood, green ash, western yellow pine, northwest and silver poplars, caragana, Russian olive, Chinese elm, American elm, and willows (under irrigation). The caragana, western yellow pine, and cottonwood were most popular last year.

The White House Conference and the Extension Service

MARTHA VAN RENSSELAER
Assistant Director, The White House Conference

THE WHITE House Conference on Child Health and Protection has found in the Extension Service of the United States Department of Agriculture strong allies both in the preparation of conference reports and in plans for continuing the work of the conference until its findings and recommendations reach the States, the counties, and the communities.

Home economics extension includes those subjects which would improve the environmental conditions for the family, while the extension service has more and more reached out to modify community life to make it a fitting place in which to prepare children and youth for citizenship.

xtension Participation

Home makers, both men and women, are asking for guidance through the extension service by which they may improve the mental, emotional, and physical health of their families. It is opportune, therefore, that the White House Conference, recently held in Washington, D. C., at the call of the President of the United States, should find in this well-organized group, opportunity for promoting the findings of this conference.

Due to the proximity of dates for the meeting of the Association of Land-Grant Colleges and Universities and the White House Conference, held in Washington in November, many extension workers were able to attend both meetings. The presence of deans of State colleges, State directors of extension, State leaders of home demonstration agents and specialists in child guidance and nutrition gave opportunity for a working knowledge of the conference findings by which to develop a program for every State in the interest of those who have definitely organized to improve their standards of home and community life.

The White House Conference is an effort to provide for the conservation of the Nation's human resources by renewing interest in childhood and youth. It parallels the effort of the Government to provide for the conservation of our natural resources.

Improving Environment

In the program already adopted to improve the physical environment of the family there is recognized an effort to gain for the family members a freedom for the enjoyment of those things which add to the spiritual and mental well-being of the family. Many home makers would like to spend less time on unessential, unstandardized methods of housework and more on those things which are of real significance in family understandings, family enjoyments, and contacts with the outside world. They look for stimulus in more interesting and intelligent methods of doing their work; to participate in things social and worth while in order to bring back to their families cheerful, not discouraging, service. Such a program is conducive to less fatalism and more altruism in regard to the stability of the home. It calls for better qualifications for marriage; less monotony in housework; a larger sense of participation in financial independence; an appreciation of books, music, and art; better hygienic living; shorter hours for work, which come with better planning; more economic floor plans; more knowledge of feeding the family for efficiency; a better understanding of how to rear and guide children.

Problems of the Home

It is anticipated that the White House Conference will unite with the Federal, State, and municipal groups, men and women engaged in scientific fields to create a more sympathetic attitude toward the problems of the home with children in it, and to demand greater ability and knowledge in those who are responsible for the guidance of children. A task imposed upon adults is to create social forces which will respond to the right of children to be well born and safely started in society with power to take care of themselves and with the ability to live safely together.

The child of the city and the child of the open country have received equal attention in the studies of the White House Conference. The searchlight has been thrown on the rural home, surrounded by vast stretches of unpopulated land, and on the family crowded in the tenement; on the rural school and on the school of many grades in the large city; on the child working in the field and in the factory.

Boys and girls in farm homes need aid on personal problems to counteract the geographical separation from their neighbors. Girls on farms need help in modernizing household problems as boys have had help in establishing modern farm practices. In no other way can social life be built up and domestic stability secured among young rural people who will be expected to become the Nation's farmers.

Land-grant colleges have incorporated educational opportunities for farm girls, for without the interest which comes from knowledge and skill they will have no interest in farm home making. The farm boy, to whom is offered at the expense of the State training for the business of farming, must expect to be able to find an equally intelligent home partner since the success of the farm depends in large measure upon the farm home and the cooperation of the farm family.

Handicapped Children

The White House Conference gave special attention to the handicapped child. There are from three to five million such children in the United States. Even in cities, provisions for these children are far from adequate. There are rural sections, practically unexplored areas, where handicapped children grow up, undiscovered and unaided.

The chief hope of helping these children is to find them, discovering their defects early enough to alleviate them. Science has perfected instruments to discover and aid defective hearing and defective sight. It has devised help through treatment for the cripple—even means of making life more livable for the mentally deficient.

The strong, healthy farm boy or girl is one of the richest assets we have in this country. His sister or brother who has some handicap to overcome must be looked upon as an asset, too, and it is our privilege to help him to the maximum of his possibilities.

One of the big problems pointed out by the White House Conference is that of developing facilities to bring to the child in the rural home who has a handicap to battle with, all that science, medicine, and invention have given to the city child; and where such facilities can not be brought to the child, ways to take the child to the facilities.

Representatives of the Extension Service of the United States Department of

Agriculture have been asked to cooperate with the White House Conference in the preparation of a program based upon the findings and recommendations of the conference. As fast as reports of supporting data for the conference findings are received they will be edited for publication and adapted for Government groups, schools, colleges, and educational organizations which conduct programs for the child.

The committee of the conference which asked the home demonstration agents to conduct a survey in rural communities, has obtained through this means a picture of child health which, when tabulated, will be of great value not only to the conference but to extension workers whose formation of a State program is to be based upon a knowledge of health practices in the homes with which they are working.

Home-Management Studies

The report of the committee on rural home-management studies, which was made at the meeting of the Association of Land-Grant Colleges and Universities, in Washington, in November, 1930, shows that little change has taken place during the last year in the number and kinds of projects undertaken with Purnell funds in the fields of home management. Nine additional projects have been started during the year—a somewhat smaller number than in any of the four preceding years. Four projects previously undertaken have been completed. The total number of active projects on November 1, 1930, was 39, as compared with 34 a year earlier.

Interest still seems to be turning, as in the two previous years, to studies in equipment and in the management of finances rather than in the management of time and in food consumption. Only 2 studies are now under way in the use of time, and only 4 in food consumption, as compared with 13 in equipment and 10 in standards of living. The remaining 10 projects in the present 39 do not fall within any of the 4 projects outlined by the committee, although some of these were listed in the last report as standards of living projects. All but one of these miscellaneous projects, however, are concerned with some phase of the management of finances, the exception being devoted to housing.

This report was given by Hildegarde Kneeland, of the Bureau of Home Economics, United States Department of Agriculture, who was chairman of the committee on rural home-management studies.

4-H forestry club members show usefulness of windbreaks

4-H Foresters Demonstrate Windbreaks

BETTER windbreaks around farm homes was the subject of demonstration and contest work carried on in 18 Iowa counties during the past year, according to I. T. Bode, extension forester. A total of 30,240 people watched 4-H club boys and girls demonstrate proper spacing of trees, kinds and grades of trees to use, arrangement of windbreaks, and methods of planting trees. These demonstrations were given at five of the larger fairs throughout the State, including the State fair. The booth shown in the illustration was used for the work. It was prepared by the forestry extension service and shipped to the various fairs.

The effect of windbreaks in deflecting air currents and their influence in protecting farmstead areas were shown by means of an electric fan and paper streamers mounted on staffs. One staff was placed behind the windbreak and one out in the open. The windbreaks between the fan and the buildings were mounted on removable blocks so that comparative values of 1-row, 2-row, and 3-row windbreaks could be illustrated, as well as the inefficiency of windbreaks which had been spaced too closely or had been allowed to become thin at the bottom because of grazing of livestock.

In the box at the left tree planting was demonstrated. The box was constructed with a glass front, which formed one side of the holes that were dug. By this means spectators were enabled to look into the hole and observe details of planting. Damp sawdust was used instead of dirt. It was lighter in weight and formed a light-colored background against which the tree roots stood out plainly.

The team in this picture was from Dallas County, Iowa. The girl is Alvoretta Hunt of Adel, and the boy is Wayne Gutshall of Van Meter. They demonstrated at the State fair and at the Midwest Horticultural Exposition at Shenandoah, Iowa, winning first place at both fairs.

This demonstration program was carried out in connection with the Iowa Farm Grove History Contest, in which 25 points were allowed for activity of the entrant in arousing interest in tree planting. Miss Hunt was the winner of the girls' State prize in the contest, and the boy who won first place was Robert Porter of Black Hawk County. Each was awarded a trip to the National Boys' and Girls' 4-H Club Congress and a medal from the American Forestry Association. Railroad fares and expenses for the trips were furnished through the State club office of the agricultural extension service, the State conservation association, and by Earl Ferris of Hampton, Iowa.

Aiding Families in the Drought Area

MYRTLE M. WELDON

State Home Demonstration Agent, Kentucky Extension Service

WHEN the drought situation in Kentucky began to show signs of becoming serious, the home demonstration department of the State extension service endeavored to help meet this situation by initiating and directing a number of emergency measures. Suggestions were given to home demonstration agents for possible emergency activities. A number of home demonstration agents took the initiative in attempting to meet the needs of their counties. The press, circular letters, demonstrations, exhibits, radio, and other means were used to disseminate information.

Among the many serious situations faced as a result of the drought was shortage of food for the family with even greater prospect of shortage during the winter months. Shortage of feed for stock resulted in flooding the market and consequent low prices for farm animals. Probable shortage of clothing during the winter months was another inevitable result of the situation.

Among the drought emergency activities encouraged and directed by members of the extension staff in Kentucky, probably the most important were the following:

(1) Production of a fall garden. The spring and summer gardens in many parts of the State did not produce a crop and in sections not so seriously affected, produced only part of a crop. The planting of a few quick-growing crops for the late fall garden was urged. Particular stress was laid on such crops as turnip greens in sufficient quantity to can.

(2) Canning of all available products. Of course, most rural people do some canning, but the drought situation necessitated canning every available garden crop. Particular emphasis was given to the canning of meat and poultry, since feed was high and the price brought by these farm products was low. Home makers were urged to can their culls for winter use.

(3) Preservation of eggs for winter use was also encouraged.

(4) Making of sauer kraut. Cabbage was one of the vegetables which withstood the drought better than others and there was a fair crop in a good many sections. The price of cabbage on the market has been quite low. The home demonstration department has urged the making of kraut in quantity to take the place of other vegetables which were not available.

During the winter months clothing relief is being stressed. In a number of counties the clothing-project leaders have been organized into relief groups and are taking an active part in the assembling, renovating, and remodeling of clothing for needy families. Early in the winter the members of the Whitehall Club in Madison County had already made, under the supervision of their clothing leaders, 103 garments for families in their community.

Using Department Films

Extension workers who use and handle motion-picture films of the United States Department of Agriculture may find food for thought in the fact that films made primarily to show approved agricultural practices are being successfully used by teachers in grade schools, high schools, and Americanization schools for teaching purposes.

Grade teachers, for example, recently used the following films to summarize the subject of lumbering, studied by fifth-grade classes in geography: Winter Logging in the White Mountains, Lumbering Pine, Red Enemy, The Forest and Wealth, and The Forest and Health. After seeing these films in the department's projection room, the fifth-grade geography students returned to their respective classrooms, where they were questioned on the contents of the films. The teachers found that in addition to seeing and learning lumbering methods and practices, the children had absorbed other lessons embodied in the films, namely, the conservation of natural resources, how to prevent forest fires, the vital influence that the forest has on water supply, and how the forest ministers to the spiritual and physical wealth of mankind.

That department films have been found to fit into school curricula is indicated by the following list of those used during the past school year by directors of visual education in the Washington, D. C., public schools: Uncle Sam, World Champion Farmer; The Horse and Man; Corn Belt Derby; Dates—America's New Fruit Crop; Citrus Fruit in Florida; Wheat or Weeds; Beets from Seed to Sugar Bowl; Sugarcane and Cane Sugar; Rice—From Paddy to Bowl; John Smith vs. Jack Frost; Goodbye Boll Weevil; Trees of Righteousness; Friends of Man; Pines from Seed to Sawmill; Trees of To-morrow; and Forest Fires.

The department's films are being used in Americanization schools in the National Capital as well as in the public schools not only to teach agricultural methods, but to teach English. One teacher found that foreign-born students from agricultural countries increased their vocabulary very rapidly by studying the film captions explaining familiar agricultural subjects shown in the department's educational films. Using the film captions to teach English to foreign-born students is one use of the department's films little dreamed of by the film editors.

These films are being used not only as a part of the regular school work but also for supplementary education by one high-school teacher, who shows them during the recreation period. Naturally, entertaining films are selected. Among those used are such subjects as: When Elk Come Down; Cloud Busting; Wild Flowers; Roads in Our National Forests; King Snow Holds Court; Wheels of Progress; Bamboos, the Giant Grasses of the Orient; Clouds; Under the 4-H Flag.

How films of the department may be put to intensive use is illustrated by the extension worker who arranged with school authorities to use the schoolhouse to show his films to specialized adult groups after school hours, but left the films and the projector for use of the school teachers the following day. The teachers, having seen the films in advance, could determine what films could be used to advantage in connection with their school work and how they could best be introduced. Thus, a large and varied audience was reached at one borrowing of the films.

At a recent meeting of the Franklin County, Vt., home demonstration women, every one of the 27 women present wore a well-planned costume, according to Lillian V. Anderson, extension nutritionist in Vermont. In every case the hat matched or blended in color with the rest of the costume and the lines were becoming.

Extension Service Review

Issued monthly by the EXTENSION SERVICE of the United States Department of Agriculture Washington, D. C.

The Extension Service Review is published in the interests of workers and cooperators of the Department of Agriculture engaged in extension activities. It contains official statements and other information necessary to the performance of their duties and is issued free to them by law. Others may obtain copies of the Review from the Superintendent of Documents, Government Printing Office, Washington, D. C., 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, Extension Work*
C. B. SMITH, *Chief, Office of Cooperative Extension Work*
J. W. HISCOX, *Chief, Office of Exhibits*
RAYMOND EVANS, *Chief, Office of Motion Pictures*

REUBEN BRIGHAM, *Editor*
F. A. MERRILL, *Associate Editor*

FEBRUARY, 1931

Extension Research

Extension workers appreciate keenly the fundamental need for scientific research as the basis for subject-matter programs, since it is the business of the extension system to acquaint farmers and their families with the results of State and Federal research and assist them in its practical application. Scientific information regarding the organization and conduct of extension is of almost equal importance if this nation-wide system of rural education is to grow and develop in an orderly and efficient manner. It would be a strange paradox if those engaged in the dissemination of scientific information should not apply the same principle of scientific study to the conduct of their own work.

A national educational movement of magnitude can not afford to drift along without facts as to what is taking place in this field. Scientific data must be available for analysis and study preliminary to the making of decisions. Theories and opinions must be able to withstand the test of research if they are to remain a part of extension teaching.

The rank and file of extension workers are also concerned with the building up of a body of scientific information regarding the organization and conduct of extension teaching. As members of a new profession they must recognize that the full development of extension teaching as a profession is directly dependent upon the establishment of principles, procedures, and technique which grow naturally out of scientific study.

A start has been made in the development of extension research through the field studies the Federal Extension Service and the extension services of some 21 States have been making. Much valuable information has been brought out by these studies, and considerable progress has been made in perfecting methods of study applicable to extension. Useful as these early studies have proved, they afford little more than an indication of the possibilities of the use of reliable data in increasing extension efficiency.

With an enterprise involving the expenditure of more than $25,000,000 of public funds annually, a 1 per cent increase in effectiveness is equivalent to an increase in appropriation of $250,000 per year, while a 5 per cent increase in efficiency is equal to a $1,250,000 increase in budget. The possibilities are so great that the time is probably not far distant when the larger States, at least, will be setting funds aside each year definitely for studying the extension job to determine more efficient methods of conducting the work.

Drought Relief

Drought relief has entered into a new phase. The passage by Congress of the $45,000,000 appropriation to provide loans to farmers for making the 1931 crop brings with it further responsibilities to the county agricultural agents in the drought area. These loans are being made to farmers who can not obtain financial assistance from local sources. Each farmer must submit with his application information regarding the crop or crops he wishes to plant and the work stock for which he must buy feed. He must report, also, his present indebtedness and the acreage and yield of crops grown the year previously. His application must be submitted to the local advisory committee, consisting of well-known citizens of the county, usually one banker and two farmers. In many cases, this advisory committee is identical with or is a part of the county drought-relief committee. The county agricultural agent is not on this committee, but he must be prepared to serve as its adviser in many of the cases that are brought to its attention.

The act is being administered in order to provide the maximum amount of financial support possible in producing the 1931 crop and rehabilitating the agriculture of the drought area. Production and rehabilitation are, also, the immediate and urgent objectives of every county agricultural agent in the area. The farmers' seed loan office, which will administer the relief act, anticipates, therefore, that each county agricultural agent will see to it that the benefits of the act have the fullest application to his county. If the county agent will inform all farmers in his county of the availability of the credit facilities of the act and will aid those who desire such assistance in making proper application for funds to meet their requirements, the act will accomplish its purpose. If such cooperation is not given by the agent, the act will be a failure in that county. The responsibility is heavy, but we are confident that extension agents in the drought area will meet it fully.

Cash or Credit

Making cotton a cash rather than a credit crop is the theme of a particularly timely article by Assistant Director C. E. Brehm of the Tennessee Extension Service in this issue of the REVIEW. The article has its lesson not only for the cotton farmer but for all producers of agricultural products.

"There are few vocations in life," says Mr. Brehm, "from which the individual can make sufficient income in 120 days to support him for 365 days in the manner in which he wants to live." He says, further, "The size of the farm income depends on a variety of things to sell at seasonable times during the year and this means getting as many hours and days labor as possible engaged in producing something to sell in a year." With these two ideas as his foundation, Mr. Brehm works out a simple but effective program for transferring farming from a credit to a cash basis. Plant good seed of improved varieties. Plant on good land and fertilize liberally. Plant no cotton on land yielding less than one-half bale to the acre. Plant only as much of a crop as you can harvest without weather damage. Market through a cooperative association to insure getting full value for the quality of your product. Grow as much of the living for the family as possible. Keep some livestock, grow the necessary feed required, and sell the products. Live as little on credit as possible. Keep the cash coming in.

These are the things Mr. Brehm stresses. They have their application to farming in any county and at any time. The extension agent who has succeeded in getting any considerable number of farmers in his county to make this shift from a credit to a cash basis for living and farming has made a genuine contribution to the solution of the farm problem.

Drought Relief Measures

C. W. WARBURTON
Secretary, National Drought Relief Committee

DEFINITE aid is now obtainable by farmers in the drought area who are in need of financial assistance to make a crop in 1931. The $45,000,000 drought-relief act passed by Congress and approved by the President provides for the making of loans to farmers who are unable to obtain financial assistance from local sources for the purchase of seed, fertilizer, feed for work stock, and fuel and oil for tractors. How these loans are to be obtained and under what conditions they will be made are questions which no doubt are uppermost in the minds of many farmers.

Blanks to be used in applying for loans have been supplied to county agricultural agents who are distributing them to banks and other places where they will be readily available for farmers. Information regarding where these blanks can be obtained is being printed in local papers throughout the drought-area. These blanks are accompanied by printed instructions on just how to obtain a loan. County agricultural agents, local bankers, and others will help individual farmers in filling out their applications and in making the necessary arrangements. In making application, information must be given by each farmer regarding the crop or crops he wishes to plant and the work stock for which he must buy feed. He will also be asked to report his indebtedness and the acreage and yield of the crops he grew in 1930. Each applicant will sign a promissory note and as security will give a mortgage on the crops he is to grow in 1931.

Local Advisory Committee

In each county a local advisory committee will pass on all applications for loans. This committee consists of well-known citizens of the county who have the confidence of farmers and business men. The committee in most cases is made up of one banker and two farmers. All applications for loans by individual farmers must be submitted to this local committee for approval.

When an application for a loan has been approved by a local committee the application will be forwarded to one of the regional offices through which the act will be administered. These regional offices will be located at several convenient points in the drought area. There should be little difficulty experienced in handling applications for loans promptly, as the Department of Agriculture has been administering similar but smaller appropriations for loans in various flood, drought, and storm areas since 1921.

When the application for a loan reaches the regional office, it will be examined by a person familiar with crop-production requirements in the particular State in which the applicant lives, who will determine how much is needed for seed, fertilizer, and feed. A lawyer attached to the staff of the office will examine the note and crop mortgage to see that they are in legal form. Final decision as to whether or not the loan can be granted will be made at the regional office. When a loan is approved, check will be drawn to the borrower. The first check will be for only a part of the loan, as the funds will be advanced in installments as needed by each borrower.

So much for the procedure to be followed in obtaining a loan from the Government for crop production purposes. Before I leave the subject, however, let me make two things clear. First, loans will be made only to those who suffered serious crop losses from drought or storms in 1930; and second, these loans will be limited to those who have no other way to finance their crop production in 1931. Those whose crops were not damaged or destroyed in 1930 and those who can obtain funds or supplies from other sources such as local banks or merchants are not included in the provisions of this relief measure.

Now let us see what is taking place along other lines in connection with drought relief.

Road Funds

On December 20 the sum of $80,000,000 was appropriated to be apportioned among all the States as a temporary advance of funds with which to meet Federal-aid road funds already provided. The States are thus relieved of the necessity of providing immediately funds of their own to match the regular Federal-aid road funds that are available to them, and provision is made for the reimbursement of the sums advanced over a period of five years commencing with the fiscal year 1933, by making deductions from the regular Federal-aid appropriations.

These advanced funds, together with the regular Federal-aid funds already available, make possible an immediate expenditure for Federal-aid road construction, supported entirely by the Federal Government, to the amount of $168,000,000.

Of this sum, the amount available for expenditure in the 21 States in the drought area is $85,000,000, and, to the extent that climatic conditions will permit, these States are thus enabled to begin at once road work totaling that amount.

Roads in National Forests

The Forest Service is pushing the building of forest roads and trails in the national forests and since July 1, has expended $278,000 on this work. Present-day road building demands the use of machinery and skilled operators, but local farm labor is being employed on all projects wherever it is at all practical. Heads of families are given preference and sometimes a new crew is taken on every two weeks to benefit as many families as possible. Supplies are bought locally, which also offers a little extra income to some farmers in the vicinity. The climate of most of the eastern forest region permits winter road work and construction programs will go forward as rapidly as available funds permit. The emergency appropriation previously mentioned provides several hundred thousand dollars additional for work in the national forests in the Eastern and Mississippi Valley States.

The buying of land needed for the national forests is also being actively pushed in the drought area. During the period from July 1 to November 24, 1930, 96,000 acres of land in the States severely afflicted by drought was bought by the Forest Service, for which $309,000 was paid. Purchase of 500,000 acres more in the drought area has been approved and payment will be made as soon as the titles are cleared through the office of the Attorney General. These sales will bring $1,639,000 of Federal money into the drought territory. Prospective purchases of forest land which are being negotiated as fast as possible include about 630,000 additional acres and involve an expenditure of about $2,410,000.

A committee representing the Public Health Service, the Red Cross, and the Department of Agriculture has prepared a special publication entitled, "Buy Health Protection with your Food

Money," which has been sent to all home demonstration agents, Red Cross workers and other trained persons who are interested in helping to plan meals which will protect the health of those families who have had to cut down their food allowance because of the drought or unemployment. This publication contains minimum market orders for a week for families of different sizes and other nutrition information in a handy and usable form.

Fall Gardens

The large number of fall gardens planted in the southern drought States after the fall rains began have been of great value in supplying winter food for farm families. In the Oklahoma drought counties it is estimated that 38,000 farm families planted gardens. Many of these garden vegetables have been canned. In Arkansas, the canning of 22,359 cans of beef and 3,568 cans of chicken is reported.

In Kentucky, home demonstration agents have helped in the canning of vegetables, fruits, and cull beeves and chickens, and in the preservation of eggs. The relief work in Kentucky is now largely directed toward the clothing problem. Home demonstration clubs and relief committees, under the direction of home demonstration agents, are busy remodeling and renovating clothing for needy families in the county. The members of one home demonstration club in Madison County have already made 103 garments for families in their community.

The people in Webster Parish, La., have continued their good work. After canning all the vegetables available in the parish for their winter food supply, they planned to can at least 150 beeves before Christmas. Most of this canning was done at community centers. The school board bought sealers and 11 steam retorts and the policy jury bought a carload of cans—50,000 cans—for sale at cost and for use in canning surplus supplies of vegetables to be donated to those who had none.

Cooperative Buying

Farmers in several States are pooling their feed orders and buying cooperatively in order to save money. In Mississippi, about 200 carloads of feed were bought by local farm bureaus at an estimated saving of $5 per ton or a total saving of $20,000. In Butler County, Mo., the combined benefits of pooling and of the reduced freight rates available to farmers in the drought area on shipments made before November 30 amounted to 20 cents a bushel on wheat, 25 cents a bushel on corn, and 25 cents a bushel on oats.

For many farmers in the drought area, the winter will be a difficult one. Very generally, however, folks are working together, making the most of what they have. Those who are able are extending help to the unfortunate ones, who have little or nothing. County, State, and National agencies are working together to provide employment, and now that Congress has made provision for seed and fertilizer loans, the problem of how to finance this spring's planting should be less difficult of solution.

A 4-day short course for lumbermen on making floor plans, elevations, and perspectives of common farm buildings was sponsored cooperatively by the University of Nebraska and the Nebraska Lumber Merchants Association. I. D. Woods, State extension engineer, reports that, because of their experience some of the men accomplished as much in this short course as the average college student does in half a semester of semiweekly laboratory periods.

Achievement Day Radio Program

NEW YORK 4-H club members assembled at Station WHAM at Rochester to broadcast their contribution to the first National 4-H Achievement Day radio program on November 8, 1930. The number of boys and girls who participated in this one State gives an indication of the hundreds who participated in the entire program. Thirty-six States cooperated with the United States Department of Agriculture in broadcasting a joint Federal-State program over 44 stations. For the first 15 minutes the entire network broadcast music by the United States Marine Band and a talk by C. W. Warburton, director of extension work. Following this, the network was temporarily dissolved, and during the next 30 minutes each of the 44 participating stations broadcast a separate 4-H club achievement day program. For the last 15 minutes all of the 44 stations were again hooked up for more music by the Marine Band and a talk by Arthur M. Hyde, Secretary of Agriculture.

Farm Board's First Annual Report

The first annual report of the Federal Farm Board, for the year ending June 30, 1930, has been recently issued. This 75-page report is presented as a record of attitude, policy, and preliminary experience, rather than of final accomplishment.

There are five main divisions to the report: (1) Development of cooperative marketing associations; (2) surplus control measures, including stabilization operations, undertaken during the first year; (3) loans made from the revolving fund; (4) various other phases of the board's work during its first year of operation, such as cooperation with other agencies and foreign agricultural information service; and (5) the board's organization and personnel. There are also two appendixes which give the agricultural marketing act in full and seven tables relating to loan operations.

Copies of the report have been sent to all extension workers. Additional copies may be obtained free upon request to the Director of Information, Federal Farm Board, Washington, D. C.

Making Cotton a Cash Crop Instead of a Credit Crop

C. E. BREHM
Assistant Director, Tennessee Extension Service

LOW-PRICED cotton, again emphasizes the need for readjustment in the cotton areas to a safer farming program, the chief objectives of course being reduction of cotton acreage that a higher price for a smaller crop may prevail, and, simultaneously, a more permanently profitable system of farming. The greatest readjustment needed is from a credit crop to a strictly cash crop. Since the Civil War, when the first crop was made in 1866, it has been customary with the majority of farmers to grow the crop on credit. Grim necessity forced every farmer to grow those first crops on credit extended from New York, until enough money was accumulated for food, livestock, feed, and seed to finance himself. The South was bankrupt and a climate favorable to the production of cotton, a commodity the world needed and wanted, was the only credit asset.

Instead of the custom of growing the crop on credit becoming less pronounced as the years passed, it became more so, until to-day almost the entire agricultural credit structure of the cotton States has been based on cotton and it calls into use every form of modern instrument of credit. If the crop were more largely grown on a cash basis, and the experience of many farmers indicates that this can be done, during periods of low prices and adverse growing seasons which have occurred at rather regular intervals, at least the cotton farmers would be out of debt for the crop. There is no doubt that their financial status and standard of living would be better, and there is every logical reason to indicate that the production of cotton would not be as large as at the present time and the prices would be higher.

Cash Crop

Be that as it may be, there is only one safe way to grow cotton over a period of years, and that is as a cash and not as a credit crop. There is plenty of evidence to substantiate this statement, especially this year. On account of low prices from the widespread depression and unprecedented drought, many farmers to-day are in the same financial status in which farmers found themselves before making a crop in 1866; financial and credit resources exhausted, with a limited amount of food and without sufficient feed to carry the livestock through the winter. Why is this the case? The answer is easy; because they have confined their farming largely to cotton and grown it on credit. The price of cotton over a series of years does not average high enough to pay for the cost of credit and permit the dollars received for cotton to pay for the other necessities in the way of feed for livestock, clothing and food, which the family wants and must have, much less many comforts. It has not been possible to build up a financial and credit reserve to weather such periods as were experienced in 1930, and such periods as have recurred with particularly marked frequency every six or seven years. On the other hand, the experience of those who have grown cotton as a cash crop has proved that they are in the best financial condition. This argument speaks for itself and should be convincing to everyone.

A Constructive Program

Now, how can cotton be grown as a cash crop? The following program, briefly outlined, will make it possible to grow it as a cash crop, and the soundness of this program is confirmed by many farm record demonstrations conducted with cotton farmers in Tennessee.

1. Grow as much of the living for the family as possible; fruit and vegetables for home use, storage, canning, and to supply the family throughout the winter months; also poultry, eggs, milk, butter, and meat. A good dairy cow, a sow, and chickens are a very good adjunct to any cotton farmer's operation. They at least insure a good living for the farmer and frequently a surplus to sell, which helps to pay some of the expense involved in making the cotton crop. There is no doubt that instead of farming for dollars, we are going to have to get back to farming for a living, and one of the most certain ways to begin is to grow a large portion of the family requirements. These can be grown on the farm far more cheaply than they can be purchased.

2. Plant good seed of improved varieties that staple around an inch or better under normal seasonal conditions. There is always a more active demand for the longer staple than for short cotton and a premium price offered for it over the shorter lengths. This is especially pronounced during years of heavy production and when there is an abundance of short cotton. This premium, of course, varies according to the season and the difference in staple lengths, but there are times when it ranges from 150 to 200 points, or 1½ to 2 cents a pound between staple lengths of seven-eighths and 1 inch.

3. Plant cotton on less acres and endeavor to secure higher yields per acre. This means plant cotton producing one-half bale to the acre or better on good land and use liberal amounts of fertilizer. The average production for the cotton States is about one-third of a bale to the acre. This, of course, means that a large area of the land planted to cotton yields less. According to the United States Department of Agriculture, the average cost of producing a pound of cotton lint throughout the cotton belt is 18 cents. With prevailing prices, it is apparent that cotton is not making money for a large number of farmers. On the other hand, where a bale to the acre is made the cost drops correspondingly, so that even with 10-cent cotton it is possible to get a profit over seed and fertilizer and some return for the labor. For example, consider the case of an individual who grew 4,898 pounds of lint on 5 acres. The seed and fertilizer cost was $67.50. This cotton has not yet been sold, but assuming it nets 9 cents a pound, this is $440.82, or $373.32 after the cost of seed and fertilizer is deducted. It does not take any great mental effort to calculate that there is a greater opportunity for profit in a yield of this kind than in a yield of 140 pounds of lint per acre, or 700 on 5 acres, which at 9 cents would be $63.

Plant Clover

Land which yields less than one-half bale to the acre should not be planted in cotton. It will be more profitable to plant such land in Japan clover and let it improve. The Japan clover seed from such land will yield a higher return than cotton. The continuance of planting much of this poor land in cotton will hold down the total production of cotton; also, it will enhance the price of that grown on better lands.

4. Plant an acreage that can be picked promptly without weather damage. An-

nually there is more cotton planted per plow than can be picked promptly with the help available. It weather damages badly, which is a cause of low price for such cotton. For example, in December, 1930, such cotton sold 350 to 480 points below bright cotton of the same staple. This is a discount of $17.50 to $24 a bale.

5. Grow some livestock or livestock products to sell and the necessary feed for them, and as many other supplementary crops as possible. It is well known in farm management that crops yield a higher income than livestock for labor given, but they do not permit a year-round opportunity for labor return. In other words, the production of livestock, or livestock products, affords an opportunity to get some income from labor that otherwise would not occur during the winter, when it is not possible to be working in a crop. The farm income results from something to sell, and all things being equal, the more things that can be produced without conflict with each other for the farmer's time to be sold at seasonable times during the year, the larger the total farm income and the greater the opportunity for profit.

Increase Output

Not long ago I was trying to make clear to a group of 4-H club boys this principle of farming and I asked them how long it took to make a cotton crop. One of the boys replied, "About 120 days." Then I asked these boys, "Now, what are we going to do the rest of the year, or time we are not busy in the cotton and corn crop?" There was no answer for a few moments. Finally one boy said, "Sit in the shade, I reckon." Then I went on to calculate that a farmer making 18 acres of cotton and about 200 pounds of lint, which is a good yield for this type of farmer, or a total of 3,600 pounds, would, at 10 cents per pound, receive $360 gross cash income for the year. Including the value of the seed this is not sufficient to support the family for the year, yet on many farms cotton is the only crop sold. This explains the situation with most 1-crop farmers. There are very few vocations in life from which an individual can make sufficient income in 120 days to support him for 365 in the manner in which he wants to live, and certainly farming, especially on a 60 to 75 acre farm, is not one of them when the price of cotton is as cheap as it has been during the past year.

The size of the farm income depends on a variety of things to sell at seasonable times during the year, and this means getting as many hours and days labor as possible engaged in producing something to sell in a year.

This is why dairy cows, poultry, and hogs fit in well with cotton, which does not necessarily imply going into the poultry, dairy, or hog business on a large scale, but rather on a moderate scale according to the cost of feed and ability to care properly for the stock. Several good cows, 100 good hens, and a few hogs to sell will bring in several hundred dollars a year in addition to the price for cotton, thus contributing to the total farm income. What is more important, the income comes in regularly and pays the store account for other necessities.

6. Market cotton through the cooperative cotton association. Marketing through the cotton association insures getting full value for cotton according to its grade and staple.

These principles, if followed by an increasing number of farmers, may not make any farmers rich, but at least they will insure a comfortable living and cash received from the cotton crop will be almost clean surplus. The individual who practices them is farthest removed from losses sustained when prices are falling and receives the greatest profit when prices are high. Furthermore, there is no doubt that a more universal adoption of such a program will automatically control some of the cotton acreage.

Cooperative Egg Marketing

4-H club boys grade and pack eggs produced by their own poultry

MEMBERS of 4-H clubs are now cooperatively marketing eggs in Belknap County, N. H., under a plan started by Stanley E. Wilson, county club agent. The marketing plan provides that the club members shall sell their eggs in special 4-H cartons stamped with the 4-H clover, the New England label, and the name of the club boy who produced them. These eggs command a premium of 5 cents above the regular market price because they are graded to average 24 ounces to the dozen, contain no air cell larger than one-eighth inch, and show no blood spots.

The above picture shows two of the leading members in Belknap County grading and packing some "New Hampshire Specials." The boy on the left is Edwin Goodwin. He now has about 60 pullets in winter quarters and plans to go into the chicken business on a large scale next year by building up his flock to at least 500 birds. The boy on the right is Robert Smith. He was the first boy in this county to market graded eggs in the special stamped cartons. Robert purchased his chicks last spring, remodeled and sterilized his hen house, and then, by following the recommended practices, raised all of his chicks to maturity. As a prize for raising every one of his chicks to maturity, this spring a New Hampshire hatchery is giving him, free of charge, 50 baby chicks.

Rural Electrification in Alabama

Rural electrification in Alabama was inaugurated in 1924 as a joint project between a local power company and the Experiment Station of the Alabama Polytechnic Institute, with the extension service as a cooperating agency, for the purpose of extending transmission lines into rural communities and offering electric current at reasonable rates, according to P. O. Davis, Alabama editor and director of publicity. A joint agreement was signed between the power company and the experiment station whereby the power company agreed to erect lines and install equipment and the experiment station agreed to do research work which would be directed toward finding equipment best adapted for farm and rural home use.

Surveys Made

County agricultural agents, home demonstration agents, and other extension workers have cooperated in the making of surveys to determine whether or not lines should be built, and where the electric service is available, they have cooperated by showing the people how it can be used to the best advantage. As the farm people using electricity must consider it as an income producer as well as a convenience, Mr. Davis reports that special work has been done in recent years to assist rural customers to make electricity increase their incomes. Examples of this special work include the use of electric lights in poultry houses to stimulate egg production during the fall and winter when egg prices are high; the use of electric lights to control the tomato worm and other insects; and electric refrigeration for storing and preserving perishable products, thereby enabling the rural producer to sell such produce profitably.

Extent of Service

Rural electrification is one of the aims of extension work in Alabama because it helps extension workers provide opportunities for increasing the family income and remove much of the drudgery from the work on the farm and in the home. At present, 1,689 miles of transmission lines are serving farmers in 63 of the 67 counties of the State. These lines are serving 8,500 rural customers in addition to 13,500 customers in 150 towns with a population of 1,000 or less. Considering the customers in these towns as being rural customers, there are now 22,000 rural people in Alabama who are being served with electricity.

Texas Turns to Turkey Grading

Ninety-six men and women qualified as turkey graders at schools held in Texas

IN THE largest turkey-grading school yet conducted by the United States Department of Agriculture, at San Angelo during the week of October 20th, Texas took a definite stand for the eventual complete standardization of the huge Texas turkey crop on the high quality United States standards. There were 135 registered students, including 12 county agricultural and home demonstration agents, and 96 were given permits to procure Federal-State graders' licenses should the need arise.

The school was arranged by the extension service and the Texas Department of Agriculture, with the Bureau of Agricultural Economics of the United States Department of Agriculture furnishing the faculty headed by T. W. Heitz, associate marketing specialist, and assisted by R. R. Slocum, George H. Powers, and Lester Kilpatrick. H. L. Shrader, poultry specialist of the Office of Cooperative Extension Work, Washington, D. C., was one of the instructors, and W. E. Newlon, poultry specialist of the California Extension Service, another. Active cooperation from O. B. Martin, director of Texas Extension Service, and E. N. Holmgreen, Texas extension poultry specialist, was given in the conduct of the school.

Schools for Farmers

County and home demonstration agents of five west Texas districts met at San Angelo during the week and were given sufficient acquaintanceship with the grading system to enable them, in cooperation with local dealers and cooperatives, to conduct a series of follow-up 1-day schools for farmers in the producing areas. At these schools the turkey producers, especially those conducting or living near turkey-raising demonstrations, were shown how to fit birds to make the high grades, and how to handle them to prevent costly bruising. Much was made, too, of the fact that later markets are usually better for Texas turkeys because of price and because the relatively warm Texas weather delays maturity and the fattening process in the fall. Farmers were shown how to pick out the birds that should be held for further feeding.

The success of this effort with farmers is seen in a report received from C. W. Lehmberg, county agent of Runnels County, in which he states that of 2½ cars of turkeys handled there for the Thanksgiving market 35 per cent of the turkeys were prime, 49 per cent choice, 14 per cent medium and only 2 per cent common. This percentage of the top grades is much higher than most people would have attributed to Texas turkeys. The improvement is believed to be the result of turkey-growing demonstrations in which feeding and worming played a big part, followed by grading instruction for demonstrators and interested neighbors.

Mimeographed Illustrations

CIRCULAR letters, informational outlines, and other mimeographed material are made more attractive and interesting in Massachusetts by the use of drawings, reports G. O. Oleson, Massachusetts extension editor. According to him, the workers in his State have found that it is relatively easy to illustrate their material by tracing the illustrations on the stencil with a stylus. The only equipment they find necessary for effective mimeographed illustrations is a mimeoscope, a set of styluses for cutting stencils, and a selective file of drawings taken from magazines or from books furnished by stencil companies. A mimeoscope may be made from an old box and a piece of glass or may be bought for as little as $7. In addition to this equipment, it is necessary to have someone with a reasonably steady hand to make good tracings, and someone who takes a little pride in producing a good job to make a neat sheet.

Farm Board Progress

FRANK RIDGWAY
Director of Information, Federal Farm Board

MORE than 1,000,000 farmers have been aided by the agricultural marketing act since it was passed by Congress in June, 1929. Producers of more than 40 farm crops have been definitely assisted in a practical way. All farmers, no matter where they live in the United States, may market their crops through the local, regional, terminal, and national cooperative organizations that are being developed in accordance with the provisions of the act. Seven national agencies have been established by cooperatives with the assistance of the Farm Board. Six of these are sales agencies. Five already are operating, marketing 16 crops—cotton, wool, mohair, pecans, cattle, hogs, sheep, goats, wheat, oats, rye, barley, corn, buckwheat, flax, and grain sorghums. Farmer-owned central marketing agencies handle these crops. The Farmers National Grain Corporation, Chicago, markets grains; the American Cotton Cooperative Association, New Orleans, sells cotton; the National Livestock Marketing Association, Chicago, handles livestock; the National Wool Marketing Corporation, Boston, merchandises wool and mohair; and the National Pecan Marketing Association, Jackson, Miss., sells pecans.

The Farm Board gives counsel and assistance to these national marketing agencies. There are many farmers' cooperatives that have not yet reached the national stage in the development of producer-owned selling organizations. Growers' cooperatives handling more than 30 farm products, not marketed by the national agencies, have been given financial or other aid by the Farm Board. These cooperatives market fluid milk, butter, cheese, eggs, chickens, turkeys, tobacco, honey, rice, peanuts, walnuts, grapefruit, oranges, fresh grapes, raisins, figs, berries, pears, plums, apricots, apples, prunes, peaches, sour cherries, potatoes, soybeans, grass seed, lettuce, cabbage, green peas, beans, and other general truck crops.

New Bulletin Published

All of this information is contained in the Federal Farm Board's new bulletin No. 3, entitled "Farmers Build Their Marketing Machinery." This bulletin deals with the organization and marketing plans of cooperative sales agencies, territories covered, membership, operation and loan policies, and some volume of business. It tells how farmers can market their crops cooperatively through the new national agencies. Copies of the publication may be obtained free by writing to the Federal Farm Board, Washington, D. C.

Oklahoma Home Garden Contest

A STATE-WIDE home garden contest for farm women has been conducted cooperatively for the past three years in Oklahoma by D. C. Mooring, extension horticulturist, and Martha R. McPheeters, extension specialist in foods and nutrition. The objects of the contest are to demonstrate the value of the continuous production of a variety of fresh vegetables of good quality, and to demonstrate a wide use every day in the year of fresh and canned vegetables for the family diet.

Results of the Contest

The enrollments in this contest have been large; 2,783 in 1928, 2,061 in 1929, and 2,437 in 1930. The results of this contest in 1930 show an average of 35 different kinds of vegetables raised by each contestant, and as many as 55 different kinds by some of the contestants. The total monetary value of this work in 1930 was $556,309. This figure includes $197,709 for vegetables canned by the contestants, $239,600 for fresh vegetables raised and consumed, and $118,800 for vegetables which were stored in the fresh state for winter use.

The county extension agents report marked improvement in arrangement of the vegetables in gardens, that is, the perennials are on one side, the long-living annuals are beside them, and the short-living vegetables are on the opposite side of the garden. Along with this improved arrangement have gone better cultivation and care of the gardens. This annual garden contest has contributed to the improvement of the farm women's markets, increased the number of fall gardens, and stimulated the interest and activity of the farm men in garden work.

Among other things, each contestant must carefully read Oklahoma Extension Circular 196, The Home Vegetable Garden; make a plan of her garden previous to planting, and then execute the plan as far as practicable under existing conditions; plant at least two vegetables that have not been grown formerly; and have a garden large enough to supply the family needs.

Stimulating Interest

To arouse and keep the interest of the women in this contest, many agencies are utilized, such as farm women's clubs, garden-judging schools, garden judging, tours, shows, and prizes. Publicity also has been used to advantage. The chief means of publicity employed were extension garden bulletins, monthly articles in the State extension house organ, radio talks, and articles in the leading daily, weekly, and farm papers.

Records and Scoring

Each contestant completing keeps a home-garden record which, when filled in, gives the number and length of rows in her garden, kind and variety of vegetables planted, dates of planting seed, transplanting, first harvest, and last harvest, and the approximate yield in number of pounds, gallons, or bushels. Each contestant also makes a vegetable canning budget for her family, cans its requirements, and then fills in a report blank which gives a record of the season's canning.

The contestants are scored on the following basis: Utility, length of life, and number of different kinds of vegetables, 125 points; arrangement of vegetables to facilitate cultivation and subsequent planting, 50 points; condition of garden (state of cultivation, freedom from grass and weeds, and absence of insects and diseases) 50 points; quality and quantity of vegetables, 50 points; home garden report, 50 points; and vegetable canning budget report, 175 points.

Judging

One-day training schools on garden judging have been held, the persons who attended scoring the gardens in their respective counties. On the average, 11 schools have been held and 168 judges have been trained annually, making a total of 33 schools and 504 judges since the contest was started.

Most of the counties have garden tours; in some counties tours are conducted in as many as 10 different communities. There are also community and, quite frequently, county garden shows. The prizes at these shows are usually garden seed, plants, or equipment for the garden.

National 4-H Music Achievement Test

The national 4-H music achievement tests were broadcast during the regular monthly 4-H club radio program in December and January and will be broadcast on the first Saturday in the next five months. "Music from Many Lands" is the theme for the broadcasts which give music representative of the different countries. On December 6 the music was from America; on January 3, from England, Ireland, and Scotland; on February 7, it will be from Italy; on March 7, from Germany and Austria; on April 4, from Spain and France; on May 2, from Russia, Norway, and Sweden; and on June 6, it will be from Pan-America.

This music is played by the United States Marine Band and broadcast over the regular farm and home hour of the National Broadcasting Co.'s chain of 45 stations.

A mimeographed list, which gives the titles of all the compositions in this series, the names of the composers, and the serial numbers of the phonograph records of these pieces, may be procured from the Office of Cooperative Extension Work upon request.

Recognizing that music memory contests should be supplemented by music achievement tests (that is, one should know the story which the music portrays, the composer, and something about his life) many States have arranged to base such contests upon these broadcasts. As a part of the broadcasts, R. A. Turner, field agent in club work for the Central States, tells something about the story of the music and the composer for each selection.

Profit Made on Certified Seed Potatoes

Ten years ago a 4-H club boy became prominent locally by showing his father and other farmers in the neighborhood of South Merrimack, N. H., the value of using certified seed potatoes. He harvested 24 bushels of potatoes from 1 bushel of certified seed as compared with 11.6 bushels from ordinary seed. According to a news release, the next spring the farmers in the district ordered a carload of certified seed potatoes.

That boy was Fred W. Peaslee, and he has continued to be outstanding in potato growing. He practically worked his way through the New Hampshire College of Agriculture by growing and selling table stock on a partnership basis with his father. This year, by harvesting 320 bushels of potatoes per acre, he was one of the 19 men to qualify for membership in the New Hampshire 300-bushel potato club. His 95 acres of potatoes was a larger acreage than that of any other member of the club. In producing his high yield of potatoes, which is more than twice the State average, Mr. Peaslee's methods were to plow old hay land last spring, harrow the ground twice before planting, use 1,200 pounds of fertilizer and 18 bushels of seed per acre, cultivate the crop twice, and spray and dust five times.

Country Life Has a Jubilee

Musicians play ballads and dance music at the jubilee

A COUNTRY-life jubilee was held September 23–26, 1930, at Jackson's Mill, W. Va. Dana D. Reynolds, who at that time was assistant extension editor in West Virginia, reported that:

Rural West Virginia, old and young, laid aside its workday life and came together in a festival of songs, games, and drama. Underneath the big tent, with a thousand spectators seated and another thousand standing, musicians of the countryside strummed out ballads of the mountaineers, joined in operatic choruses, and fiddled jingling dances while community after community presented its offering. Friendliness, neighborliness, and the play spirit were everywhere.

The purposes of this jubilee were to demonstrate that there could be a noncommercial fair, to bring out that which is distinctive and significant in the life of central West Virginia, to set forth through exhibits and activities the ideal rural community, to make country life more satisfying and meaningful, and to celebrate the tenth anniversary of the founding of the State 4-H Club Camp at Jackson's Mill.

Jackson's Mill

Ten years ago a public service company turned over to the State of West Virginia 5 acres of land (part of the boyhood home of "Stonewall" Jackson, a famous general in the Confederate Army during the Civil War) to be used as a 4-H club camp. This nucleus has been added to until now the camp is an institution covering 90 acres and said to be worth almost a million dollars. Jackson's Mill serves the people and extension service of West Virginia as a center for round-ups, recreation, meetings, safety-day programs, and similar events. The local people justly feel that it belongs to all of them and thousands go there for such events as public picnics, Sunday "sings," and community days throughout the year.

Massachusetts News Contest

The second news and informational contest for State and county extension workers in Massachusetts was held during the annual State conference of extension workers at Amherst, Mass., December 15–18, 1930, according to G. O. Oleson, Massachusetts extension editor.

The contest was divided into two divisions—one for State workers and the other for county workers. In the State division there were classes for news or feature stories written by the specialists, stories written by someone else but about the specialists' project, circular letters written by the specialist, and the best photograph or series of photographs. In this division 20 of the 23 eligible workers were represented.

In the division for county workers there were classes for news stories written by the agents, circular letters written by the agents, the best photograph or series of photographs, material used in putting across a project campaign, county extension house organs, and representative samples of publicity for the entire county. This last class had to include at least 25, but not more than 50, items, at least 5 articles from each department within the county, and at least one article from each agent in the county. In this division, 52 of the 63 eligible workers were represented, and 7 of the 11 county workers not included were new or part-time agents.

Keeping Films Up to Date

Motion-picture films, like clothes, become old-fashioned. From time to time educational films issued by the Office of Motion Pictures, United States Department of Agriculture, are withdrawn from circulation for one of the following reasons: The subject matter no longer is timely; newer and more approved methods are advocated; new scientific discoveries have been made; or all available prints have worn out from usage and funds are not available for purchase of new copies, so the film is automatically retired. Some films are made for specific purposes, such as intensive clean-up campaigns, or to deliver a timely message. When these have served their usefulness they are put on the shelf. The negatives and last copy of all retired films are kept intact and stored in fireproof vaults to form a permanent historical record of agricultural development.

During the past year films on approximately 40 subjects were placed on the retired list. A number of films withdrawn have been replaced by new and better ones—more up-to-date in method, appearance, or subject matter.

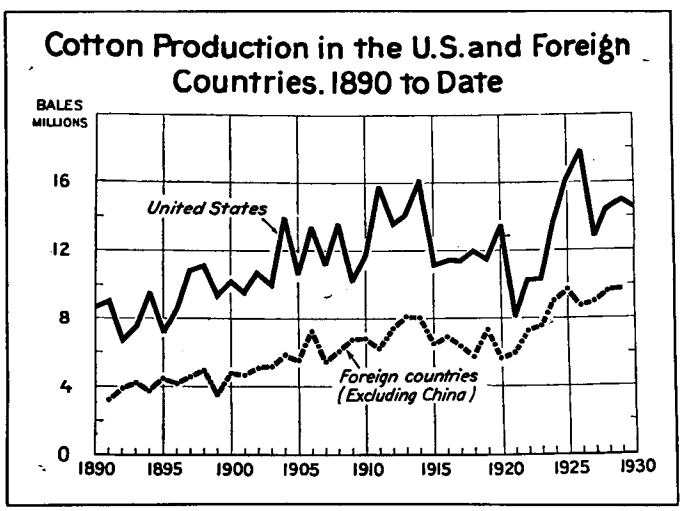
Some film withdrawals and replacements are: Control of Hog Cholera, 1 reel, replaced by This Little Pig Stayed Home, 2 reels; Hog Breeds and Hog Management, 1 reel, replaced by How to Grow Hogs, 2 reels; Corn Borer Control in the Corn Belt, 1 reel, replaced by Corn and the Borer, 1 reel, and The Corn Borer and What to Do About It, 2 reels; Layers and Liars, 1 reel, replaced by Layers or Loafers, 1 reel; Wheat Grading Under Federal Supervision, 1 reel, replaced by Wheat Grading, 2 reels.

A series of 1-reel films showing damage to white-pine blister rust has been retired and replaced by The Pines, 2 reels, and Blister Rust—A Menace to Western Timber, 2 reels. The films withdrawn are: The Story of White Pine, White Pine—A Paying Crop for Idle Lands, White Pine the Wood of Woods, and White Pine—Beautiful and Useful.

Requests for films may be sent direct to the Office of Motion Pictures, United States Department of Agriculture, Washington, D.C., except in those States which require the forwarding of such requests through the State director of extension.

CHARTS TELL THE STORY

STATISTICS AS A MEASURE of the trend of change are essential tools of every teacher. But masses of statistics are confusing. They must be simplified to be practical in educational work. Graphs clarify statistical measurements. They are being used more and more to illustrate the history of changes taking place in agriculture.



Facts of acerage, yield, and total production, seasonal and cycle trends in prices, movements by truck, rail, and water, stocks offered for sale, and periods of greatest shipment—these and other facts are readily explained in graphs.

ECONOMIC CHARTS AVAILABLE

THE BUREAU OF AGRICULTURAL ECONOMICS has prepared charts that are available in two types: (1) A standard chart for reproduction in printed publications, or 8 by 10 inches in photoprint or rotaprint form, and (2) wall charts, 30 by 40 inches, which are easily readable at a distance of 100 feet and are adapted for use in extension meetings. These charts may be purchased at cost.

A LIST OF available economic charts giving titles and negative numbers to facilitate ordering or any information regarding economic charts may be obtained upon request to the

DIVISION OF ECONOMIC INFORMATION
BUREAU OF AGRICULTURAL ECONOMICS
UNITED STATES DEPARTMENT OF AGRICULTURE

UNQUESTIONABLY it will take more labor to produce fifty bushels from an acre than it will to produce ten bushels from the same acre; but will it take more labor to produce fifty bushels from one acre than from five?

ABRAHAM LINCOLN

U. S. GOVERNMENT PRINTING OFFICE: 1931

Extension Service Review

VOL. 2, NO. 3 MARCH, 1931

A PICTURE THAT TELLS THE STORY OF A DEMONSTRATION IN WEED CONTROL
IMPROVED PASTURE (LEFT) UNIMPROVED PASTURE (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

Contents

The EXTENSION SERVICE REVIEW is the official organ of the Extension Service of the Department of Agriculture. It is issued monthly throughout the year. The subscription price is 50 cents a year. All subscriptions should be sent direct to the Superintendent of Documents, United States Government Printing Office, Washington, D. C. Single copies may be obtained at a price of 5 cents each. For postage to countries that do not recognize the United States mailing frank, 25 cents a year should be added. Remittances should be made to the Superintendent of Documents by coupon, postal money order, express order, or New York draft. Remittance in currency will be at the sender's risk. Postage stamps, coins defaced or worn smooth, foreign money, and uncertified checks will not be accepted.

CERTIFICATE.—By direction of the Secretary of Agriculture, the matter contained herein is published as administrative information and is required for the proper transaction of the public business

Extension Service Review

VOL. 2 WASHINGTON, D. C., MARCH, 1931 NO. 3

Put the Outlook to Work

C. W. WARBURTON,

Director of Extension Work, U. S. Department of Agriculture

WE hear much to-day about the business side of farming. Successful farming is far less simple than it was 20 years ago. Then the best farmers gave their attention, largely, to improving the soil, controlling insect pests and diseases, growing better seed, and using improved farm machinery and implements. In other words, the emphasis was on larger yields and better quality. Although a knowledge of efficient production practices is still important, we can no longer afford to overlook the economic facts that are placed at our disposal as a guide to production and marketing. To farm without an understanding of the demand for your products and the probable prices at harvest time is like running your automobile without lights on a dark night. You may be fortunate and keep to the road but the percentage is against you.

Outlook Helps Farmers

The national agricultural outlook for 1931 should be of help to every farmer in planning his farm operations. This outlook was prepared after a long and careful study of the domestic and world situation by members of the staff of the United States Department of Agriculture and by representatives of the various State agricultural colleges who understand conditions in their States. It is therefore as accurate a picture of what we may expect during the year from a national standpoint at it is possible to give. The outlook is designed for the sole purpose of helping farmers to make more money. If it does not do this, it is, of course, worthless. The outlook does help the farmer. Many farmers through the use of outlook facts manage the farm business more advantageously. If the outlook is applied in a practical way to his local situation, it will help the farmer to answer important questions that he is asking at this time. For example, he may be wanting to decide right now what to produce, how much to produce, and when to plan to sell. The outlook should help him in removing the element of chance from his operations during the coming season and aid him to avoid costly mistakes in reorganizing his enterprises. Let me give you a few instances of what farmers who use outlook facts have done.

The first case which comes to mind concerns a farmer in the Corn Belt. This farmer believes in utilizing all available sources of information. For years he has been in constant contact with the county agent and with his State agricultural college. As a result of the advice and help that he has received from these educational agencies, he has developed a successful system of low-cost farming. His three main sources of income are grain, hogs, and cattle. The outlook information that he frequently consults aids him to interpret the trend of the market. He is thus able to determine in advance the probable prices that his commodities will bring at the time he expects to send them to market. Consequently, he can change his plans and concentrate on such products as will insure the greatest profit.

Under normal conditions he keeps the same number of sows each year, but he is ready at any time to expand the number if the outlook is for higher market prices or reduce the number if the prospect is for an unfavorable market. From the outlook facts, he can also tell when to make adjustments in the weights and ages at which to market hogs to obtain the best profits. He keeps a herd of milking shorthorns. If there is an upward trend in beef prices, he buys calves, puts them on the cows, and sells beef at the time when the outlook indicates that the best prices may be obtained. When the indications are for low beef prices, he makes his plans for marketing butterfat instead. Through keeping in constant touch with the latest economic information, he is able to shift his enterprises in accordance with what the market situation justifies. To-day this farmer is buying land and expanding his enterprises when many farmers would sell if they could.

Tobacco Farmers Save Money

Another instance where outlook information saved a group of farmers a considerable sum of money was reported recently from a county in a tobacco-producing section. The local buyers were offering the producers 5 to 6 cents a pound for the particular type of tobacco grown by them. The buyers stated that they could not offer a better price because there was an oversupply of the type of tobacco grown in that locality. A number of the producers fearing an even lower market were about ready to sell. However, one of them consulted the county agent, who immediately got in touch with the State economic specialist. The Bureau of Agricultural Economics of the Department of Agriculture in Washington was asked for a report on the supply and price situation of this particular type of tobacco. This report showed that there was no oversupply of this type of tobacco and that the low prices offered were not justified. Within a week after the first inquiry was made to the county agent, a meeting of interested growers was called. Between three and four hundred farmers were present.

The outlook for the type of tobacco grown by them, based on information from the State agricultural college and from Washington, was presented. As a result of the favorable situation reported, the growers were reassured and held their tobacco for a better price. Within another week, the crop began

38823—31

to move to market at 12 cents instead of 5 to 6 cents a pound. Did the outlook in this case pay? Judge for yourself.

Of course, outlook information must be interpreted in the light of your local situation. If you are growing potatoes, for instance, and the agricultural outlook states that there will be an increase in potato acreage in the United States, it would be foolhardy to substitute some other crop for potatoes without a careful analysis of the facts. There may be other elements in your own situation that should cause you to act differently than the potato farmer in some other region or even than your neighbor. The following story of how two farmers interpreted the outlook to fit their own local conditions will illustrate this point.

A meeting of farmers was in progress at which extension workers were explaining the agricultural outlook for the coming year. The outlook for potatoes in the late potato States indicated that there would be a 14 per cent increase in acreage. The farmers were asked what they would do to take advantage of this knowledge. One man stated that the potato outlook meant that he should increase his acreage. He had been growing about 30 acres of potatoes. With the prospects for a general increase in acreage in the region and probably a larger crop and lower prices, he stated it was to his benefit to get lower costs of production. Studies of the cost of producing potatoes in his county showed that farmers with more than 30 acres could grow potatoes at a lower cost per bushel than those with smaller acreages. He had sufficient planting, spraying, and harvesting equipment to handle the larger acreage, and with the prospects for lower prices, he interpreted the outlook to mean that he should increase his potato acreage to 50 acres in order to reduce his overhead per acre and his cost per bushel.

Substitutes Crops

Another farmer at this meeting stated that the potato outlook showed that he should substitute other crops for potatoes for that year. This man had been growing 10 acres of potatoes in some years and in other years none at all. He did not have a good outfit of labor-saving potato machinery. Cost studies showed clearly that the cost per bushel of growing 10 acres of potatoes was very high. He believed therefore that it would be to his advantage to discontinue growing potatoes temporarily until the prospects for higher potato prices were better. Both of these men are good farmers who use the outlook to help them make more money, but on the basis of the potato outlook one increased his potato acreage and the other stopped planting potatoes. The point of this story to any farmer is, study all the facts as they apply to your own farm and then make the necessary readjustments.

Since the national statement was issued on February 2, the outlook has been under discussion in most States at county and community meetings. At these meetings county agents and State extension specialists have presented the local aspects of the outlook and have explained how profitable readjustments in farm enterprises can be made. Attendance at such meetings has given farmers a new slant on this matter of placing their farms on a better business basis.

The economic situation changes gradually during the year and facts concerning the trends in production and prices and the market demands for your farm products should be consulted frequently. It is important therefore, that the county extension agent keep in constant touch with agricultural prospects. It is with him that the farmer must consult if he is going to use the outlook to advantage. The progressive extension agent prepares himself and welcomes the opportunity to analyze with his farmers the situation in which they find themselves and to help them make profitable changes in their farm operations. The agricultural outlook for 1931 is before us. Let's put it to work.

Farm and Home Economics Conference

DESPITE extremely cold weather more than 20 farm men and women from all sections of the county attended the farm and home economic conference held in Windsor County, Vt., December 3 and 4, reports J. E. Carrigan, assistant county agent leader in Vermont. At the conference the men and women studied the various phases of farm and home life and made recommendations to be used as a basis for a stronger and more forward-looking farm and home program. The conference was held under the auspices of the Windsor County Farm Bureau and directed by the officers of this organization, who were assisted by the county extension agents.

The first session was devoted to a review and analysis of trends in agriculture in New England, Vermont, and Windsor County during the last 50 years. This analysis gave the various committees a comprehensive economic picture of the present situation, indicated the direction of future agricultural and home development, and formed a basis for discussions by the committees.

For two half days the committees, assisted by specialists from the University of Vermont and the State department of agriculture, studied the problems of the farms and homes and at a final session presented their recommendations, which were adopted by the entire conference.

Recommendations Adopted

The young farm people's committee was made up of young men and women not yet proprietors of farms. This committee made a plea for taking the young people into the councils on farm and home-economic activities and brought out the need for studying the problem of acquiring farm proprietorship.

The committee on home economics worked out a budget covering home expenses, which showed that a minimum of $1,200 net cash income was needed annually to care satisfactorily for the cash needs of the farm home and provide for food, clothing, home furnishings and equipment, recreation, education, religion, and charities.

The farm committees made recommendations for production and marketing policies and practices which would meet the requirements of the home. The best means of doing this was pointed out to be the economical production of fluid milk and cream for southern New England and New York City and the marketing of these products through a central cooperative farmers' milk-marketing organization, such as proposed by the New England Dairies (Inc.). As supplementary sources of income maple products, poultry products, potatoes, forest products, and summer-tourist trade were emphasized as being of great importance. It was pointed out that only as many enterprises should be undertaken as could be handled profitably in a commercial way. To meet the $1,200 cash income needed in the home, the farm-organization committee found that a gross farm income of about $4,000 was necessary.

The conference passed unanimously a resolution asking the Windsor County Farm Bureau to give the various committees permanent standing, and now these committees are to meet annually or oftener for the purpose of putting these recommendations into effect.

Stabilizing the Price of Wheat

ALEXANDER LEGGE
Chairman, Federal Farm Board

THE present position of the Grain Stabilization Corporation in regard to the stabilization of wheat prices is not different from the position taken a year ago. At that time the Grain Stabilization Corporation agreed to carry for a time a part of the 1929 surplus. In handling this operation the Stabilization Corporation did not at any time deal in the 1930 crop except that they sold some of the old wheat and replaced it with an equal quantity of new wheat from the 1930 crop. This replacement was made mainly, of course, because wheat if carried for too long a time will deteriorate to some extent.

At present, the question being asked is: What position will the Grain Stabilization Corporation take with respect to the 1931 crop? For the present, this can not be determined further than to reaffirm what was said last year, namely, that stabilization operations must be regarded as an emergency, temporary measure. We sincerely hope that no action of this kind will be required with regard to the 1931 crop.

What we are trying to make plain to the farmers of the country is that it will be impossible to permanently maintain a domestic price level in wheat above the world level unless our production is adjusted to the quantity which is consumed in this country. This means a reduction of about 20 per cent from what has been produced on an average of recent years. What the future price will be clearly depends upon the extent to which producers cooperate in adjusting production to demand rather than upon any policy that the Stabilization Corporation might adopt.

Some people have taken this declaration on the part of the Federal Farm Board to mean that if the acreage adjustment this year was not sufficient the holdings of the Grain Stabilization Corporation would be dumped on the market at whatever they would bring. Such a proceeding has never been contemplated, of course. The corporation will at all times try to work off the stock it has in storage with as little damage to the market as possible. Obviously, however, the corporation can not go on piling up a larger and larger supply of wheat. The cost of carrying it alone would make this prohibitive.

As we see it, American wheat growers rather drifted into their present difficult position without fully realizing what was taking place. We are exerting every possible means to get the facts before them. With those facts before them, it is up to them to act. If they prefer to fight it out among themselves on the basis of the survival of the fittest until a sufficient number of them go broke so that the remaining growers will not be producing more than the market will take, that is their privilege. It seems inconceivable in this day and age that they should prefer such action to the procedure we have recommended, namely, a gradual readjustment downward to bring their wheat production within the limits of domestic consumption.

Neither can we see how any of our American wheat producers can hope to compete permanently in the world market under existing conditions. At the present time, based on the price that wheat is selling for in the Liverpool market, the average grower in the United States would be getting less than 40 cents a bushel; in some localities perhaps less than 30 cents, the Liverpool price being at the lowest level that has prevailed for some 337 years. If this does not appeal to the grower as being sufficient reason for adjusting his production to the quantity that can be consumed at home, on which he will get the benefit of the tariff protection, it would seem rather impossible for us to offer an argument that would convince him.

Of course, something may happen in some of the large wheat-producing countries of the world that would temporarily run prices up to a level where exporting would yield a fair return to our growers. Even if this should happen, our wheat farmers should not be led to expect any permanent improvement in the export situation. The acreage of other exporting countries is far more than sufficient to supply the needs of the importing countries, and apparently these exporting countries are either willing to or are compelled to sell at prices with which the American farmers can not hope to compete.

Montana Outlook Meetings

A SERIES of outlook and farm board meetings was held in each county in Montana early this year for the purposes of explaining the organization plans for wheat marketing approved by the Federal Farm Board. Combination outlook and marketing meetings were held to discuss the outlook reports and to use these reports as a basis for recommending increased plantings for crops such as flax, or decreased acreages for crops such as wheat.

The Montana Extension Service feels that these meetings had the desired effect inasmuch as the Division of Crop and Livestock Estimates of the Bureau of Agricultural Economics, United States Department of Agriculture, reports that the flax acreage in Montana increased from 293,000 acres in 1929 to 469,000 in 1930. This, they believe, is fairly good evidence that the flax campaign, reenforced by the outlook report, received attention from Montana farmers. Forty-five county meetings with an attendance of 4,245 were conducted by Farm Management Specialists Paul Carpenter and V. D. Gilman, and County Agent Leader Fred Bennion. In addition to this series, extension agents continued to extend their message through 85 community meetings on outlook information which were attended by 6,047, and 96 meetings on the farm board which were attended by 6,438 persons. The outlook and farm board meetings were sometimes combined, but in most cases they were separate series.

A number of extension agents in Montana are now sending the agricultural outlook report, issued monthly, to all farmers in their counties.

The Field as a Source of Information to Extension Workers

P. H. ROSS

Director, Arizona Extension Service

BY FAR the greater part of the information used by extension workers doubtless always will be obtained from experiment stations. Circumstances sometimes throw a worker on his own resources when in search of information that ordinarily would be procured by experiment stations, and there is other information pertaining peculiarly to his own conditions that he always, without doubt, will be obliged to get for himself. In other cases the farmer will be the one to furnish the information, while often it will require teamwork on the part of the farmer, the extension man, and the research worker to obtain certain important facts.

Experiment in Poultry Culling

Along in 1921 a county agent in an Arizona county began to wonder about the ulitmate profitableness of the popular system of poultry culling. It was the usual practice to hold culls for a week for comparison with selected birds. The demonstration was always very convincing for the length of time conducted, but the question in the agent's mind was whether the demonstration would prove as effective if the two groups were compared for a year.

The agent was surprised not to be able to locate any basic research upon which the work was founded. The practice was evidently based upon the experience and observation of producers and professional poultry men and not upon careful investigation. This aroused greater curiosity, and as a next step, the agent arranged to have the culls in a certain flock held for observation. In order that no question might be raised regarding the culling, he arranged to have it done by a competent poultry specialist. The culls were fed and cared for in the same manner as the remainder of the flock that had been held as good layers. The response of the culls was not immediate, but in a short time eggs began to appear. The culls made an average yearly production of 134.6 which compared very favorably with that of the selected flock. Certainly that average indicates that some hens of exceptional laying ability were among the culls as many must have been low producers.

Continued observation and test by the agent for a number of years led to the conclusion that for conditions in southern Arizona, at least, the accepted method of culling was not based on the hen's ability as a year-round layer, but only on whether the hen was in production at the time of culling, and to some extent her performance during past months. This work established no new positive truth, but it certainly laid open to question methods long accepted as the most practicable.

In 1924 the irrigation specialist began a study of irrigation practices in Arizona. The most immediate and important question seemed to be whether farmers were obtaining adequate penetration of irrigation water when applied to the soil. The nature of the problem was hardly one demanding the attention of the experiment station. The obvious solution was for the specialist to determine the real situation from actual testing. He proceeded to do so, and made borings with a soil auger on approximately 150 farms throughout the State. In only a few instances did he find a greater penetration than 18 inches. The roots of cotton, alfalfa, wheat, and many other crops penetrate the soil to a depth of 72 inches or more. Obviously the storage capacity of the soil and the feeding area of the plant were being restricted unnecessarily.

Correcting a Bad Situation

The situation was not apparent to the operator because it was under ground, out of sight. It was not a project of a nature that would be regarded as pressing for the experiment station, in view of the heavy demand on station funds for more fundamental work. Yet it was information of the highest importance to the farmer and the irrigation specialist, the results of which were used immediately to correct a bad situation.

The necessity for getting adequate penetration of irrigation water and of knowing that such penetration was accomplished have been since then generally emphasized by county agents and the irrigation specialist. In the spring of 1930 a definite check up of progress was made by the extension service. In a survey of 61 farms in 3 counties by actual tests with the soil auger, it was found that on 30 farms, or 50 per cent, a penetration of at least 6 feet had been reached quite uniformly over the fields. In nearly every instance the penetration was found to be much better than in similar fields six years earlier, which gave proof not only of the effectiveness of the extension method, but also of the real value of the practice advocated. A practice may be pushed into many farm operations through aggressive salesmanship, but if it has no merit it promptly falls again into disuse.

Experiment Station Assists

The value of a close relationship between the station and extension workers is shown in the following instance:

An Arizona county agent and the irrigation specialist were studying a problem of difficult penetration in an area irrigated by water from wells. Black alkali in the water was suspected, but a chemical analysis did not reveal it. When soft or distilled water in connection with gypsum was used in percolation tests of soil from the area, satisfactory penetration was obtained. However, the county agent had tried gypsum on soil in the area on previous occasions with no satisfactory results.

The field workers were puzzled that water from these wells should give results which should be expected from the application of black alkali water. The sample of water of one of these wells from which the chemical analysis was made had remained in the laboratory for several days when a recheck of the analysis was requested.

Much to the surprise of everyone, the tests showed about 17 parts to 1,000,000 of black alkali. The field workers took another sample of water direct from the discharge pipe of the same well, and two analyses made several days apart showed the same general results. A research worker suggested that possibly some of the sodium bicarbonate contained in this water, when subjected to the heat of the laboratory, was being transformed into sodium carbonate or black alkali. Several other tests were then made, both in the field and the laboratory, and the suggestion given proved to be the correct one.

The farmers of the area had been saying for years that the getting of satisfactory penetration of irrigation water was growing more difficult. Through

teamwork the farmer, extension worker, and research man had discovered the scientific reason for the phenomenon, and established a basis for working out a remedy.

Pecan Industry Developed

Sometimes a problem which is of great importance to a single county may have no significance in other counties. A case in point is shown by the development of the pecan industry in Yuma County. The adaptability of pecan trees to conditions in this county was so apparent from results obtained on scattered farms that an effort to make it one of the leading crops of the valley was started by the producers most interested. It was important that the status of the industry be known. The county agent seemed to be the only source to whom to look for information. He immediately made a thorough survey, locating all pecan growers, learning the acreage, the number and age of trees, the bearing records to date, and the available acreage of land adaptable to pecan production which was not in use for that purpose. This information formed a basis upon which to plan intelligently the part that the pecan industry was to have in the agricultural program of the county. It is evident that the information could not have been obtained so economically and so promptly from any other source.

Data are being obtained from poultry men in the State to determine the factors that affect profits in the industry. This information is being procured through forms supplied poultry men who report monthly to the county agents. The procedure is a means of getting information of exceptional local value, but in addition, the method lends itself excellently to the adoption of better practices by reporting poultry men. The showing of profits in the actual conduct of the business through following certain practices gains converts faster than other methods. The effectiveness of this latter feature would be diminished or destroyed if the information were obtained in any other way than through the active participation of the poultry men. It is a type of information that, all things considered, the extension service can obtain for itself with better results than if it looked to some other agency.

Effective Dissemination of Facts

In any organization it is essential that there be a definite division of labor among its various members. When the general principles governing this differentiation have been established, then the organization begins to learn by experience how best to take care of problems that fall in the twilight zones. Although the primary purpose of the extension service is to disseminate knowledge, experience has shown in some instances that the best preparation for effective dissemination is the participation of farm people in assembling the information. And, too, the extension service must depend upon its own resources for obtaining a great part of its subject matter, especially that which has an immediate and local application.

Alabama Curb Markets

HELEN JOHNSTON

State Home Demonstration Agent, Alabama Extension Service

IN SPITE of drought, hard times, and lower prices, Alabama curb markets have increased their sales; the total sales of 19 markets for the year 1930 amounting to $413,039.71, an increase of $18,899.66 over the total for 1929.

Since the opening of Alabama's first curb market in Gadsden in November, 1923, $1,640,254.82 has passed into the homes of more than 4,900 farm families in 21 counties. And what has the farm wife done with the money? What of efficiency, comfort, culture, happiness has she brought into the life of her family? While she has been developing the resouces of her land, while she has been building up her trade at the market, while she has been making contacts with other rural women and with city women, what has been going on within her? Let her answer for herself, in words that are typical of the thousands of farm women who are increasing the incomes of their families by selling upon the curb markets:

With the grateful thoughts of my success in mind, I want to tell my story of how I "broke in" on the curb market on a hot July day with a few baskets of fresh vegetables and fruit to see what it all meant. In a few hours everything was sold, bringing $8.75. Gratifying indeed! So next market day I was there again with a few more things than before, selling out by 10 o'clock and on my way home with $12.50. It was then that I firmly resolved to stay on the market if I could clear $5 per day.

All went well until late autumn, my highest sale day bringing $25, when severe drought began to tell on everything growing. I was then put to the test to get enough produce to make a market day. Sales ran as low as $5.75. This proved a blessing in disguise, for it caused me to think and act. I turned to the forest with the thought in mind that if my city friends love the beauties of nature one-half as much as I do, surely they will like a few specimens of what I am so rich in. Then I went to work and carried in pine, holly, magnolia, maple, crab apple, hawthorn, redbud, sweetshrub, sumac, yellow jessamine, columbine, sweet myrtle, gallberry, yucca, and others. My friends welcomed them and sales from these alone nearly doubled what I would have received for my garden produce alone. So I still carry them in—the plants for setting in season, their gorgeous wild blooms in springtime, and the wild fruits and nuts in harvest time. Thus the forest, when given a chance, is a source of year-round cash.

Now that my story may prove helpful to some one else I want to state in figures something of what it has meant to me. I started to curb market 18 months ago "down and out." I paid my way in a neighbor's car and averaged $30 in sales per month. To-day I go in my own conveyance, sell $50 worth per week, owe no debts and have some cash on hand. I am in the curb-market business to stay and have set my goal for this year's sales at $100 per day. I have scored one time already, having had sales amounting to $104 in one day. My total sales for 1929 amounted to $3,243.50.

I am now using some of my profits to remodel my home. I am president of the Smilietown Club, which is studying home management. I hope by the end of the year to have proof in our home life of what the curb market has meant to me.

The Alabama curb market builds new rural homes and makes over old ones; it pays off debts and establishes savings accounts; it sends boys and girls through high school and college; it brings about contact between town folks and country folks; and it offers social opportunity to rural women, developing leadership among them.

Baby Chick Shows

Baby chick shows were held last spring throughout New York State to aid both hatchery men and farmers to recognize quality in chicks, reports L. M. Hurd, poultry husbandman in New York. The show in Sullivan County also acquainted the farmers with new equipment, such as battery brooders and disinfecting torches, and indicated that, although a large percentage of the chickens raised in that county were purchased out of the State, the near-by hatcherymen were offering excellent stock at reasonable prices.

Is Extension a Profession?

C. B. SMITH,

Chief, Office of Cooperative Extension Work, U. S. Department of Agriculture

EXTENSION workers, generally, are interested in the question of whether extension teaching has "arrived" as a special profession. Thought is being given as to what remains to be done to give extension workers the same professional recognition accorded resident teaching, engineering, law, and the similar established professions. What are the attributes of a profession, and how is extension work meeting them?

Specialized Training

The term "profession" implies special training to enable one properly to meet the requirements of the work in which he expects to engage. For the most part the present force of extension workers have had a four years' college course, but few of them have had training especially designed to fit them for extension teaching. More than 20 of the State colleges are now giving one or more undergraduate professional courses open to juniors and seniors interested in becoming extension workers. Two of the leading State universities, Wisconsin and Cornell, have recently established professional improvement courses on a graduate basis, and are serving as regional training centers for extension workers already in the service. Colorado and Ohio have also made a beginning in the development of professional improvement courses for the extension workers employed in those States.

Much more needs to be done in the training of prospective extension workers. There is need for four or five graduate training centers geographically distributed to serve the 48 States, where extension workers with years of practical field experience can obtain advanced training in extension methods and engage in graduate research in the extension field. The granting of sabbatic leave privileges to extension workers, as has already been done in a number of the States, will only partially accomplish the desired results, unless professional improvement courses are established to meet the requirement of such graduate students.

Literature

Considerable progress has been made in developing extension literature. Numerous bulletins and a few books are now available which treat of the history, development, and methods of organizing and conducting extension work. Much of the so-called extension literature, however, relates to agricultural and home-economics subject matter rather than to extension teaching as a profession. Keen, experienced observers are greatly needed to record in a permanently available form, free from personal opinion and bias, what is taking place throughout the wide field of extension.

Extension Research

As the basis for worth-while literature and in order that extension workers may have a body of scientific data as a guide to the future development and conduct of extension work, increased provision must be made in extension budgets for the conduct of research in the extension field. The beginning which has already been made in this field opens up wide possibilities of increased effectiveness through the application of the results of scientific study to the conduct of extension.

Complete and Accurate Reports

Adequate and systematic record keeping and reporting of observation, activities, and accomplishments are invaluable in connection with any growing and developing enterprise. The importance of accurate records and reports in the conduct of a business enterprise is universally recognized. They are of no less importance in the educational field than in the business world.

Uniform Terminology

In order that extension literature may accurately convey ideas to readers in all parts of the country and throughout the entire profession, a precisely defined and universally accepted terminology is an absolute necessity. Without suitable terminology, records and reports are almost meaningless and extension research is handicapped.

Many extension terms have been officially defined by the Land-Grant College Association and the United States Department of Agriculture. Many additional terms need defining. Recent years have witnesed increased respect for official definitions, but the loose use of terminology remains one of the greatest weaknesses of extension teaching from a professional point of view. Extension terms must have a precise meaning to extension workers generally, just as legal and medical terms have a precise meaning to the members of those professions.

Satisfactory Working Conditions

Up to the present time extension teaching has been a young person's job. The long hours of work, physical condition of roads, weather and distance, inadequate equipment, unstable appropriations, and the almost limitless task to be done have all contributed to make it necessary for many well-qualified persons to seek other employment after a few years. The employment of additional field agents and office assistants, the payment of the entire salary of the extension worker from State and Federal funds, as is being done in California, Missouri, Pennsylvania, South Carolina, and several other States, the spread of improved roads, and the development of a technique of the profession are all contributing to length of tenure of office, and the possibility of one being able to continue in extension as a life work.

Professional Standards

It has been said that of all the professions, those relating to education are most lacking in ethical standards. Largely due to the very nature of the work in which they are engaged, perhaps, extension workers frequently fail to give proper credit to research agencies, other extension workers, local leaders, farmers and farm women, commercial and other agencies for their part in the dissemination of information relating to improved practices in farming and home making.

Codes of ethics, rules of conduct, or professional standards, regardless of what they may be called, are worthy of consideration by all of those interested in extension teaching becoming a true profession.

Professional Consciousness

The realization of all of those professional attributes mentioned above is dependent upon the development of a

consciousness on the part of the rank and file of extension workers that extension teaching is a profession. Extension house organs, and associations of extension workers, both State and national, are contributing to this growing consciousness. Epsilon Sigma Phi, the national honorary extension fraternity, is playing its part. It is doubtful, however, if the rank and file of extension workers as yet fully appreciate the part that a strong professional association under competent leadership can play in professionalizing extension work.

Potentially, extension teaching is a profession, but much remains to be done before it can rightfully expect to receive proper recognition as one of the scientific professions.

Home Industries Shop

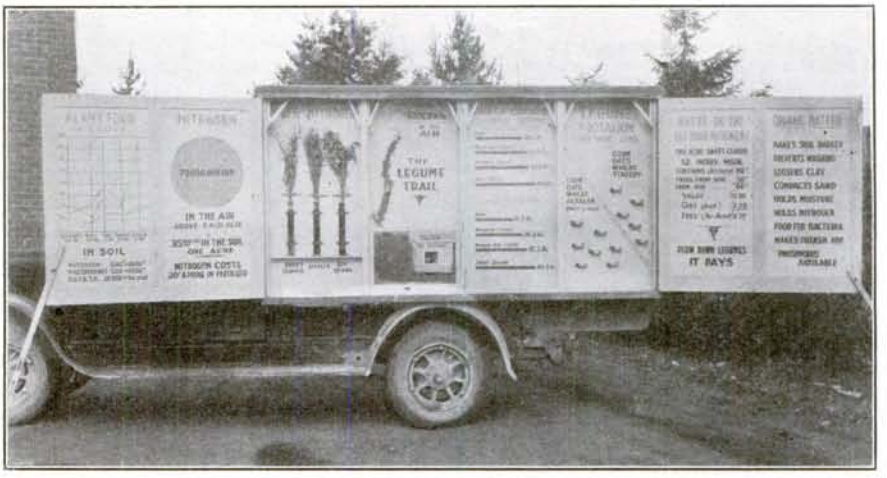
The Mountain State Home Industries Shop, of Cabell County, W. Va., which opened in 1927 and last year sold $3,408.41 worth of produce, was started through the cooperation of the Huntington Women's Club and the home demonstration club of the county.

The extension service of the University of West Virginia and the associate home demonstration agent of the county act as advisers for the organization. There is a county chairman in whom local authority is vested, and a full-time manager who attends to the selling of the produce brought in by the rural women. An executive committee aids in establishing standards for produce, in finding new producers and patrons, and in fostering cooperation between the producers and the members of the women's club.

Many varieties of fresh and cooked food products are sold in the shop, which charges a commission of 12 per cent for the sales of perishable produce and 15 per cent for the sales of nonperishable produce. This fee covers the operating expenses of the shop, such as electricity, gas, water, telephone, rent, and paper.

Demonstrations have been given in making cake, cake icing, blackberry jam, candy, baskets, and stoves for the purpose of improving the quality of these products. The executive committee requested that uniform containers be used for canned goods and this regulation is observed by most of the producers. This committee also sent out a letter which listed the standards and requirements for salable products and included recipes that are popular with the buying public.

Michigan Soils Laboratory Truck



One side of the soils laboratory truck opened to show displays

STATISTICS show that 16.6 of soil-improvement practices adopted result from farm and home visits by the county agricultural agent and 13.8 come through office calls on the agent, according to M. C. Wilson, of the Federal Office of Cooperative Extension Work. The reason that the soils laboratory truck, as operated by the soils extension division of the Michigan State College, has been so well received by the county agents and farmers of Michigan is undoubtedly that this truck combines the desirable features of both methods, according to E. C. Sackrider, Michigan soils specialist.

The soils laboratory truck is fitted with a panel body and doors to cover the panels. On the inside of the doors are additional panels making, when the doors are open, a total of eight panels on each side and four across the back. On these panels are displayed pertinent information and data relative to lime, organic matter, care and proper use of stable manure and commercial fertilizer.

Inside the truck are carried a laboratory testing table and equipment for making soil acidity tests, for determining the purity of marl, and for testing soils for available phosphorus content. At the meeting place, which is usually some farmer's yard or a school yard, the truck is opened to display the panels, and the laboratory table is brought forth and placed on the ground at the rear of the truck.

Meetings at the Truck

The truck meetings are well advertised in advance by the county agents. News stories telling of experiences of farmers in the county, who have followed the college recommendations, are usually used. Each farmer is urged to attend and to bring samples of soil and marl with him.

At the truck meeting the extension specialist spends a short time in talking about the exhibits and data on the panels, then proceeds to the testing, and makes specific lime and fertilizer recommendations for the sample of soil which the farmer has brought to the truck. While making the tests both the county agricultural agent and the specialist have a chance to talk with the farmer and discuss his specific problem; it is this individual work that counts. The original copy of the recommendation is given to the farmer, and carbon copies are left with the county agent so that he can follow-up with the men about whom he has some doubt.

Advantages

This method seems to be ideal, as it closely combines both activities which result in soil-improvement practices being adopted; namely, farm visits and office calls. The individual attention given the farmer at the meetings gives the same information and in nearly the same way that the farm visit or office call would, and it does in one day what would require many days of the agent's time. This is shown by the fact that at 100 meetings in 28 counties in Michigan during the months of June, July, August, and September over 1,600 farmers attended the truck meetings, and 2,084 samples of soil were tested. In addition ,some of the atmosphere of the general meetings is created, and the few in attendance who do not bring samples gather information| by hearing their neighbors' problems discussed.

Extension Service Review

Issued monthly by the EXTENSION SERVICE of the United States Department of Agriculture Washington, D. C.

The Extension Service Review is published in the interests of workers and cooperators of the Department of Agriculture engaged in extension activities. It contains official statements and other information necessary to the performance of their duties and is issued free to them by law. Others may obtain copies of the Review from the Superintendent of Documents, Government Printing Office, Washington, D. C., by subscription at the rate of 50 cents a year, domestic, and 75 cents, foreign. Postage stamps will not be accepted in payment.

MARCH, 1931

Using the Outlook

What to produce? How much to produce? When to plan to sell in order to make the most money? These are vital questions to the farmer as he goes into production in 1931. It is in helping the farmer to answer these questions that the agricultural outlook must find its application. Around this thought much of the discussion of the future development of the outlook and its uses centered at the national outlook conference in Washington in January.

The steps taken during the past year to hold regional outlook conferences, to make more general the preparation of State outlook statements, and to engage in new lines of economic research, tending to reenforce and to make more applicable outlook information previously available, were commended. Particular appreciation was expressed by both department and State economists of the practical contribution made to the regional outlook conferences by the county agents, district agents, State leaders, and production specialists attending them. Their presence served to bring constantly to the attention of these conferences, the importance of organizing outlook material so that the county extension agent can use it in a practical way in advising his farmers as they plan their production for the year. The comments made served, also, to point out additional facts needed to increase the usefulness of outlook material to the farmer and new lines of investigation that should be undertaken

It was clearly the feeling among the economists attending the Washington January conference that the programs of the regional outlook conferences for 1931 should include more discussion of ways and means of facilitating the practical application of outlook information. The whole extension organization may well devote thought and effort in 1931 to determining how the outlook can more effectively aid the farmer in answering the all-important questions: What shall I produce; how much shall I produce; and when shall I plan to sell in order to make the most profit?

A Life Work

Is extension teaching to be regarded as a life work? Or is it only a work for young men and women, a makeshift pending one's establishment in a more substantial profession? Does extension teaching offer the privileges, the recognition, and the opportunities for self-improvement afforded men and women engaged in resident teaching and scientific investigation in the field of agriculture and home economics?

These are thoughts that are in the minds of many extension workers to-day. The more mature men and women in the work, in particular, are weighing pro and con extension's claim to professional status.

Whatever may be the verdict, there are many now engaged in extension work who are attracted and held to it because it deals so largely in human problems and relationships and pays them for their effort in human appreciation. To these extension workers, there is only one road they are willing to take. If extension teaching as a profession has not attained to the standing and recognition of other allied professions, these workers are determined to attain such standing and recognition for extension. They realize that it rests with them to develop for extension teaching and for themselves as individuals higher professional standards, the more scientific organization of instruction, more definiteness in teaching technique, and more opportunities for systematic study and professional improvement if this standing and recognition are to be achieved. With some six thousand extension workers earnestly seeking the attainment of these objectives, can it be questioned but what extension teaching will take equal professional rank with any of its allied professions? Surely, the near future will see extension teaching justify and command, without question, the lifetime devotion of intelligent and ambitious men and women.

Pioneers

The story of the beginning of farmers' cooperative demonstration work in the South under the leadership of Dr. Seaman A. Knapp is told in this issue of the Review by one of his earliest associates, J. A. Evans, now associate chief of the Office of Cooperative Extension Work. It is a story of deep interest to every thoughtful extension worker. The story of the pioneers of any movement always has fascination. Particularly, is this true when the story is told by one of them. No extension worker can fail to feel a quickening of the pulse as he reads the paragraph in Mr. Evans' narrative where he steps out of the chronicling of dates and events and says of the relation of Doctor Knapp to his fellow workers, "They bore to him the relation of loving, dutiful sons to a respected and beloved father, rather than the purely official relation between a chief and his subordinates."

What a world of meaning there is in that sentence! What a tribute it is to Doctor Knapp! It explains, also, the 25 years and more of devoted and productive service which Mr. Evans has given to the extension cause. It was most fitting that Mr. Evans should have received from Epsilon Sigma Phi, the national honorary fraternity of the agricultural extension service, in November, 1930, the award of the distinguished service ruby of that society. Mr. Evans is the only man now living to hold this honor. It has been accorded to two others—the late Dr. A. C. True, director of the States Relations Service, and the late W. D. Bentley, formerly director of the Oklahoma Extension Service and Mr. Evans' associate in the early days under Doctor Knapp in Texas.

The cooperative movement in Canada has passed the experimental stage, according to Dr. John F. Booth, commissioner of agricultural economics of the Dominion of Canada.

Though the volume of business handled by farmers' associations in Canada varies, of course, with the price of farm produce, a conservative estimate places the total at from $300,000,000 to $500,000,000 annually. The total number of associations operating is not known, but nearly 1,000 reported to the Government last year and these gave a membership of more than 400,000, including some members who were not farmers. When it is realized that there are only about 700,000 farmers in Canada, it is evident that most of them belong to at least one association, even allowing for some duplication of membership.

How Farm Demonstration Work Began

J. A. EVANS,

Associate Chief, Office of Cooperative Extension Work, U. S. Department of Agriculture

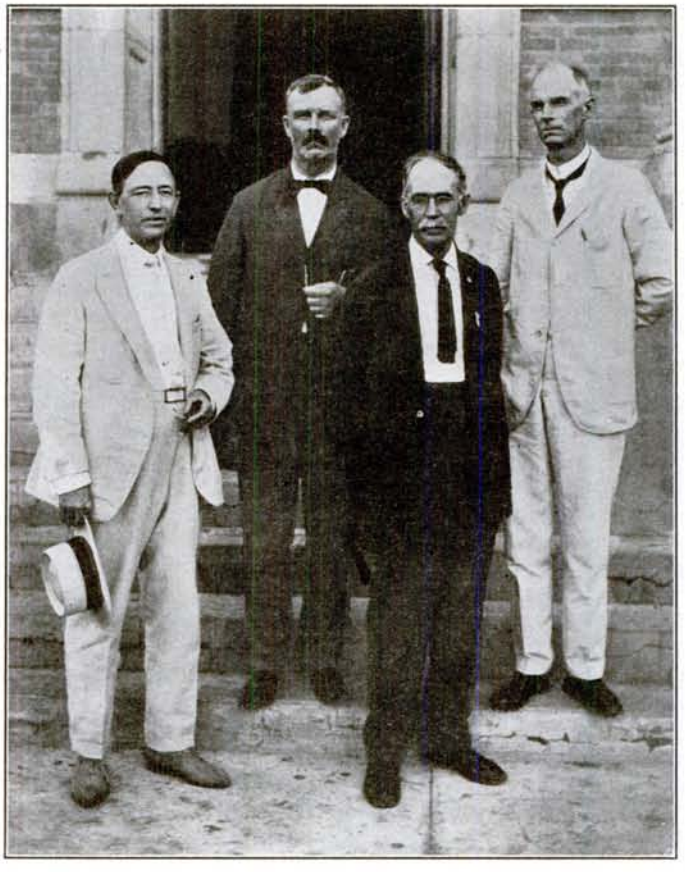
FARMERS' cooperative demonstrations was one of the several lines of work begun under an emergency appropriation which was made to enable the Secretary of Agriculture to meet the ravages of the Mexican cotton-boll weevil. The appropriating act was signed by President Roosevelt, January 15, 1904, and the funds became available immediately.

The Bureaus of Entomology and of Plant Industry in the Department of Agriculture were allotted the funds for work along several different lines bearing on the weevil problem. Secretary James Wilson said that he regarded the plan for farmers' cooperative demonstrations as offering the most promise for relief from existing conditions of any of the proposed activities. He referred to it as "propaganda work." The purpose of this work was to convince the panic-stricken farmers and business men in the boll-weevil infested territory that cotton could be profitably grown in spite of the boll weevil by the adoption of better cultural methods.

Farms Established

Dr. Seaman A. Knapp, who sponsored the plan and was placed in charge of the work, was an advocate of demonstrations as an effective method of teaching adult farmers. He had established previously and supervised for the Bureau of Plant Industry several demonstration and test farms in the South. These farms were in effect Government stations conducted by paid employees.

In 1903 Doctor Knapp had established near Terrell, Tex., a community demonstration farm on an entirely new plan. The farm owner carried on the demonstration at his own expense, with a guarantee from the business men of the town against possible loss. The object was to demonstrate good farm-management practices and better cultural methods. Such crops as corn, cotton, legumes, and potatoes were grown on a 70-acre tract. There were no boll weevils in that part of the State at the time and the Terrell farm had no direct connection with the farmers' cooperative demonstrations. However, the plan for this work was patterned after the successful Terrell farm experiment.



Pioneers in Farm Demonstration Work

These were four of the first farm demonstration agents appointed by Doctor Knapp in February, 1904. They are, reading from left to right, J. A. Evans, who is now associate chief of the Office of Cooperative Extension Work and has been in extension work longer than any other living man; J. L. Quicksall, who was formerly State agent for western Texas and now is living on a farm at Waco, Tex.; the late W. D. Bentley, who died at his home in Stillwater, Okla., after completing 26 years, 4 months, and 17 days continuous service in extension work (the longest unbroken service of any man in extension work) and who was assistant director of the Oklahoma Extension Service at the time of his death; and W. F. Proctor, who at the time of his death in 1916 was State agent in charge of the county agricultural agents of Texas

Doctor Knapp went to Houston, Tex., on January 25, 1904, and immediately began an intensive publicity campaign, outlined his plan, and asked for the cooperation of all the agencies in a position to help and make it a success. He obtained the fullest possible cooperation from the press in the territory and established as a cardinal principle of demonstration work the public report, through the press, of results obtained. The railway industrial agents were called into conference; they pledged the full support of the railways, including free transportation on all lines for Doctor Knapp and his assistants. Bankers and business men also offered their full cooperation. Dr. D. F. Houston, at that time president of the Texas Agricultural and Mechanical College and, later, Secretary of Agriculture, placed the farmers' institute personnel under Doctor Knapp's direction. More than 1,000 farmers' meetings were held during that first year.

Department officials had expected that Doctor Knapp would need only three or four assistants, but it was soon evident that more help would be necessary to organize the work in the State before cotton planting time. More than 30 additional "special agents" were employed in February, usually for a 60-day period, and assigned territories embracing from 10 to 25 counties each. Their job was to obtain the cooperation of business men and farmers and to establish "cotton culture farms" of 5 to 20 acres near the market towns in their territories. Doctor Knapp called these "town farms."

Demonstrators and Cooperators Obtained

The business men were asked to give the necessary seed and fertilizers and to select the demonstrators. These farm demonstrators agreed, in writing, to prepare, plant, and cultivate the farm according to Doctor Knapp's instructions,

and then make the required reports. Personal instruction by the agents was promised the demonstrators. Several hundred farms were successfully operated under this agreement in 1904.

Other farmers were asked to become cooperators. The cooperators also agreed in writing to prepare, plant, and cultivate a specified number of acres, entirely at their own expense, according to written instructions to be furnished them. Written reports of yields and a comparison of the crop grown according to instruction with the average crop on the rest of the farm and of the community were expected. More than 8,000 cooperators were obtained in Texas and Louisiana, the only States in which work was done that year.

Continuation of the Work

When the 60-day period of employment expired, most of the agents were reappointed for longer periods. It was considered that continued visits to the farms were essential to supervise operations, to advise with cooperators, and to observe and report results.

The results of farmers' cooperative demonstration work for the first year were even greater than its sponsor had hoped for or dreamed of. The morale of farmers and business men was restored; a profitable cotton crop had been grown in spite of the weevil, and the movement was everywhere indorsed and praised.

During this year the boll weevil continued to spread over Texas and reached almost to the borders of Arkansas and Louisiana. It was apparent that it would soon spread over the entire cotton growing belt. It was planned, therefore, to increase the farmers' cooperative demonstration work in Texas and to begin it in States soon to be infested with the weevil because the work seemed to offer the most promise for relief in Texas.

The Early Agents

Few of the agents appointed in 1904, or in the next few years, had any college or technical training in agriculture. As a rule they were mature men, 30 to 60 years of age. All of them were farmers or had some practical farm experience. The salaries paid ranged from $60 to $80 per month. What these men may have lacked in technical training they made up for in experience, in energy, in zeal, and in an understanding of the farmer and his problems.

The term "Knapp Disciples," often applied to them, was not an inappropriate one. Inspired by him they became crusaders with a mission to increase the incomes of the average farmer. They bore to him the relation of loving, dutiful sons to a respected and beloved father, rather than the purely official relation between a chief and his subordinates. Indeed, it was Doctor Knapp's kindly, sympathetic, human personality, and missionary zeal for a better agriculture, as much as his sagacity and practical way of dealing with men and organizations, which contributed to the remarkable influence he wielded and the remarkable success which cooperative demonstration work with farmers and their families has attained.

Tributes to Doctor Knapp

Doctor Knapp died April 1, 1911, at the age of 77 years. Once president of the Iowa State Agricultural College, he was buried in the cemetery on the campus of that institution, where also lie the remains of six other former college presidents.

Last June the Iowa delegates to the National 4-H Club Camp in Washington, on their return to Ames, laid a wreath upon Doctor Knapp's tomb as a tribute to the founder of this great movement. They did this as representatives of the camp and of the 800,000 boys and girls now in club work. The president of the college, the extension staff, and other officials participated in an appropriate ceremony.

In the words of Dr. A. C. True: "He had lived to formulate and direct the development of approximately the whole system of farmers' cooperative demonstration work." This system, under the Smith-Lever Act of 1914, has expanded into the present nation-wide one of cooperative extension work in agriculture and home economics which employs 6,000 workers and annually expends over $25,000,000.

Farm Accounts Used in Developing County Programs

Answers to a question recently sent to several county agents in Ohio regarding the value of the farm accounting project in their county programs of work, showed conclusively that the value of the individual farmer who kept the record was considered as only a small part of the total value to the extension work of the county, reports Carl R. Arnold, Ohio extension economist.

One agent stated, "The service to individual farmers is only a small part of the value of the farm account work in this county, although this, together with the spread to neighbors, would justify the efforts. Our county farm account summary is discussed thoroughly each year with our county executive committee as a basis for the county program. It is also discussed with our township leaders and used to support all projects. These reports for the last eight years have given a definite indication of the importance which should be given to different projects. The results of the 1929 account records in this county were the chief reasons for the greater emphasis which we have placed on certain phases of the livestock efficiency program this year."

Another agent stated, "Results of the farm accounting analysis several years ago showed the importance of livestock instead of grain farming in this county. The results of these summaries have been the basis for our livestock extension programs for the last four years."

Another reply included the following: "It is easy to talk about balanced rations, quality of livestock, good crop yields, and soil improvement, but it is hard to get any action unless we have specific information upon which to base our discussions and definite proof that such practices are profitable. Although the most direct benefit from the farm accounting program in our county comes to the record keepers themselves, we use it in our extension program as a guide to all extension activities. I believe I can conscientiously say accounting work is an aid in every extension project in this county. It gives local facts and local proof that some of the things which we recommend are advisable."

The facts shown in an analysis of from 30 to 50 farm account records in a county give one of the best possible guides toward a sound extension program, Mr. Arnold says. The fact that this information is local and that the county agent is familiar with it is very largely responsible for the extensive use made of it. Only during the last four years have there been any number of Ohio counties which have had sufficient farm account records to be used in this way. The broader phases of the farm accounting work, which include its use in the county extension program and its use in developing the projects of other specialists, are just beginning to be utilized, according to Mr. Arnold.

Club members and leaders at Camp Plummer

Camp Plummer—the Northwest 4-H Club Event

REPRESENTING the 4-H clubs of Idaho, Montana, Nevada, Oregon, Utah, Washington, and British Columbia, Canada, 571 club members and leaders participated in the educational activities of Camp Plummer at the Pacific International Livestock Exposition, October 25 to November 1, 1930. Demonstrations, judging contests, and educational trips made the week a profitable one for the northwestern 4-H club boys and girls, according to H. C. Seymour, Oregon State club leader.

Contests

One day of the camp was devoted to foods, clothing, livestock, crops, rabbit, poultry and egg judging, and meat identification and judging. Gold medals for first place and silver medals for second place were awarded to the winning demonstration and judging teams.

Sidney Rasmussen, Portland, Ore., and Neca Jones, Overton, Nev., scored highest in the health contest. The entrants in this contest had previously won their respective State health contests.

Six States sent demonstration teams in agriculture and home economics to compete for the Plummer trophy which is presented each year by O. M. Plummer, manager of the Pacific International Livestock Exposition. This trophy was won by the State of Washington this year.

The annual fat stock auction sale, in the opinion of those who conducted it, was the most successful sale that has been held there. In one hour and a half, 17 fat steers, 32 lambs, and 225 fat hogs were sold. The total amount received for the animals at this auction sale was $7,561.39. It is said that the buyers plan a year ahead of time to purchase some of the animals at this sale.

Educational Activities

As a treat for the boys and girls from the inland who had never seen the ocean, a special train left the grounds early one morning for Seaside, Oreg. Here the boys and girls were entertained by the local chamber of commerce at luncheon and privileged to roam around the beach, see if the water was really salty, feed the gulls, and have a genuine good time. The majority of those making the trip had not seen the Pacific Ocean before.

On another day the club members were shown through the battleship *Oregon* which was docked at Portland. Then they were taken on a boat trip down the Willamette River and up the Columbia River as the guests of the port of Portland.

When the club members held their banquet, they were addressed by A. W. Norblad, Governor of Oregon, and other prominent citizens of the Northwest. On the last evening of the camp, Mr. Penney, donor of Penney Hall, was at the exposition and was the guest at a dinner of former 4–H club members who were students at the State colleges in Washington, Idaho, and Oregon. All of the meals were served, family style, in Penney Hall.

Canning in Texas

Results of the 4-H pantry demonstration in Texas for 1930 have gone beyond the most optimistic hopes of the home demonstration agents of the State who, under the direction of Lola Blair, extension nutrition specialist, have been promoting the organization of farm pantries, the consideration of the family food needs, and the budgeting of canning for the unproductive months with those needs in mind. By midyear 1,093 farm women had undertaken the full demonstration and more than 3,000 were enrolled as cooperators with the intention to make at least one major improvement in their pantry work. This might be more storage space for canned foods, or a more convenient arrangement of storage facilities, or the making of a recipe and menu file involving the study of an adequate diet for each member of the family, or the planting of a garden or orchard to supply the needed fruits and vegetables, or the raising of meat animals for canning and curing to insure a proper meat supply.

Rural Sociology Specialists Meet

THE extension specialists in rural sociology held their first annual conference in Cleveland, Ohio, for two days prior to the meetings of the American Sociological Society in December, 1930.

In order that the group discussions might be especially worth while, each specialist brought to the conference about 30 copies of his answers to the 10 discussion questions. This device brought specificity into the thinking discussions of the conference.

Objectives Formulated

The general objectives in agricultural extension work have been stated as "diffusing among the people of the United States useful and practical information on subjects relating to agriculture and home economics, and encouraging the application of the same." More adequate incomes, the cooperative spirit, the wise use of leisure time, and higher standards of life are the results to be desired.

According to Robert G. Foster, of the Office of Cooperative Extension Work, rural sociology extension contributes to the attainment of these general objectives by developing with rural people the science and art of living and of working in groups. It accomplishes this through assisting them in: (1) Analyzing their larger community situations, (2) thinking through the principles underlying their group relationships, (3) discovering needed adjustments, (4) planning for desired improvements, (5) developing practical methods of procedure, and (6) applying these methods.

This development is concerned with individual adjustments and with such group adjustments as the family group in its inner and outer relationships; voluntary-interest group relationships (e. g., farmer clubs and associations, recreational groups, etc.); cooperative group relationships (e. g., membership morale); town and country relations; local government groups in relation to tax-supported institutions (e. g., schools, libraries, hospitals, and public welfare); and the individual and the group in relation to their cultural environment.

The general objective is to stimulate specific activities contributing to the development of human values and rural talent, and to assist rural people in developing and coordinating their various groups and institutions in relation to their priority and emphasis in community building.

The conference was opened with a paper by Doctor Foster which gave a digest and review of the rural sociology extension work which is now being conducted. This was followed with discussions by W. H. Stacy of Iowa, and B. L. Hummell of Virginia, on the extent to which the present activities were sociological.

The other papers presented were Situations Met by Extension Workers that Demand Sociological Knowledge for Their Best Solution, by R. C. Smith of Ohio; Contribution of Sociology Science for Rural Sociology Extension Workers, by A. F. Wileden of Wisconsin; Basic Considerations in Planning Rural Sociology Programs, by Nat T. Frame of West Virginia; My Philosophy of Rural Life, by C. B. Smith of Washington, D. C.; The Importance and Value of the Career of the Rural Sociology Specialist, by C. J. Galpin of Washington, D. C.; and Plans of Work, by D. E. Lindstrom of Illinois, B. L. Hummel of Virginia, W. R. Gordon of Pennsylvania, and A. H. Rapking of West Virginia.

Extension Workers Present

The extension workers who attended this conference were: D. E. Lindstrom, Illinois; O. F. Hall, Indiana; W. H. Stacy, Iowa; Merton Oyler, Kentucky; Eben Mumford, Michigan; Fred Boyd, Missouri; R. B. Tom, R. C. Smith, and J. P. Schmidt, Ohio; W. R. Gordon, Pennsylvania; B. L. Hummel and Robert Polson, Virginia; Nat T. Frame, A. H. Rapking, and Leonard Riggleman, West Virginia; A. F. Wileden and E. L. Kirkpatrick, Wisconsin; and C. B. Smith, C. J. Galpin, and Robert G. Foster, Washington, D. C.

Farmers' Institutes

The nine States conducting farmers' institutes in 1930 held an aggregate of 2,584 institutes extending over a period of 3,752 days and comprising 8,569 sessions at which a total of 1,269,419 persons were in attendance. The instruction at these institutes was given by 653 persons, of whom 59 were members of the extension force, 50 from experiment station staffs, 11 from the personnel of State departments of agriculture, 187 from a special force, and 346 from sources other than those specified. Those from outside sources were mostly actual practicing farmers and farm women selected and hired during the institute season because of their success and reputation for having actually done the things on their own farms or in their own homes under normal conditions, as well as for their ability to tell others how they did it. The cost of these institutes was $176,008.79, of which $112,416.87 was from State appropriations for farmers' institute work and $63,591.92 from local contributions.

In comparison with the previous year's report of farmers' institutes conducted by both State departments and colleges of agriculture, the report for 1930 showed a slight decrease in the number of institutes held, days lasting, and sessions held, but a slight increase in number of persons in attendance and in the amount of money expended.

NATIONAL 4-H RADIO PROGRAM

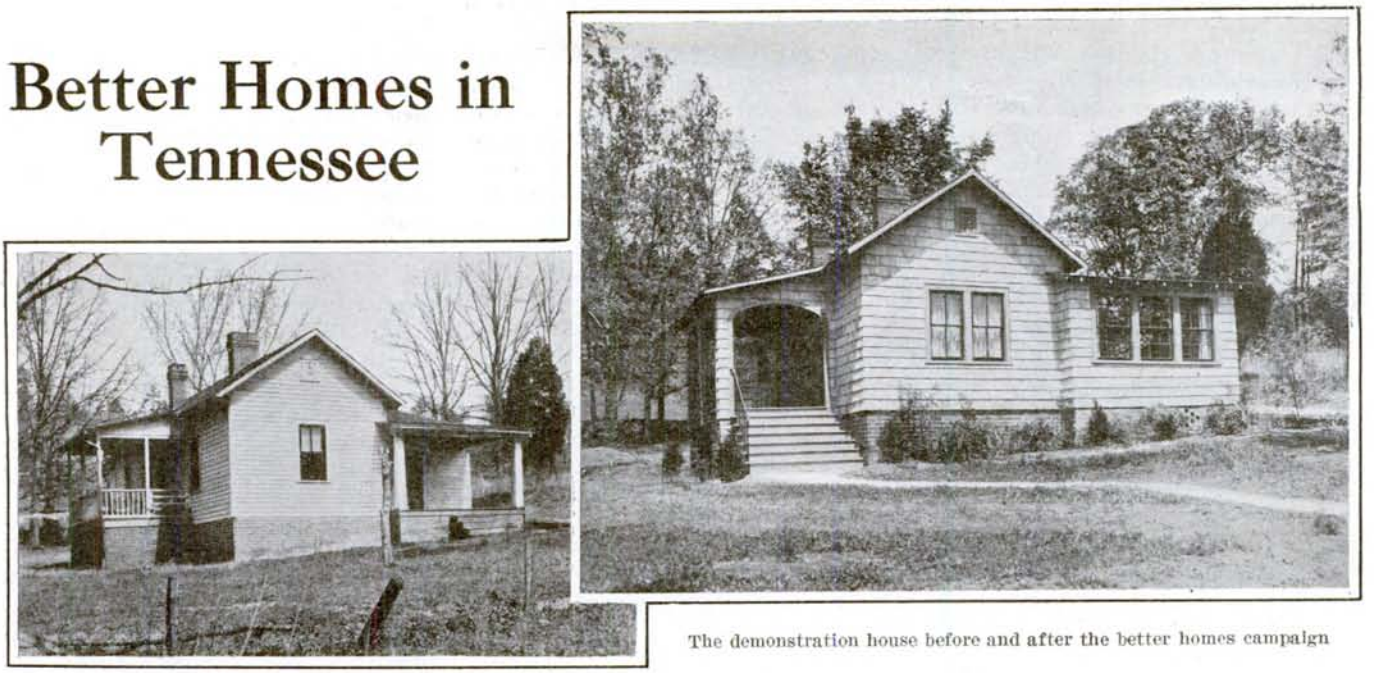
SATURDAY, APRIL 4

Music from Spain and France will be featured in the National 4-H Music Achievement Test which will be broadcast on Saturday, April 4, as a part of the United States Department of Agriculture Farm and Home Hour. The following selections will be played by the United States Marine Band:

Toreador Song from "Carmen"	*Bizet*
Amaryllis	*Ghys*
The Swan	*Saint-Saëns*
Quartet from "Mignon"	*Thomas*
March of the Little Lead Soldiers	*Pierné*
En Bateau	*Debussy*
Moraima	*Espinosa*

Even fleas have become an object of extension interest. The University of Illinois is recommending that fleas be controlled by thoroughly cleaning up the farmstead and then soaking the ground, floors, and first three feet of the walls of the farm buildings, feed floors, sheds, and feeding lots frequented by any farm animals with a very coarse spray made from one part of miscible or soluble oil to 20 parts of water. This treatment is economical and practical, although it takes about 300 gallons of spray for the average farmstead.

Better Homes in Tennessee



The demonstration house before and after the better homes campaign

THE week of April 26 through May 2, 1931, has been set apart as National Better Homes Week. Many extension workers, both men and women, have cooperated in some way in this national movement every year since it began in 1923. In many rural communities over the United States the home demonstration agent has been largely responsible for the furnishing of a demonstration house open to the public during Better Homes Week.

In Tennessee, extension workers have adopted as their slogan "Better homes on better farms," according to Lillian L. Keller, Tennessee home-management specialist. Men and women agents work together for the betterment of farm homes in Tennessee. They have found that one of the best ways to get this project across is by using tours for visiting farms where improvements have been made. One home visited has installed a water system, another has been planted with shrubs from cuttings, and another has some modern farm equipment. All these things are of interest to both farm men and women.

Demonstration House

Instead of a tour in some counties a demonstration house has been opened during Better Homes Week to interest rural people in improving their homes. In April, 1929, a house of this type on the outskirts of Knoxville, in Knox County, was open to rural and town people, and was visited by 6,000 persons from 10 different counties. Two families had been living in this 5-room rented cottage with only a cretonne curtain for a partition. The spending of $1,000 completely changed the run-down house, and it was sold for a material increase within a month after it was opened to the public.

The home agent, the county agent, specialists, and even the director of the extension service worked on this demonstration house as a joint project. The rooms were furnished inexpensively, the yard was sodded and planted with shrubs, a garden was planted, and the back yard was equipped with homemade merry-go-round, see-saw, balance board, and other things dear to the heart of a growing child.

One room in the house, which was planned for the 15-year-old girl of the hypothetical family, was furnished entirely with refinished furniture and articles made from dyed flour sacks. A home demonstration club, which had been working on a room-improvement project, undertook the furnishing of this room. Rugs were braided, and seat covers, curtains for the windows, curtains for the dressing table, and all accessories were made from feed bags or flour sacks. Even the dresses, aprons, and shoe bag hanging in the closet were made from sacks.

Influence of This House

Although this demonstration house was furnished in April, 1929, its influence still is being felt in extension work. Just recently 15 farm homes in Knox County were visited by Miss Keller and scored for a girls' room-improvement contest. Twelve of the fifteen rooms were done over in a color scheme of yellow and green—the colors used in the "room that sacks built" in the demonstration house. Several dressing tables and bedside tables were made exactly like the furniture displayed during Better Homes Week. In addition to this illustration, Miss Keller reports that playground equipment, rugs, curtains, lamps, pillows, and other articles have been made by rural people who visited the little house, so that, although it was dismantled many months ago, it continues to "carry on."

Extension workers might now plan to have a county tour or a demonstration home during Better Homes Week, April 26 through May 2, 1931.

Joins Iowa Staff

Fannie R. Buchanan, who has given music-appreciation work on extension programs in many States during recent years, has been appointed assistant in rural organization for the Iowa Extension Service, with headquarters at Ames. While on the staff of a well-known sound-recording company, Miss Buchanan collaborated with Rena M. Parish in writing for 4-H club members A Ploughing Song, Dreaming, and A Song of Health. These three songs are among those which are available as film strips and lantern-slide series from the Office of Cooperative Extension Work, Washington, D. C.

Iowa Agents Plan Work

The systematic planning of their work for 1931 brought together practically all the Iowa county agents during December in a series of nine district conferences, reports Murl McDonald, assistant director of Iowa Extension Service.

The work of a county agent in Iowa involves from 30 to 40 different project activities and the use of about as many distinct extension means or methods. Systematic selection of the most effective means best adapted for use in each project was carefully considered to meet the increased demands upon the time of agents. This planning or budgeting of time is similar to that recommended to farmers. It is a case of a county agent planning his job or the job will soon be pushing him.

This was the second successive year that the program-calendaring conferences have been conducted. Each of the groups consisted of from 10 to 12 agents. The discussion opened with the listing of all extension means on a blackboard. The means used in one of their most intensive projects were checked on this list. Later a chart was displayed giving a complete list of extension methods.

The next step was to indicate the factors to be considered in determining what means or methods should be used in conducting a project. The following were mentioned:

Goal to be reached.
Need or interest in project.
Stage of development of project—previous methods used.
Time of agent available.
Cost and available funds.
Help available—specialists and leaders.
Office facilities.
Nature of project—type of work.
Seasonal conditions.
Territory to be covered.
Number and character of people to be reached.
Training of agent.
Results contemplated.
Effectiveness of different means.

A brief discussion followed of methods to be utilized in checking results of project work, such as surveys, questionnaires and cards, reports through cooperators and leaders, show of hands or ballots in meetings, personal observations, visits, interviews, tours, census reports, and similar devices.

Each county agent was seated at a table and furnished with a large sheet ruled one way so as to provide two columns for each month and ruled crosswise to allow ample space for each major activity. The two columns for each month included one for writing in the work to be done on each project and a narrow space for indicating the number of days of the agent's time to be allotted to each activity.

A copy of this county program of work was used by the county agent in making up his calendar of work. In addition to this, he had a book of extension projects prepared by the State extension specialists showing the extension methods recommended, the specific work to be done, and the plans for the individual county.

A mimeographed booklet was furnished containing suggestions for calendar plans for each of several major projects. This included an outline of extension activities by months on a few projects as actually carried out in individual counties during 1930. Sample calendars prepared and used by some of the county agents covering all projects in their counties during 1930 were also exhibited. These calendars had been used as a means of checking progress of work during the year. A list of the dates of such events as farmers' week, the State fair, and the junior short course were furnished the agents for reference.

A preliminary draft of the program calendar was prepared at the conference by each county agent for his county, to be typed or printed and posted in the county agent's office for use during the year.

Commenting on this program making by Iowa county agents, H. W. Gilbertson, Office of Cooperative Extension Work, says:

> The calendar will be useless if merely prepared and rolled up or stuck away in a desk. Posted on the office wall it indicates a busy agent and a useful county extension organization. It is helpful in portraying the span of work. It should convince anyone, including officers, directors, and leaders that the agent is busy the year round and the program is more than a 1-man job. It serves as a basis for checking results. It is efficient planning.

Cooperative Conference

At the fifth annual cooperative conference held at the Pennsylvania State College, November 20–22, 1930, the following topics were discussed: Credit extensions and collections, membership problems, plans of the Federal Farm Board for the Northeastern States, marketing plans of the Grange League Federation, and management responsibilities. Approximately 125 members of coperatives attended.

H. N. Reist, extension agricultural economist in Pennsylvania, reports that representatives of the extension division assist most of the active cooperatives of the State in setting up accounting systems; with instruction in bookkeeping, assistance in auditing, instruction in the interpretation and use of financial reports, and assistance with financial, business, and management problems.

In providing these services, the extension representatives come in contact with those cooperative organizations whose methods of extending credit and making collections, and of meeting membership problems are successful. Representatives of these organizations are asked to contribute to the conference.

Studies Made

During the past few years studies in credit extensions and membership problems have been made by research workers in the college department of agricultural economics. The results of these studies are presented at the annual conference. Requests for this type of information by local cooperatives are handled by extension specialists.

The work of the extension representative reveals problems of management and at the conference he discusses the most general of these problems.

Home-Economics Posters

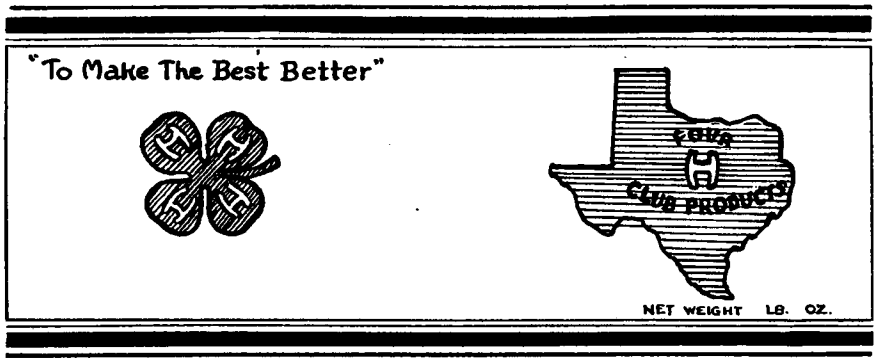
A series of eight new home-economics posters is now available for the use of home demonstration workers, home-economics extension specialists, local leaders, and others. They were prepared by the Office of Cooperative Extension Work in cooperation with the Bureau of Home Economics, and cover the following subjects: Self-help bibs, self-help suits for little boys, children's play suits, aid in window curtaining, home baking, savory meat dishes, egg dishes and ice creams, and home canning of fruits and vegetables.

The posters contain from 6 to 12 small pictures each, with explanatory legends, which illustrate the important points of the subject. They were designed for extension workers who wish to use illustrative material in their work, and will be found particularly helpful at conferences and group meetings and for exhibits.

The posters are not available for free distribution, but may be purchased either as photographic prints, size 8 by 10 inches, or as bromide enlargements, size 16 by 20 inches. The 8 by 10 inch size sells for 9 cents each and the 16 by 20 inch enlargement, mounted on cloth, sells for $2 each. Larger sizes can also be obtained at proportionately higher prices, which will be furnished upon request. Purchase orders for the posters should be sent to the Office of Cooperative Extension Work, United States Department of Agriculture, Washington, D. C.

Home Industries in Texas

PROCEEDING on the idea that marketing surplus products is one major farm problem and quality production another, an extension service specialist in home industries was appointed in Texas according to M. F. Cunningham, associate extension editor in Texas. This specialist had a commission to work with the county home demonstration agents in obtaining demonstrators and developing production processes and marketing methods. The work was found to be of so much value that another specialist in the same line was added in October, 1930, and a division of the field was made. Mamie Lee Hayden, the first appointee, was given the work with fruits, nuts, textiles, household furnishings, cakes, puddings, and candies, and Zetha McInnis, the new specialist, was given the work with meats, vegetables, cereals, and dairy and poultry products.



This label helps to standardize products of home industries in Texas

Demonstrators Obtained

The first step in the work was to find demonstrators who would follow standardized recipes or methods, insuring that the product would always be of a certain quality. The second step was to help the demonstrator to market her product profitably and to prove to herself and her circle of acquaintances (which always included a few doubting Thomases) that there is a steady market for quality products. Women of ability, ambition, and persistence were sought as demonstrators, and their work was watched and guided through all of the experimental stages by the county home demonstration agents in consultation with the specialists. A few stories of demonstrators will illustrate the small beginnings and healthy growth of the work.

A Harris County woman sold 665 small containers of strawberry preserves at a profit of $55. She has added 1,700 strawberry plants to her patch, bought a canner and sealer, improved her kitchen, and plans to sell a great deal more in 1931.

Two sisters in Jack County have specialized in hand woven and braided articles. Working only in their spare time they have made a profit of approximately $75 apiece and have not been able to supply the demand for their rugs, couch covers, chair throws, scarfs, pillows, and braided silk mats. Three other women in the same county have taken up the same line of work.

A Hidalgo County woman has become an expert in designing, making, and selling leather purses, key rings, bill folds, and chair seats. Through the sale of these products she has added a bedroom for her two little girls, has arranged good storage facilities and bought a gasoline heater for the home, and has paid the taxes on 320 acres of land.

A Brazos County woman paid for the improvements of her living room, which she entered in the living-room contest, by the sale of her excellent noodles and doughnuts with the advice and help of the home agent of the county.

A Gray County woman, making a great profit on low-priced wheat in the Panhandle, canned and sold more than 400 containers of steamed whole wheat.

Three Milam County women have sold $529.75 worth of canned products, linens, and grape juice made from native grapes.

A Jefferson County woman has perfected a delicious crystallized fig. On that, and on fig jam and fig sweet pickle, she made a profit of $207 during the past season.

These examples could be multiplied indefinitely, but they are enough to show that no matter what are the resources of the county in which a demonstrator lives, she can turn them to a profit by standardizing her product and offering it for sale in an attractive way. In addition to standardizing recipes and furnishing lists of supplies and equipment needed, the specialists have designed and had made bottles, jugs, paper boxes, butter and egg cartons, labels, stickers, and tags for "dressing up" the homemade products and presenting them to the public in a style befitting their excellence.

The development of the home industries work has given many women on the farms of Texas an outlet for artistic and economic ability, and the use they have made of the money has been as interesting as how they made it. Improved homes and grounds, better equipment, some music, some books, some travel—all planned to be shared by the family as a whole—these things have shared the funds with grave necessities and family emergencies. The sense of successful achievement has lifted each demonstrator to a position, mentally as well as financially, from which she is better able to cope with the problems of her life as a whole, according to Miss Cunningham.

Idaho Rodent Control Work

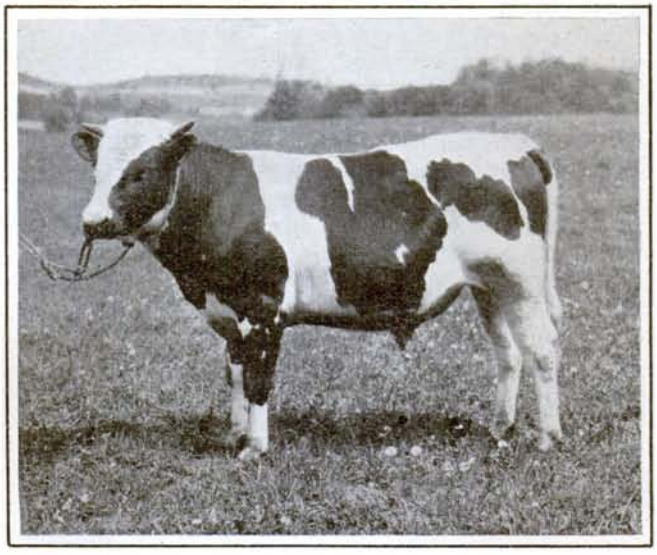
Rodent-control work was carried on in 40 of the 44 counties of Idaho during the fiscal year ending June 30, 1930, with unusual success, reports T. B. Murray, Idaho extension rodent-control leader.

The year's campaign extended over 2,140,300 acres of land, involved the distribution of 231,260 pounds of poisoned bait and cyanide, and cost all of the cooperating agencies $39,301.48. Twenty-seven county agents assisted in the work, and approximately 16,700 landowners, farmers, and livestock men cooperated in the drive to reduce losses caused by rodents. Since the drive was conducted on a state-wide basis, the poisoned bait was mixed at central stations and supplied to the cooperators practically at cost, which saved them about $19,000.

Mr. Murray states that, since the species of rodent pests in Idaho are not readily exterminated, their efforts are directed toward the most effective control over the greatest possible area at the smallest cost consistent with good supervision and thorough treatment. During the year campaigning was carried on against the ground squirrel, rock chuck, pocket gopher, jack rabbit, field mouse, porcupine, and magpie.

Watch the Background

The setting for this photograph is not only unsuited to the character of the story to be pictured, but the prominence of objects in the background presents conflicting elements which detract from the central point of interest



The farmyard or pasture provides an appropriate setting for this type of photograph. The distant rise of a landscape is also helpful in furnishing the necessary contrast

ALMOST important feature in taking photographs, and one that is all too commonly overlooked, is the background. The background plays an essential part in every picture. It has two functions: One is to show that the principal objects are located in their proper setting, and the other is to enhance, by contrast, the importance of the principal objects. The background that is least noticed in the picture is the most successful. It is true that the background furnishes just one more thing to think about when making a photograph, but it is one of those things that will mar or make the picture.

In taking a photograph, the setting should be carefully chosen. Select a quiet background, one that offers pleasing contrast with the main object of interest and which will set it off in its proper environment. Exclude from the view all elements that may set up competing attractions and thus may destroy the unity of the picture. Be careful also to note how the light falls on various objects. Too much light falling on the background and too little on the important elements of the scene may place the emphasis on a subordinate part of the composition. Where the background consists of trees, care should be taken that a large patch of sky does not show through the leaves. This would make an objectionable white spot on the picture that would draw the attention away from the central point of interest.

The point where the camera is to be placed should be selected only after some thought has been given to the background. Often, moving the camera a few feet to the left or to the right will eliminate from the field of view objects that would serve only to confuse the picture. Likewise, moving the camera closer to your subject may be helpful in keeping out extraneous matter.

Montana's Home Demonstration Handbook

A HANDBOOK which is designed to include information about which a new worker should know has been assembled for use in Montana. This information is used by the State home demonstration leader in conference with the new worker and thereafter becomes a source of information and a guide to the new worker.

The handbook is in mimeographed, loose-leaf form so that changes can easily be made as need arises. The table of contents is as follows:

Legal Authority for Cooperative Extension Work.

List of Extension Workers, United States Department of Agriculture.

Members of the Montana Extension Staff.

Preparation and Qualifications of Home Demonstration Agents.

List of Information Every Agent Should Know About Her County.

Office Organization.

Office Supplies.

The Aim of Home Demonstration Work.

Programs and Projects.

4-H Clubs.

Home Demonstration Clubs.

Agent's Calendar of Work.

Leaders' Training Schools.

Reports.

Finances and Expense Accounts.

Bulletins and Mimeographed Material.

Illustrative Material and Equipment.

Annual Extension Workers' Conference.

Farm and Home Week.

Publicity.

Annual Leave.

Resignations.

Warning Regarding Political Participation.

Instruction for Use of Franking Privilege.

Benefits of Compensation Act.

Extension Workers' Code.

PICTURES WORK FOR YOU

Film Strips Will Do the Job

Have you not often wished for pictures that would illustrate and strengthen the points made in your talks—that would furnish positive local evidence of the practical nature of your recommendations? ~ ~ Have you not felt a need for a series of illustrations in convenient form for use at meetings, in the office, or during your farm and home visits? ~ ~ Your own photographs are best. They show how farmers in *your* county have solved their farm problems, how farm women have successfully introduced new methods. Such photographs are convincing. ~ ~ The film strip offers a practical way of showing such pictures. Film strips are easy to organize and inexpensive. They are a distinct help in extension teaching. ~ ~ Here are the titles of a few localized film strips recently prepared for use by county extension workers. A complete list of such localized film strips will be sent upon request.

Agents wishing to review any of these film strips may borrow them. Information will also be supplied about the cost of film strips and method of organizing the illustrative material for film-strip production.

OFFICE OF COOPERATIVE EXTENSION WORK
EXTENSION SERVICE, UNITED STATES DEPARTMENT OF AGRICULTURE
WASHINGTON, D. C.

The farmer who is to prosper must have capital. Only the prosperous can really meet the demands of the consumer. In farming, as in every other kind of honest business, the only proper basis of success is benefit to both buyer and seller, producer and consumer.

THEODORE ROOSEVELT.

U. S. GOVERNMENT PRINTING OFFICE: 1931

Extension Service Review

VOL. 2, NO. 4 APRIL, 1931

THE HOME GARDEN MAKES FOR ECONOMY AND HEALTH

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

The EXTENSION SERVICE REVIEW is the official organ of the Extension Service of the Department of Agriculture. It is issued monthly throughout the year. The subscription price is 50 cents a year. All subscriptions should be sent direct to the Superintendent of Documents, United States Government Printing Office, Washington, D. C. Single copies may be obtained at a price of 5 cents each. For postage to countries that do not recognize the United States mailing frank, 25 cents a year should be added. Remittances should be made to the Superintendent of Documents by coupon, postal money order, express order, or New York draft. Remittance in currency will be at the sender's risk. Postage stamps, coins defaced or worn smooth, foreign money, and uncertified checks will not be accepted.

CERTIFICATE.—By direction of the Secretary of Agriculture, the matter contained herein is published as administrative information and is required for the proper transaction of the public business

Extension Service Review

VOL. 2 WASHINGTON, D. C., APRIL, 1931 NO. 4

Land Utilization in Wisconsin

K. L. HATCH

Associate Director, Wisconsin Extension Service

WISCONSIN has a group of counties in the northern part of the State which like many counties in other States are vexed with the problems of tax delinquency. The reason is simple. The taxation policy followed in this area forced the cutting of timber. When the plow failed to follow the ax, the owners of this land became unable or unwilling to pay the taxes assessed against it.

The default of taxes in this cut-over land—much of it suitable for farming—shifted the tax burden to the farms and villages in these counties. The failure to collect taxes on this land left the counties with unbalanced budgets.

Manifestly, something had to be done. Since each of these counties had county agents who were giving their attention to farm problems and the development of agricultural lands, county boards turned to them for assistance and leadership. But not more than 10 per cent of the land area in this part of the State is in farms. What could be done with and for the remaining 90 per cent?

The first step evidently was to take an inventory of assets and liabilities—a sort of an emergency land survey to find for this land its most productive immediate use.

Agents Conducting Surveys

At the request of the several county boards, county agents have assumed local leadership in the conduct of these surveys. The effort has been made to get at the basic facts necessary to an understanding of the real problem and to suggest ways and means of meeting the conditions confronting these counties.

These studies were made by people already on the public pay roll. Hence little, if any, new funds were required. Public officials all gave unstintingly of their time in this effort to render high-quality public service. County officers, college specialists, the State department of agriculture and markets, the State soil survey, the conservation commission and the department of public instruction, all united their efforts. Could money be saved on roads and schools and on other items of local and county government? What were the sources of funds for public use? Where are these delinquent lands? If at present, because of location, these lands are unsuitable for farming, can they be put to some other use, such as forestry and recreation?

These are type questions for which answers were sought. Surveys of three counties, after the plan briefly suggested, have already been made and published, and two more will soon be finished.

Five specific suggestions were made in the first survey published, that of Marinette County:

1. County board should at an early date take action to enable a referendum vote to be held on the subject of organizing a county forest under the provision of the new forest tax law.

2. As soon as a favorable referendum vote is secured, county board should make application to place selected areas under forest crop law and begin the development of a definite county forest program.

The development of a county forest will naturally have to be made, in part at least, on lands that fall into the hands of the county, but an effectively handled forest will necessarily have to be "blocked up." Some lands will need to be purchased or exchanged to consolidate the body of growing timber so it can be wisely and intelligently managed.

Under the Wisconsin forest crop law, it is possible for the county to secure annual State aid to the extent of 10 cents per acre. This will yield a sum on the basis of existing acreage that will materially exceed that heretofore derived from taxation on these delinquent lands.

3. A county unit school system in Marinette County could undoubtedly do more in adjusting school enrollment and costs than any other agency.

The economical and efficient management of schools might be greatly promoted through the county unit system, doing away with existing districts as they now stand.

4. Consolidation of such areas (townships) is worth consideration.

Some of the towns in Marinette County have so low a valuation that the cost of government is relatively out of all proportion to the taxes actually raised.

5. The county board might authorize arrangements, on a voluntary basis at least, for exchanges in farm holdings from the scattered locations to more suitable farm areas.

No Planned Development

The countryside, like the city, has simply grown without any thought of planned development. In the earlier days of settlement, before the advent of systematic colonization efforts, the location of settlers was sometimes widely scattered.

The insistence of such pioneer settlers on roads and schools that would make their farms more readily accessible to such necessities has often imposed on town governments large expense for the small number of farms served.

Within a year from the date of publication of these "suggestions," all of them, except No. 3, had been acted upon favorably by the Marinette County Board.

This type of survey is avowedly one of an emergency character. The county officials appeal to the extension forces to evaluate the assets and liabilities of the county in a manner somewhat similar to that performed by an auditing company for any commercial organization. The service which the extension forces can render is that of fact-finding and fact-analysis. The application of these facts, must, of course, rest with the county itself.

Time only is the "acid test" of the wisdom of such action and the quality of service rendered by the public agencies who participated in this work.

43947—31

Summer Courses for Extension Workers

IN response to the demands for the professional improvement of extension workers, at least five State agricultural colleges are offering in their regular 1931 summer sessions graduate courses in extension work. Members of the Office of Cooperative Extension Work are planning to teach in the following States: Robert G. Foster, New York; H. W. Hochbaum, Colorado and Utah; Mary Rokahr, Wisconsin and Oregon; and M. C. Wilson, Wisconsin.

University of Wisconsin

The following courses especially prepared for extension workers will be given at the University of Wisconsin, Madison, Wis., June 29 to August 7: Extension methods, presented by M. C. Wilson; applied extension methods, W. W. Clark; administration and supervision of extension, M. C. Wilson and W. W. Clark; problems in home economics extension, Mary A. Rokahr and M. C. Wilson; extension research, M. C. Wilson and W. W. Clark; and writing for extension workers, W. A. Sumner.

Other courses especially suited to extension workers are: Rural social organizations, E. L. Kirkpatrick; outlines of land economics, B. H. Hibbard; and cooperative marketing, M. A. Schaars. In addition to the regular courses, definite provisions have been made for qualified graduate students to undertake extension research and prepare their theses in the field of extension education.

Cornell University

Five courses at the Cornell University summer session, Ithaca, N. Y., are being given expressly for extension workers. They are: Philosophy of education for extension workers, T. H. Eaton; farm management for extension workers, V. B. Hart; procedure in clothing projects for extension workers, Bessie C. McDermand; rural leadership, Robert G. Foster (particular reference will be given to the training of leaders by extension workers); and methods in extension work—three 2-week units, i. e., public speaking for extension workers, G. E. Peabody; use of the press in extension work, Bristow Adams; and method demonstrations and result demonstrations in extension work, F. G. Behrends.

In addition to these courses for extension workers, the university is offering courses of direct interest to extension workers, such as, the family, Robert G. Foster, and psychology for students of education, Paul J. Kruse, T. L. Bayne, and A. L. Winsor.

State Agricultural College of Colorado

A short, intensive 3-week training session, from June 13 to July 3, will be given in the graduate school of the Colorado State Agricultural College for the extension workers in that State. The courses offered cover basic and advanced work in methods in extension teaching, adult education, economics, and teaching. Registration for graduate courses totaling four credits is permitted.

H. W. Hochbaum will give the work in methods in extension teaching.

Agricultural College of Utah

The summer school work at the Agricultural College of Utah, Logan, Utah, will include a 2-week unit course on methods in extension work. This course is open only to actual extension workers and will be given by H. W. Hochbaum, from July 6 to July 18.

Oregon Agricultural College

The Oregon Agricultural College, Corvallis, Oreg., among other courses, will offer in its summer session this year methods in home economics extension, presented by Claribel Nye, and extension methods in home management, Mary Rokahr. The purposes of the latter course are to acquaint the students with the most successful pieces of work being undertaken in the field of home management and to give them some experience in the different techniques being used.

All the courses mentioned in this article are regular college courses, and full credit is given for completed work. Most of the courses are open only to graduate students and some of them are open only to actual extension workers. Additional information about the summer school work at any of these universities may be obtained from the director of the summer sessions at the respective institutions.

Marketing Home Products in Illinois

Markets and exchanges for home products are reported to be unusually successful in Illinois. These markets give the farm women an opportunity to sell dairy and farm products, and baked, and other prepared foods at a fair profit. Some of the best work has been done in Adams and Champaign Counties.

The market for home products in Quincy, Adams County, was started in 1927 as a part of the home demonstration work and is now a thriving enterprise with about 40 women regularly selling there. The market equipment includes scales, a refrigerator, a cash register, an adding machine, shopping baskets, and glass-inclosed cases for displaying such foods as cakes, salads, and meats, in compliance with the State pure-food laws. This market has a standards committee which advises the women when improvement in quality is needed and how this improvement may be attained. Each kind of produce is placed on a separate counter. The chairman assigns a counter to each woman where she clerks throughout the day. This arrangement does away with competition among cooperators. Operating expenses and the cost of equipment are met by charging the women who do the selling at the market a commission of 10 per cent on their goods sold and charging those who do not work at the market 15 per cent. The market is open from 10 a. m. to about 4.30 p. m. on Wednesday and Saturday and in the average week sells about $400 worth of goods. The prices charged are approximately the same as those charged in the local stores for goods of similar quality.

In Champaign County the local home bureau sponsors a cooperative market and a community kitchen. Last year about 46 families contributed foodstuffs to the cooperative market which netted $28,667.78. The standards of this market have been improved by the concerted efforts of the contributors, the farm and home-bureau market committee, and especially the food specialist. The community-kitchen products are sold through local merchants, who charge a commission for their services.

Arkansas Rural Communities Beautified

CONNIE J. BONSLAGEL
State Home Demonstration Agent,
Arkansas Extension Service

One Arkansas farm home that was beautified. Underpinning has been added since this picture was taken. Shrubs were too small to show well. At the right is the same home before improvements were made

TWENTY-FIVE rural communities in Arkansas have been beautified as a part of the 1930 home demonstration pragram. Twenty-one of the twenty-five continued their program of improvement throughout the year and sent in reports illustrated with before and after pictures. Four communities discontinued work because of the prolonged drought during the summer. Landscaping and other improvements were accomplished at 21 of the 29 rural schools and at 24 of the 27 rural churches. Some of the buildings were moved and remodeled and others replaced with modern buildings. A total of 694 farm home grounds were planted in the 21 communities, an average of 33 homes to each community and approximately 46 per cent of all the homes, white and colored.

Center Hill community, in Greene County, working under the supervision of Mrs. R. B. Rogers, county home demonstration agent, and Mrs. Frank Fogle, chairman of the local committee, made the highest record with a score of 266 out of a possible 326 points. Center Hill is a community of 26 white homes on United States Highway No. 25. Every one of the 26 homes was landscaped according to plans made by the home demonstration agent and the local committee. All woodpiles were moved to the back and neatly stacked, 22 of the 26 homes were freshly painted, and many improvements such as underpinning of houses with native stones, building new steps, repairing porches, reroofing, and remodeling in general were made. One new home was built. Both churches, the school, and the community store and filling station were painted and repaired, and the grounds were graded, sodded, and planted with native shrubs and trees and some nursery stock. Gravel drives and stone steps were added as an approach to the school and to one church. Both cemeteries were thoroughly cleaned of deadwood, weeds, and underbrush, and were sodded and planted.

Two large hollows made by excavating necessary to the construction of the highway were graded, sodded, and planted. An attractive filling station was erected on one and a tourist camp, of which any community might be proud, on the other.

Every foot of highway and crossroads in Center Hill is kept thoroughly cleared of trash and weed growths. No special highway plantings were made this year, but the naturally beautiful shrubs, trees, and flowers which abound in the woods of Arkansas were given every chance to show up at their best. Twenty-three of the twenty-six families in the community have subscribed to a monthly magazine devoted to home improvement and gardens; five have placed the name of their farm on an attractive sign near the entrance to the grounds.

A tour in which a large number of people from the county participated visited Center Hill community as a part of the Greene County better homes program for 1930, Greene County receiving honorable mention in the National Better Homes contest.

All citizens of Greene County take great pride in the accomplishments of Center Hill. Truck loads of plants were donated by the people of Paragould for landscaping public and community buildings.

Quinn community in Union County, the county which won first place in the National Better Homes contest in 1930, also made remarkable improvements. While Center Hill won the silver cup and $50 worth of shrubs offered as first prize by the Arkansas Farmer, and the cash prize offered by Mrs. J. W. Velvin, chairman of the American home department of the Arkansas Federation of Women's Clubs, for greatest improvement in home grounds, Quinn, under the leadership of Mrs. Myrtle Watson, county home demonstration agent and county better homes chairman, and Mrs. H. L. McMurrain, local chairman, won second. Massard in North Sebastian, with Miss Ruth Fairbairn as county home demonstration agent, and Mrs. Joe Lee, committee chairman, won third; Rosston in Nevada County, Miss Sue Marshall, home demonstration agent, and Mrs. T. J. Mendenhall, committee chairman, won fourth.

Every community has signified its determination to continue its program through 1932. The program is a 5-year program. The 21 communities which were entered this year will compete among themselves for honors in the second-year group. Each county can enter one new community for 1931. The county council of home demonstration clubs and the home demonstration agent decides on the community when more than one asks to be selected. Many applications are already in. With county home demonstration agents employed in 64 of the 75 counties in Arkansas, it looks as if the extension specialist in horticulture, who included the community landscaping demonstration in his plan of work, will have a busy year.

Production of Small Seed in Oregon

ONE CLASS of crops to which Oregon is particularly adapted is small seed, says F. L. Ballard, State county agent leader. Every year importation of small seed into the United States assumes large proportions. The volume varies so greatly from year to year that it can be indicated only indistinctly by averages. The average over a recent period of years, however, is slightly over 38,000,000 pounds.

A factor particularly favorable to small-seed production is transportation. On the average the freight will consume only about 5 per cent of a small-seed crop such as clover or alfalfa. When this is compared with 25 per cent or more, year in and year out, in the case of grain, 50 per cent of the value of hay and 20 to 50 per cent for fruit, this basic advantage becomes very clear.

Oregon county agents have for four or five years been giving increasing attention to small seed because of the basic reasons above outlined. Marked progress has been made in increasing the volume of small seed produced by calling attention of a great many farmers to the facts surrounding the industry.

The recent tariff is very favorable to a wider adaptation of small-seed projects. Rates are doubled on a number of the seeds grown exceptionally well in Oregon, including the clovers and alfalfa. Lesser increases prevail on hairy vetch, other vetches, and ryegrass.

Value of Small Seed

The annual value of small seed in the State is approximately $1,700,000 already, according to recent estimates of E. R. Jackman, extension agronomist. The clovers, particularly the alsike and red varieties, offer the most promising future of all the crops now being harvested for seed in Oregon, he states. The tariff on these clovers has been raised from 4 to 8 cents per pound. For these, the Willamette Valley has been the main producing area and still is.

In order to improve the demand for seed from this region, which has been found in extensive trials in the East to be somewhat lacking in winter hardiness, county agents in the Willamette Valley counties are assisting in the distribution, certification, and plans for ultimate marketing of more hardy varieties than are now grown. Central Oregon is making remarkable progress, however, in clover-seed production. The first demonstrations there were established in 1919 when, through the efforts of the county agent, four clover fields were left to produce seed. Of these, two were red clover, one alsike, and one sweetclover. Lack of adequate threshing equipment halted any expansion for a time, although good yields were obtained from the demonstration fields. Three years later a field of alsike clover used as a demonstration produced 4 bushels per acre and may be said to be the start of the small-seed production industry in that region.

Through field tours, publicity in the papers, circular letters, and community meetings the results on early seed producing fields were brought to public attention and threshing equipment and cleaning machinery were installed. In 1929 the Ladino seed alone amounted to $14,000 while red and alsike clovers attained a value of $44,000. In 1926 the total clover crop brought less than the Ladino crop of 1929.

In Klamath, Lake, and Baker Counties clover-seed production is attracting attention and may be said to be in the early demonstration stage, or that stage of development in which the county agents are checking yields on the few fields grown and using the information obtained for promotion purposes.

Field Peas

County agents in Benton, Lane, Polk, Clackamas, and Washington Counties have been active in the distribution of seed of the Austrian winter field pea, a new crop in Oregon which in 1929 brought to farmers of the Willamette Valley, mainly in the counties named, more than $150,000. Under normal growing conditions this figure will be more than doubled in 1931. This new crop, which supplies seed for use in the Southern States, has proved remarkably successful, and the acreage has more than doubled each year. The crop is not assured of a permanent market and unlimited expansion, however, since its value depends upon the purchasing power of farmers in the Southeastern States. It is, nevertheless, a specialty of value and shows much promise for the future.

Grass Seed

With lawns and golf greens to insure a stable demand, and the tariff stepped up under the new law from 2 cents to 40 cents a pound, creeping bent grass is rapidly increasing in importance as a seed crop, particularly in the coast counties, according to Mr. Jackman, who states that some hundred thousand pounds were sold from Coos and Clatsop last year. This year unusually good yields of excellent seed were produced for the first time in Klamath County.

Western ryegrass now brings in an income of about $350,000 to the upper Willamette Valley counties. County agents are advocating that for additional plantings the English ryegrass, which commands a higher price, be used. Vetches grown for seed, including hairy, common, Hungarian, and purple, bring in at this time around $50,000 per year, and there is some opportunity for expansion of this item.

Though the State is an extensive producer of alfalfa seed, a few small districts are showing promise in this regard. Land of inferior quality along the Snake River in Malheur County is now producing alfalfa seed to the value of about $100 per acre. There are other minor specialties which can be grown with profit in limited areas. Among these are crimson clover and Reed's canary grass.

Pooling Exhibit Ideas

A fair exhibit contest with ribbons as awards and the assembly of usable ideas as the object is announced by the extension editors in Texas for the next agents' meeting during the farmers' short course at the Texas Agricultural and Mechanical College next summer. Working in cooperation with the staff exhibits committees, it is proposed to give county and home demonstration agents an opportunity to work out in miniature form fair booths that forcefully illustrate the results, accomplishments, and progress in one or more lines of local county demonstration work. The display of these exhibits will be in the front lobby of the main assembly hall where all the agents may inspect the work of the competitors and gather ideas for portraying their own demonstration results in the fall fairs.

In commenting on this contest O. B. Martin, director of Texas Extension Service, explained that "Fully one-twelfth of the time spent in extension work each year is devoted to fairs of some kind. Of the value of fairs to the people of Texas there can be no doubt, but as extension workers we probably have not availed ourselves enough as yet of the opportunity presented by fairs to make plain the results and meaning of local demonstrations. The contest simply represents an effort to pool good ideas for the further utilization of fairs to promote rural welfare."

Home Makers' Clubs

GRACE DE LONG
State Home Demonstration Leader,
North Dakota Extension Service

Handicraft hour at a rest camp

Recreation hour at a farm women's rest camp

THE North Dakota Agricultural College began its organized home-economics work by establishing local units first, known as home makers' clubs, placing them wherever 10 or more women wished to meet regularly to discuss home problems they had in common. Forty-seven home makers' clubs were organized during 1922, and the number has steadily increased. There are now 398, with a membership of 6,804. This number represents about one out of nine women in the 32 counties in which there are county workers. Records show that at least an equal number of nonmembers have been reached with definite help during the past year, through information passed on by members and project leaders. In counties having home demonstration agents the proportion of women reached is considerably higher, although the home demonstration agents are located in the more thickly populated counties.

From the beginning the home makers' clubs have been established as permanent organizations with a minimum of 10 members. With practically no exceptions they meet regularly every month and follow a definite program made out a year in advance.

The first programs covered a variety of topics on nutrition, clothing, home furnishing, poultry, gardening, and the like. Each leaflet contained a paper, not intended to be read aloud, but rather to form the basis for a talk to be given by the local program leader. Rather minute directions for an accompanying demonstration were included with each. These programs furnished the greatest part of the year's work, but they were supplemented by demonstrations given occasionally by specialists from the State office, or by the home demonstration agent.

The first attempt at leader training began in 1923, when one series of county-wide leaders' meetings was held. These were merely program conferences which had little value from the standpoint of giving subject matter, but which seemed at the time to be all one could hope for in the face of the current objection to driving the long distances required. Such travel involved a tremendous physical effort, as compared with present transportation facilities.

Projects Planned

In 1925 the first major projects were planned and the first monthly project leader training classes were held. Only a few counties accepted the plan at first, and not all the local clubs sent leaders to the training centers, the chief objections being the long distances to drive and doubt as to the ability of leaders to teach subject matter in a satisfactory way. Gradually, better travel facilities, continuous training of leaders, and a clearer understanding of extension objectives have made the project-leader method the accepted one in all counties that have agents.

Since 1927 county committees have been developed as a natural outgrowth of united effort in the county project. The present county council consists of the presidents, ex officio, of all local home makers' clubs. The council has only two regular meetings a year; one on the county achievement day to make final decision on the county project for the ensuing year, and the other in the late summer just before the fall training classes begin. Newly elected presidents are introduced at the meeting held in late summer, a chairman is elected, and a joint session is held with the new project leaders. The chief subject of discussion is the major project about to be undertaken, and ways and means of making it most effective in the county.

Sometimes all newly elected officers are invited, and interested club members as well. Such a meeting has been exceedingly helpful. It renews the enthusiasm of achievement day; gives an opportunity to clarify any misunderstanding about the responsibilities of officers, leaders, and specialists, and sends the local women home with renewed faith in the

soundness of the program they have chosen. The State home demonstration leader attends as many of these meetings as she can, for she feels that she needs this contact with local conditions and problems.

The home demonstration staff at present consists of 2 clothing specialists, 1 full-time and 1 one-fourth-time nutrition specialist, 1 home-management specialist, and 7 home demonstration agents. Assisting also are the extension engineer, who is doing excellent work in water-system installation, the poultry specialist, the extension forester, and the county extension agents who, without exception, give the finest cooperation and consider the home makers' clubs a most important and vital part of their county programs.

Major Projects

Major projects in progress are: The well-fed family, a general project on food selection and meal planning; nutrition-garden project, involving safe canning methods, vegetable storage, greater variety in vegetable cookery, and gardening methods including seed varieties and cultivation; sewing equipment and tailored finishes; clothing the family, which gives important information on the clothing budget, the efficient clothes closet, cleaning, renovation, and clothing accessories; kitchen improvement, including sorting and arranging equipment on hand, light, color, homemade equipment, and the service yard, supplemented by a special project on installation of water systems; and the living room, which deals with the problem of providing a comfortable and adequate place where family life may center.

The major project occupies six months of the club year. The rest of the club meetings are devoted to miscellaneous programs which serve the purposes of review of past projects, arousing interest in new projects, and offering opportunity for supplementary work and recreation. It is important that program material be furnished in order that the clubs may meet regularly the year round. Regular meetings mean sustained interest and alert membership.

Community Projects

Many home makers' clubs sponsor community projects such as owning or helping to maintain a clubhouse, community library, park, or skating rink. Nearly all are actively interested in promoting 4-H club work. Music appreciation is studied in connection with most major projects. Plays, picnics, and parties are common. The whole family attends county achievement day. Exhibit booths are planned and displayed by club members at county, State, and local fairs. Three 4-day camps for farm women were held last summer.

Local Programs

On the whole the home makers' club organization plan in North Dakota is quite elastic. The local program, based upon the local need, is the motivating force. All else hinges upon it. No office or committee is created until the women can see a definite need for it. Local clubs have equal votes in county council deliberations, and groups of leaders are permitted free choice of action between certain generous limits. More and more the program and organization are being placed in the hands of the women themselves. No club is organized by high-pressure salesmanship. Interest is aroused until the request comes from the community and until some local person is willing to assume responsibility for calling a group together to discuss organization with the home demonstration agent or county agent. There are no State or county membership fees. Membership is based wholly upon interest and regular attendance. Any member may withdraw by notifying the club president or secretary, and any club may discontinue home makers' club work by notifying the county or State office. As a matter of fact, few clubs withdraw and memberships are seldom dropped except for very good and obvious reasons. Twelve of the original 47 home makers' clubs are among the strongest in the State to-day.

Two women represent home makers' club work on the county farm and home advisory council.

So far there has been no open discussion of a State organization. Perhaps it will come later—perhaps not. There has been about a 30 per cent increase in the number of clubs each year since 1927. The plan of organization is flexible enough so that it can be adjusted to meet the changing needs of the general extension program of the State and to incorporate the best thought of the farm women of this and other States.

By thinning the 24-year-old shortleaf pine timber on one acre of abandoned farm land, a farmer in North Carolina netted $26.40 in addition to the costs of cutting, assembling, and delivering the wood. The 539 trees left standing will provide for two additional crops at intervals of about 9 years.

Thomas Bradlee

Thomas Bradlee, director of the Vermont Extension Service, died on February 21, 1931, at the University of Vermont from the effects of a cerebral hemorrhage. His untimely and sudden death is deeply regretted by all those who knew him.

He was born in Lewiston, N. Y., on October 9, 1885. After graduating from Cornell University and spending two years as a farm superintendent and instructor in agriculture at Smith's Agricultural School, he was appointed as the first director of the Vermont Extension Service on July 1, 1913.

Thomas Bradlee, who died February 21, 1931, after 17 years' service as director of extension in Vermont

For over 17 years he gave himself whole-heartedly to the service of extension work and rural people. When he was appointed director of the Vermont Extension Service, the system of agricultural extension work was unknown to the farmers and home makers and some of them were even skeptical of it. Director Bradlee's skillful, tactful, and untiring guidance has helped to establish the extension service as a vital part of agriculture in Vermont as well as in the entire United States. Under his leadership extension work in Vermont is now employing twenty times as many people and twenty times as much money as it did in 1913.

Thomas Bradlee—quiet, unassuming, uncomplaining, and yet resolute—will be especially missed by those who so frequently and so wisely called upon him for counsel.

Missouri Clover and Prosperity Program

A LONG-TIME program of soil improvement through the use of lime, barnyard manure, commercial fertilizer, erosion control, and a system of crop rotation including legumes every third or fourth year is the essence of Missouri's clover and prosperity campaign which is now in its eighth year, according to A. A. Jeffrey, Missouri extension editor.

When this campaign opened in 1923, a great deal of publicity was given to the unusual spectacle of the motor truck illustrated above carrying its slogan Clover and Prosperity on Every Farm and traveling over the State with speakers and exhibit material. Heralded by advance notices in the local papers, extension campaigners traveled by night and then in the early morning set up the exhibits, the ice-water barrel, and the seats for their audiences. The first year 36 all-day stands were made in 26 counties to demonstrate the principles of soil improvement and happier home life.

All-Day Meetings

At these meetings two speakers talked to the men and one talked to the home makers. C. E. Carter, crops specialist, spoke on the place of legumes in crop rotation and livestock feeding; P. F. Schowengerdt, soils specialist at that time, discussed the reasons for clover failures and the way to overcome them; and they both spoke on the relation of livestock to soil fertility, distribution of labor, and the permanence of a well-balanced farming system. Julia M. Rocheford, home-economics specialist, made the days interesting and profitable for the women.

This was the introductory phase of the campaign and it laid the foundation for the permanent organization of "clover and prosperity delegates" the following winter.

Clover and Prosperity Delegates

Starting in 1924 winter meetings have been held and built around school district delegates who are selected in each county by the county extension agent, the county court, and the local extension committee as offering the best actual or potential leadership for a long-time soils and crops campaign. These delegates are called clover and prosperity delegates.

In all-day meetings during the winter, the delegates, under the leadership of the soils and crops specialists and the county agent, analyze local soils and crops problems and then adopt a definite program for their solution.

During the seven years of campaigning, the truck tour has reached new counties each summer, and the delegates have continued to meet annually. As the eighth year of the campaign was entered in January, 1931, there were 10,500 clover and prosperity delegates covering 99 of the 114 counties in Missouri. These delegates are veterans since practically the same school district leaders are retained year after year. This year the annual clover and prosperity conference was held for the seventh time in 33 counties, the sixth time in 19 counties, the fifth time in 6 counties, the fourth time in 20 counties, the third time in 8 counties, and the second time in 13 counties.

In this campaign the Missouri specialists have addressed 92,400 persons in 96 counties at the truck meetings and have counseled with thousands of delegates on local problems and practical solutions.

This year the clover and prosperity program is being conducted by C. E. Carter, K. G. Harman, and I. P. Trotter, field crops specialists, and W. C. Shotwell and O. T. Coleman, soils specialists.

Effective Campaign

The results of this campaign are best shown by the following comparison of legume acreages for different years:

Legume acreages in Missouri

Legume	1920 (estimates)	1929	1930
Red clover	316,000	819,000	634,000
Soybeans	1,000	423,000	472,000
Alfalfa	73,000	169,000	147,000
Sweetclover	30,000	95,000	62,000
Total	420,000	1,506,000	1,315,000

C. E. Carter, Missouri agronomy specialist, attributes the declines for 1930 to drought conditions.

As another result of this campaign the use of limestone has increased. In 1919 only 9,020 tons of limestone was applied to Missouri soils, but in 1929, 236,896 tons was applied and in 1930, 223,400 tons, according to the reports of county agents and limestone producers This campaign is also influencing the use of high-grade fertilizers; only 191 of the 51,382 tons of fertilizer used in Missouri in 1930 was low-grade fertilizer.

Extension Service Review

Issued monthly by the EXTENSION SERVICE of the United States Department of Agriculture Washington, D. C.

The Extension Service Review is published in the interests of workers and cooperators of the Department of Agriculture engaged in extension activities. It contains official statements and other information necessary to the performance of their duties and is issued free to them by law. Others may obtain copies of the Review from the Superintendent of Documents, Government Printing Office, Washington, D. C., 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, Extension Work*
C. B. SMITH, *Chief, Office of Cooperative Extension Work*
J. W. HISCOX, *Chief, Office of Exhibits*
RAYMOND EVANS, *Chief, Office of Motion Pictures*

REUBEN BRIGHAM, *Editor*

APRIL, 1931

Summer Courses

A greater capacity for understanding facts and situations and for leadership during the distressing era that agriculture is now passing through, is the way Director J. Phil Campbell of Georgia, expresses what the forward-looking extension worker may gain from attending one of the several valuable summer courses offered extension workers for the coming summer. With the present increased stress on economic facts and situations in extension work, with many new developments in teaching methods, and with the marked changes in progress in the economic and social structure of country life, the extension worker who is ambitious to grow in competence and ability is not overlooking the opportunities for more rapid professional improvement afforded by these various courses.

Time for the systematic study of principles, methods, and problems relating to extension teaching in association with other ambitious and enthusiastic workers in his own field, an opportunity to reenforce his own store of facts, a chance to take a look at his job and study his situation away from the daily grind of contact with immediate and pressing practical problems—these are some of the things that the extension worker gains from attending a summer course. He returns to his work with new enthusiasm, fortified with new knowledge, and confident that wider opportunities and advancement are open to him. Not only he, but the people with whom he works, gain immeasurably from the increased competence and broadened outlook with which he returns from this refreshing experience.

Radio Aids

For more than a year and a half the United States Department of Agriculture has been cooperating with State agricultural colleges and the National Broadcasting Co. in broadcasting once each month a 4-H club radio program over a national network of 45 stations. Since August, 1929, 21 programs have been given in which 42 club boys and girls from 26 States have participated. In addition to these boys and girls, 17 members of the State extension staffs and 15 members of the department extension staff have contributed to the programs.

These programs have been addressed primarily to the boys and girls who are members of the 4-H clubs. At least one boy and one girl representing the best 4-H activities are scheduled for 5-minute talks on each program. Letters which have been received commenting on the broadcasts have influenced to a large degree the character of the programs. It has been learned, for instance, that it is well not to introduce too much subject matter in 4-H programs. The personal 4-H experiences of club members told by the members, themselves, seem to have distinct radio appeal. The club members' talks, which have been for the most part, timely, interesting, and vital discussions of outstanding 4-H achievements and unique features of club work, have been supplemented by inspirational talks from national, State, and county extension workers.

One of the most valuable and popular portions of the monthly programs has been that of the music and songs. This music has taken the form of a carefully planned and staged series of related compositions, such as are played and described in music-appreciation periods. The music played by the Marine Band under the leadership of Capt. Taylor Branson and announced, with notes on history of composers and compositions, by R. A. Turner, of the Department Extension Service, has had an enthusiastic reception.

In commenting on the 4-H radio programs Captain Branson said: "One of the most important radio activities of the United States Marine Band is that of furnishing music for the broadcast of the 4-H club farm and home hour sponsored by the Department of Agriculture. During our many trips throughout the United States we have heard numerous favorable comments on the success of this hour of broadcasting. The music appreciation period recently introduced is one that is destined to be of far-reaching effect, for the spirit of progress in the great art of music is constantly onward and upward, and the contribution of the 4-H clubs toward making America a music-loving nation is indeed a worthy appreciative effort. I desire to assure all the 4-H club members that the services of the United States Marine Band are at their disposal at all times."

Hundreds of thousands of persons all over the country have listened to these programs. Following each broadcast requests have come to the department from bankers, writers, teachers, and business men, from parents of prospective club members, as well as from other farm men and women, for more information about club work, its activities, its scope, its aims, and its results. This radio venture has aided immeasurably in bringing about a wider understanding of what farm boys and girls are accomplishing in the 4-H clubs.

The Home Garden

The home garden enters the growing season of 1931 strongly intrenched in the extension program of every State. The garden always makes an important contribution to the farm living. In times of financial stress or disaster it affords invaluable aid to the farm family. How to feed the family adequately? How to make lessened income stretch to meet family needs? How to keep the members of the family in good health? These questions the well managed garden helps to answer.

The garden is always a good starting point—a first resource when at the end of a bad year the farmer and his family face the new crop season. Out of the garden must come much of the living until the new crop is sold. Nor is it enough to encourage the planting of gardens by young and old. Extension workers, men and women can not do better this year than to urge insistently the growing of a good garden, and the cultivating, manuring, fertilizing, and weeding of it week in and week out through the entire season. Fresh vegetables in quantity and variety, a generous table, summer and winter, even in difficult times is what the well-tended home garden gives the farm family.

The purchase this spring of 50 carloads of garden seed by the Red Cross for distribution to farm families in the drought area as a rehabilitation measure of major importance gives further emphasis to the place of the home garden in any scheme of farm economy.

Economic Training for Extension Workers in Georgia

J. PHIL CAMPBELL

Director, Georgia Extension Service

DURING the 1930 farmers' week and marketing conference held at the Georgia State College of Agriculture, in January, a group of county and district agents requested that the marketing division of the college offer a course in marketing farm products which would meet the needs of extension workers in solving their problems in this field of activities.

These extension agents stated that more farmers were asking for assistance with their marketing problems than formerly, and that the growing complexity of marketing activities and agencies made it highly desirable for extension workers to have technical training in marketing farm products and the economic principles underlying this subject.

An outstanding fact apparent in the activities of agricultural extension workers during the last 10 years has been the increasing interest in economic phases of such work. This interest was at first focused on the individual farmer's business and then it spread to the business activities of groups of farmers.

Economic Undertakings

State and Federal educational agencies have been laying the foundation for service to farmers in economic undertakings through their research studies and their numerous lines of activity in giving practical service in marketing. The collection and publishing of dependable crop and livestock data followed by day-to-day market and price information, have become a necessary part of our business of marketing farm products. The setting up and use of standards for farm products, supported by adequate inspection service, lowers the hazards in rapid distribution and also lowers the cost of making transactions. The searching for accurate information about marketing agencies and methods has stimulated the setting up of new agencies for solving problems in marketing farm products.

The passing of the Federal marketing act with emphasis on cooperative marketing and stabilization has intensified this growing interest in and enlarging appreciation of the importance of economic facts in rounding out the programs of agricultural extension workers.

The demand for extension workers with a background of economic training or practical experience in marketing farm products, or both, has recently exceeded the supply. This supply and demand situation resulted from increased demand for workers with economic training and not from a decline in the supply of such people.

Training Needed

It has not been practicable to wait until the supply becomes adequate in the usual way. The need has been great. Undoubtedly, the extension workers visualized this need. They saw the problems of the day and knew what was needed in the nature of academic training to meet this pressing need. As they have had the close-up observations and much direct experience with farm business activities, they are in the favored position to study and apply whatever educational institutions are in position to offer as training to workers.

Having in mind the increasing number and complexity of marketing problems of farmers and also the desire on the part of farmers for the assistance of extension workers in solving these problems, the extension service in Georgia requested the Georgia State College of Agriculture, through its division of agricultural economics and marketing, to offer a course in marketing farm products to extension workers during the summer school of 1930 at the University of Georgia.

Course in Marketing

Following a conference of extension workers, administrative officers of the college, faculty members in charge of courses, and the head of the division of agricultural economics and marketing, it was decided to offer a graduate major in marketing farm products to extension workers who were in position to take such work. A course was divided into four parts; the first part devoted to marketing agencies; the second, to rural organization; the third, to price policies and trends; and the fourth, to commodity marketing studies. Each integral part of this course will be offered during one summer session—the first part having been given in the summer of 1930. In addition each student is required to materialize a thesis problem in the field.

Besides the usual systematic study and discussion of subject matter, the residence work consists of a series of cases related directly to the marketing problems of the students, and for each student, each summer, the selection, development, and presentation of a limited marketing problem. The presentation is made to the entire class by each student.

Seventeen extension workers took this course last summer. They included 5 district and State administration officers, 10 county agricultural agents, and 2 subject-matter specialists.

Thesis Problems Selected

All but one have selected their thesis problems. These problems are vital ones in the State and directly connected with extension activities as indicated by the statement of some of the titles, namely, An Analysis of Methods and Practices of Various Agencies Marketing Georgia Watermelons; Marketing Fruits and Vegetables in Atlanta; An Economic Study of Farm Market Commodities, Agencies, and Facilities in the Savannah Trade Territory; Cooperative Marketing of Sweetpotatoes; Cooperative Creameries and Other Agencies for Marketing Georgia Butter; Economic Changes in Distributing Fruits and Vegetables in the Atlanta Trade Territory; and Services Rendered in Cooperative Marketing of Cotton.

It is believed by the extension service of Georgia that the technical classroom work, the research necessary in meeting the requirements of academic cases and problems, and the stimulation to initiative and resourcefulness resulting from the thesis work will undoubtedly give to the students, who are in the first instance practical extension workers, a larger capacity for understanding economic facts and situations and a greater capacity for leadership during this distressing era that agriculture is now passing through.

Twenty-two potato clubs in St. Louis County, Minn., in February gave from their own club products more than 400 bushels of potatoes which were shipped to help people in Arkansas suffering from the drought last year. Those who gave so freely come from rather ordinary homes so far as wealth is concerned.

Colorado's Plan for Program Building

F. A. ANDERSON
Director, Colorado Extension Service

WITH the object of making Colorado's agricultural extension program more practical and of greater benefit to the farmers and farm women of the State, regional extension economists in farm management have been appointed to work with county agents, their leaders, and commodity specialists in preparing the county extension programs.

Under this plan it is proposed to make agricultural economics the basis of all extension work in Colorado, as the result of a conviction that only through a proper application of economic principles is it possible to accomplish our ultimate objectives, namely, more profitable farming and a more satisfactory standard of living on the farm.

Colorado's unusual topography, consisting of the Rocky Mountains, mesas, plateaus, valleys, and plains, has resulted in a natural division of the State into several distinct regions, each of which has its own peculiar agricultural problems.

It is necessary to meet the agricultural needs of such varying altitudes as 3,400 feet above sea level, found in the lower parts of the Arkansas Valley, on up to elevations of almost 10,000 feet in the Rockies. The difficulties confronting the dry-land farmers on the plains of eastern Colorado are, of course, decidedly different from those of the northern irrigated sections, the high-altitude farming regions or the fruit-growing country of the western slope.

Regional Extension Economists

To meet these diversified needs regional extension economists in farm management have been assigned to these various sections of the State. One such economist has been delegated to the plains country in eastern Colorado, another to the irrigated section of northern Colorado and the Arkansas Valley, a third to the western slope with headquarters in that territory, and still another is contemplated in the San Luis Valley and San Juan Basin, in southwestern Colorado.

These extension economists will work with county extension agents and also on their own initiative, thereby supplementing the work of the local agents in their respective regions. They will study economic facts related to agriculture and keep the agents and others fully informed regarding trends of production, consumption, prices, and market requirements.

They will have frequent and intimate contacts with members of the various departments at the Colorado Agricultural College, the Colorado Experiment Station, and the central office of the Colorado Extension Service, bringing to them more complete information regarding field activities, and, in turn, conveying to the agents important information from the departments of the institution. In other words, they will contribute effectively to a better understanding between all parties concerned in cooperative enterprises.

A farm management demonstrator has been employed by the extension service for many years, primarily for the purpose of conducting work in farm accounting, farm organization, and farm enterprise records. Obviously, a single individual can not do very intensive work in a State having an area of 103,658 square miles. The first requisite, therefore, is to provide adequate personnel to meet the situation, and this has been done by the employment of additional economists in farm management.

We are of the opinion that competent men trained in the economics of agriculture, working continuously with commodity specialists and county agents on the problems of their respective regions are the logical ones to work with the agents and specialists in the preparation of programs of extension work.

This plan of basing the extension program on sound agricultural economics is an outgrowth of the regional economic conferences which have been held in Colorado for several years. In some sections these conferences have been held for as many as five consecutive years.

4-H Club Judging Schools

THREE 4-H club judging schools were held at the agricultural college in Lincoln, Nebr., during the summer of 1930. Another district school was held at Kearney in the central part of the State and another of the same kind at Sidney, in western Nebraska, during August. The Kearney school was only for girls. All the others were for boys and girls.

The idea of having the schools originated in the summer of 1929 when many county extension agents and leaders came to the college in Lincoln at various times to practice judging on the college livestock and with the classes which the home-economics extension service could furnish. Rather than have some one around almost every day during the summer, L. I. Frisbie, the State club leader, and his assistants decided to offer three well-organized judging days.

The first school in June was elementary in nature. Specialists of the extension service taught the boys and girls how to judge classes of animals and products and even went so far as to help the leaders and agents to select the right kind of material to judge. Only a few of the more experienced boys and girls were called upon to give reasons for placings at this first judging day. Over 300 boys and girls and leaders attended.

The second judging day, in July, came during the busy harvest season which kept away most of the boys. The program represented a county fair or State fair contest in every respect except that no awards were made or placings summarized.

The August judging day was planned in such a way that several of the counties which had no county fair contests before the State fair could have an elimination contest and pick their county teams to compete at the State fair. Extension agents and leaders exchanged groups during the day and picked each others' judging teams.

The meeting at Sidney served the same purpose to western Nebraska boys and girls as the July and August meetings at Lincoln combined. The Kearney meeting made it possible for home demonstration agents in central Nebraska to choose their judging teams.

Only a limited amount of help with demonstrations was given. At the July and August meetings in Lincoln teams were asked to appear on the program to show the beginning club members how demonstrations are usually presented.

Field Comments

EDITOR, EXTENSION SERVICE REVIEW:

I noticed in the December issue of the Review an item about the survey which I carried on in Hampshire County in order to find out why boys and girls stay in club work over a long period of time. The source from which you got your information was badly misunderstood, as the reasons listed were in exactly the reverse order from the actual results obtained. This mistake was undoubtedly caused by the misunderstanding of figures.

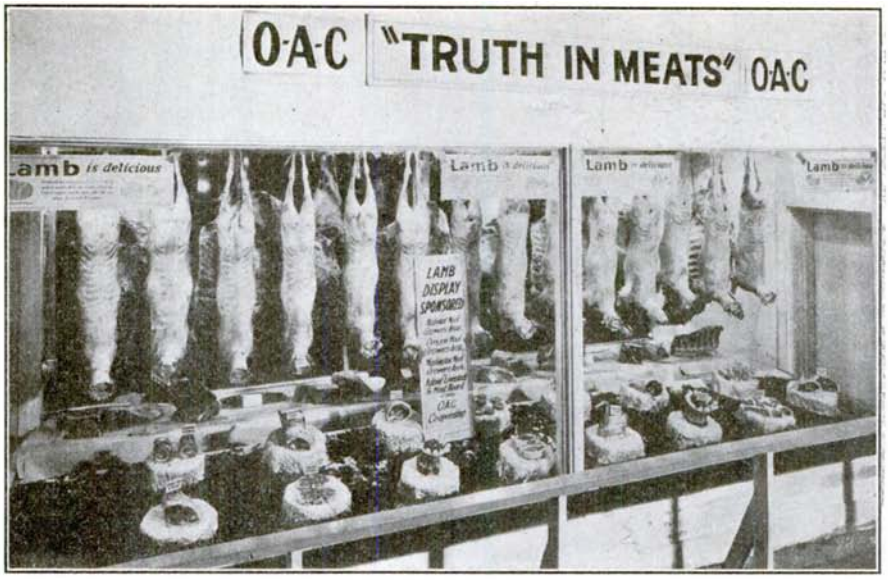
In sending out these questionnaires I listed 12 possible reasons why club members might continue as members for a long time. I asked the club members to decide for themselves which was the most important of the 12 and asked them to put the figure (1) beside that reason; then decide the second most important and put the figure (2) beside that; and so on down through the 12 reasons. Upon receiving the questionnaires I averaged them up and found the following results:

Their first choice was the opportunity to learn new things and the project work; second, they liked the experience gained; third, the encouragement received from their leader or club agent; fourth, the friendships made at camps and other meetings; fifth, the opportunity to make money; sixth, the inspiration received from being a 4-H club member; seventh, the opportunity to compete for cash prizes, cups, etc.; eighth, the interest gained from attending county or state-wide meetings; ninth, judging contests; tenth, training in leadership; and eleventh, the opportunity to compete for prize trips.

My reason for making this survey was to find out the relative importance of the various methods which we use in trying to hold the interest of the boys and girls.

Needless to say, I was very much surprised to learn that money and prize trips had very little to do with it; and the relative importance of friendships, camps, etc. However, as one boy put it, although money was not the important matter, he hoped that the opportunity to make money would remain open, especially to older boys.

HAROLD W. EASTMAN,
County Club Agent, Hampshire County, Mass.



A Truth in Meats exhibit shown at Oregon Fairs

Oregon Exhibit Teaches Meat Facts

ABOUT 60,000 housewives have been reached each year with the message of Truth in Meats through an exhibit, arranged for the past six years by the Oregon State Agricultural College, at the Pacific International Livestock Show at Portland. In addition to Portland the display has been shown at the State fair and fairs at Albany, Medford, Grants Pass, Eugene, and Gresham, five of the principal cities of the State.

The "truth in meats" work was started in 1925 because of a growing desire among consumers to know quality and cuts of meat. The Pacific International officials built a large cooler with the provision that the extension service would arrange an educational exhibit. The first year, live grades of beef cattle were shown as well as the grades and cuts of meat that came from the various grades. The meats on display were completely placarded so that the housewife could compare the grades and cuts in all details such as color and texture.

The same exhibit was repeated in 1926 but each year since then some new feature has been added. Lamb carcasses and cuts have been shown in addition to beef the last three years. In 1927 and 1928, a housewives' judging contest was held in connection with the exhibit. Four classes of cuts of beef were used and reasons for placings were required. Cuts of beef were given as prizes in the contest. Nearly 1,000 women tested their judgment in this contest in a single week.

In 1927, D. W. Hartzell, meat-cutting demonstrator of the National Livestock and Meat Board, gave cutting demonstrations at the exhibit and around the city of Portland during the week of the International. The first graded and stamped lamb carcass in the world was shown at the 1929 exhibit with W. C. Davis of the United States Bureau of Agricultural Economics, livestock and meat division, doing the stamping.

Recipe Books Distributed

As a follow-up for the exhibit, recipe books on the preparation of meat furnished by the National Livestock and Meat Board were passed out each year to all who stopped at the exhibit. This last fall, Miss Frances Clinton, of the Oregon Extension Service, was present to discuss with interested parties, meat selection, menus, and preparation of meats.

The subject matter for the "truth in meats" displays has been in charge of H. A. Lindgren, extension livestock specialist with U. S. Burt, exhibit specialist, arranging the exhibit. Cooperation at various times in supplying financial assistance, meats, and informational material has been given by the Oregon Cattle and Horse Raisers Association, the Oregon Wool Growers' Association, Swift & Co., the National Livestock and Meat Board, and the United States Department of Agriculture.

State champions of Wyoming, New Mexico, and Colorado attended the western 4-H club round-up at the National Western Livestock Show, January 17 to 24, 1930

4-H Club Round-up

THE 4-H club round-up at the National Western Livestock Show in Denver during the week of January 19 was attended by 45 State 4-H club champions and six local club leaders from Colorado, Wyoming, and New Mexico. These outstanding club members spent the week exhibiting their livestock, giving team demonstrations, participating in judging contests, and making tours throughout the city, reports C. W. Ferguson, Colorado State club agent.

Livestock Exhibits

Among the 4-H livestock exhibits there were classes for steer calves, individual fat steers, 10 head of fat steers from a county, fat barrows, and wethers. There were more entries in the club contests this year than in any previous year. For example, 11 calves were exhibited in 1926 but over 200 calves were exhibited in 1931. Although the 4-H club fat barrow class is a new one at this show, 42 head were exhibited.

The grand champion steer of the entire show was owned by a 15-year-old Japanese club boy, Masa Matsutani, of Paxton, Nebr. During the season the steer won $425 in prizes and after the show he was sold for $85 a hundredweight. The grand champion wether of the 4-H club class was exhibited by Margery Broad, of Fort Collins, Colo., and was sold at auction for $1.37 a pound, a cent a pound more than was brought by the grand champion wether of the show.

Contests were held for livestock, foods, clothing, home economics, and agricultural judging teams. The Colorado champion 4-H club agricultural demonstration team gave a demonstration on milk testing at the show.

Throughout the round-up the boys and girls made their headquarters at a large hotel. Here a special dining room was allotted to them which permitted them to dine, get together and sing as a group.

Report of Negro Summer Schools Published

The report of the three special summer schools for negro extension agents which were held at Orangeburg, S. C., Nashville, Tenn., and Prairie View, Tex., August 4 to 30, 1930, has been published by the Julius Rosenwald Fund.

This 64-page illustrated report covers the need for the schools, their origin, the teaching personnel, the courses offered, the content of several courses, the agents attending, the effect of this training on the extension workers, and the cooperating agencies.

The three schools were conducted under the direction of the Office of Cooperative Extension Work in cooperation with the State extension services of the Southern States, and were partly financed by the Julius Rosenwald Fund.

E. H. Shinn, of the Office of Cooperative Extension Work, prepared the report. Helpful suggestions on the form of the report and its contents were offered by J. A. Evans and Mrs. Ola Powell Malcolm, both of the Office of Cooperative Extension Work; B. F. Hubert, of the Georgia State Industrial College, and Arthur Raper, of the interracial commission. Copies of the report may be obtained from the Julius Rosenwald Fund, 900 South Homan Avenue, Chicago, Ill.

The trustees of the Julius Rosenwald Fund have appropriated $15,000 for two similar schools in 1931 and $12,000 for two others in 1932. The schools this year will be held at the Virginia State College for Negroes, Petersburg, Va., and at the Arkansas State College for Negroes, Pine Bluff, Ark., August 3 to 29, 1931. The work will be under the general supervision of Mr. Evans. Doctor Shinn will have active charge of directing the schools, and Mrs. Malcolm will assist in organizing and conducting them, with special attention to the women's work.

Large numbers of rats were exterminated in an extension campaign in Burlington County, N. J., during which the people prebaited by setting out unpoisoned fish, vegetables, and meat for several days. Later all set out their bait on the same night with fresh, powdered red squill added. Powdered red squill is not a poison, strictly speaking, but it makes rats feverish and thirsty and then kills them by affecting the heart. It has an objectionable taste to other animals; however, if they eat it, usually only vomiting follows.

NATIONAL 4-H CLUB RADIO PROGRAM

SATURDAY, MAY 2

Music from Russia, Norway, and Sweden will be featured in the National 4-H Music Achievement Test which will be broadcast on Saturday, May 2, as a part of the United States Department of Agriculture Farm and Home Hour and as a feature of the monthly 4-H club radio program. The following selections will be played by the United States Marine Band:

Song of the Volga Boatmen---------- *Folk song*
Flight of the Bumble Bee-- *Rimsky-Korsakow*
Selections from the "Nutcracker Suite"---------- *Tschaikowsky*
In the Hall of the Mountain King---------- *Grieg*
Norwegian Bridal Procession---------- *Grieg*
Swedish Wedding March---------- *Södermann*
Coronation March------ *Svendsen*

Maine and Alaska Appoint Directors

NEW directors have been appointed in Maine and Alaska as follows: Arthur L. Deering in Maine, and Ross L. Sheely in Alaska.

Arthur L. Deering

Ross L. Sheely

Arthur L. Deering became director of the Maine Extension Service on January 1, 1931, succeeding Dr. Leon S. Merrill, who resigned to give more time to his duties as dean of the college of agriculture.

Mr. Deering was born and reared on a large dairy farm at Denmark, Me., 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, Me., 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.

Ross L. Sheely was appointed assistant director of agriculture in the Extension Service of the Territory of Alaska effective April 1, and on July 1 he will become director of that extension service. Extension work was inaugurated in Alaska on July 1, 1930.

Mr. Sheely was born February 6, 1891, at Des Moines, Iowa. He was educated at the grammar schools in Osceola, Iowa, and Merino, Colo., at the high school in Fort Collins, Colo., and at the State Agricultural College of Colorado, where he received a bachelor of science degree in 1914.

He spent four years of his early manhood on his father's livestock ranch and after graduating from college he was part owner of a grain and sugar-beet farm. For five years before entering the extension service he owned a 4,000-acre cattle ranch. Since 1925 he has been a county agent in Wyoming.

Organization Aids Crop Improvement

The extension agronomy program in Virginia is receiving helpful cooperation from the Virginia Cooperative Improvement Association, according to W. D. Byrne, extension agronomist in that State. This association is composed of farmers, seedsmen, and others who are organized and incorporated under the State laws of Virginia, and cooperating with the State College of Agriculture in the production, distribution, and use of improved, high-yielding, weed-free, adapted seeds which have proved their value on experimental station farms and other farms under supervision. The association is the outgrowth of the former Virginia Corn Growers' Association, the reorganization taking place in 1921.

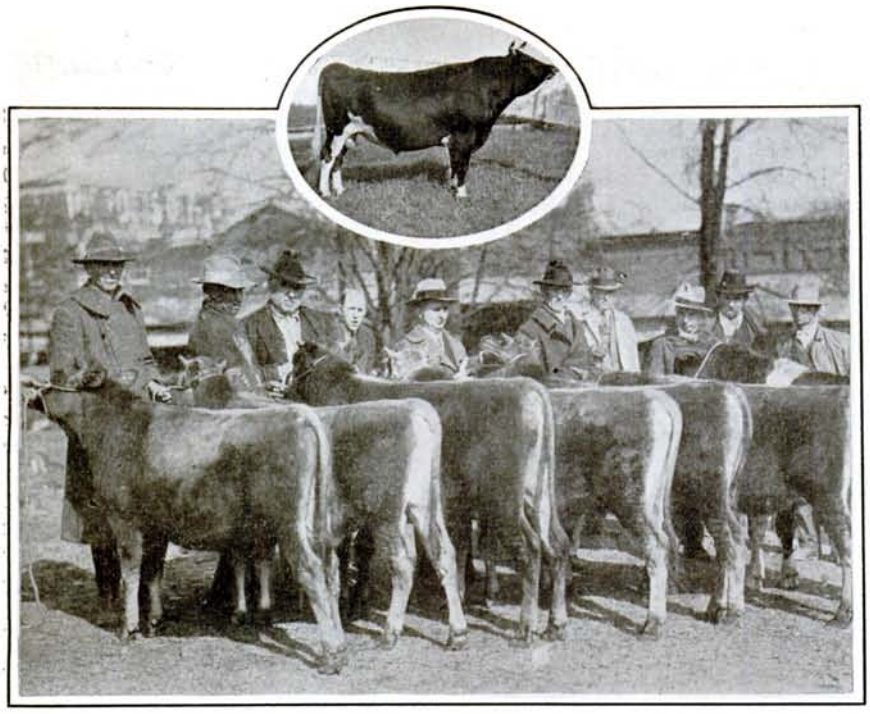
Mr. Byrne reports that the association not only makes it possible for farmers to obtain a premium for the seed they produce, but it makes available a large supply of quality seed which the average farmer can advantageously use in reducing the cost of production.

The seed produced by the members of the association is known as certified seed, after it has passed two inspections. The first, or field inspection, is made by a field agent of the association while the crop is growing. At this time the inspector determines the origin of the seed, the varietal mixture, the disease and noxious weed content, other crop mixtures, and vigor of the crop. Crops which pass the field inspection are eligible for the bin or final inspection which is also made by a representative of the association. This inspection is made after the seed has been cleaned and made ready for sale. It consists of examining the storage and general condition of the crop, and taking a representative sample of the seed. This sample is divided, one part being sent to the association for file, and the other to the State seed testing laboratory for analysis.

Seed Tested

At the laboratory after the seed is tested for germination, purity, weed seed, and other crop seed, a report is forwarded to the secretary of the association. If this inspection shows that the seed meets the minimum requirements for certification, the producer is furnished with a certificate in the form of official yellow tags properly filled out which give the results of both the field and the bin inspections. A sufficient number of additional tags are furnished on request so that one may be attached to each bag of certified seed sold. The growers are required to sign each tag, guaranteeing that the seed will come up to the standards set forth on the tag.

A survey, which was made by the agronomy department in 1928 and covered a 5-year period, showed that during this time the average yield of certified corn was 12½ bushels more per acre than the State average yield of corn, and that the average yield of certified wheat was 6 bushels more per acre than the State average. When it is realized that between 30,000 and 35,000 bushels of seed is certified each year the increases obtained with certified seed are no small item. That certified seed is gaining in prestige is illustrated by the fact that in 1928, 75 per cent of the seed produced passed through the regular commercial seed channels; in 1929, 80 per cent, and in 1930, over 85 per cent.



Some production bred bulls placed by the Attala County Development Association. (Inset) Xenias Sultan King, one of the bulls placed by this association, won first in his class at the Mississippi State Fair in 1929 and 1930.

A Successful Dairy Development Association

IN commenting on the beneficial activities of the Attala County Development Association, of Mississippi, which was formed in 1927 by the cooperative efforts of the local farmers, extension workers, business men, business organizations, bankers, and professional men, H. V. Cooper, secretary of the association, says: "Even in these depressed times there is no suffering among the farmers who have consistently followed the program recommended by the Attala County Development Association in cooperation with the State and county extension forces."

L. A. Higgins, Mississippi leader in extension dairying, says: "I had always considered the business people in Kosciusko, the county seat of Attala county, just about as dead a lot and as unconcerned a lot with reference to the agricultural development of their county as I had ever found anywhere. The town was an old, dilapidated, tumbled-down community; the business houses were unattractive; and there were no paved streets or appearance of civic pride of any kind.

"Since the organization of their development association, the business people of Kosciusko have been converted into about the most wide-awake and live lot of people I have to work with."

Sometime ago the local business men decided that in order to bring prosperity to their county they should do four things: First, organize themselves; second, correlate and unify all extension forces in the county; third, set up definite objectives and stick to the job until the objectives are attained; and fourth, since they live in an agricultural section in an agricultural State, give priority to farm problems.

After this decision was reached, the Attala County Development Association was organized in June, 1927, for the purpose of developing Attala County. The association decided that the wealth of the county was in its unexploited agricultural resources. It advocated a diversified farming program because the county has a mild climate and a soil adapted to growing a great variety of crops.

Service Rendered

Since the association was formed it has rendered real service to the county. One of its first projects was to campaign for better roads, and although there was not a single mile of hard-surfaced road in the county in 1927, there are now more than 450 miles of hard-surfaced roads leading to every part of the county. Advertising and educational campaigns have been conducted which have resulted in a recounting of the agricultural possibilities of the county and a better understanding between town and country.

This association has served the town people especially by morally and financially supporting the establishment of a fine water system, sewage disposal, well-paved streets, public library, and an athletic field.

Milk Condensary Located

Perhaps the greatest contribution of this association is its fostering of the dairy industry of the county. Four years ago, it was evident that a market for whole milk was essential for further growth in dairying and that a milk condensary would offer the best market for the whole milk. By private subscription, the business men raised $1,500 for taking a cow census in order that the possibilities of the county could be presented forcefully to the milk condensary companies. After negotiations with one of the larger companies (in competition with a dozen or more towns in Mississippi and other States) the business men succeeded in persuading the company to locate a plant in the county. The results of this piece of work are still paying dividends by bringing a steady income to the farmers, even during the present depression. This condensary has also helped the farmers by keeping a dairy expert in the county.

Dairy Industry Improved

Along with obtaining a market for whole milk, the association has succeeded in raising the quality of dairy herds. For three years a dairy specialist was employed by the association at a salary of $3,000 per annum. About 500 high-grade dairy cows and 52 Taft ranch bulls were bought by the association and sold to the farmers at or below cost, and approximately 300 scrub bulls were ushered out of the territory. School teachers, railroads, doctors, and lawyers, joined in the "bull campaigns."

Recognizing that the successful dairyman must not only feed intelligently but also grow his own feed, campaigns for growing feed have been conducted. About five carloads of vetch and soybeans were distributed without profit, and the farmers have been taught the value of good pasturage and how to obtain it.

The association has also been successful in promoting and establishing an annual dairy and poultry show, in bringing a stave mill to the community, and in sponsoring milk routes to the condensary.

The Attala County Development Association is composed of business men,

professional men, and farmers of the county who voluntarily pledge a yearly subscription to the association. These subscriptions are payable monthly and are the association's only source of income. The membership in Kosciusko, the county seat, has fluctuated from about 90 to 40 paying members or from about 90 per cent to 40 per cent of the business men in Kosciusko. Other sections of the county have supported the association slightly less, proportionately.

The real work of the association is done by the board of directors which meets every Monday night and consists of 15 members. The local county agricultural agent and the officers of the association are ex officio members of the board.

The association, in cooperation with the extension forces, is carrying on its development program through auxiliary organizations in each community. Members of the association are chosen as sponsors for each community club. These sponsors meet with their particular clubs and help the clubs in every way that they can. Likewise, in each community club there are key men on whom the association can rely for advice and assistance.

Local Leaders Helpful

Training schools for local home demonstration leaders have been very successful in Cherokee County, Iowa, according to N. May Larson, assistant State home demonstration leader in Iowa.

In carrying on this work, Miriam Griffith, Cherokee County home demonstration agent, deals with each of the 16 townships in her county as a unit. First, she holds a meeting of all the women in the township to help them get ready for the project. At this meeting the women nominate their township chairman, a township publicity chairman, and a district cooperator and local leader for each of the eight districts in the township.

Under the direction of Miss Larson each township chairman makes plans for all-day training schools for district cooperators and local leaders to receive instruction from the county home demonstration agent. In turn, these women pass on to the home makers in their districts the subject matter given at the training schools. The local leaders give most of the lessons to the women in half-day meetings, but sometimes they give the lessons in individual homes so that as many women in the district as possible will be reached.

Records on the number of lessons given and the number of women reached are kept and turned in to the township chairman, who gives them to the home demonstration agent. According to Miss Larson, the results of this organization and careful planning are that the reports are accurate and complete for the most part, and the attendance at the thraining schools is very good; in fact, it was perfect in one township.

Honeybees in Michigan Orchards

MICHIGAN fruit growers have realized the importance of cross-pollination and how to secure it as a result of a pollination project which was started there in 1928, according to H. D. Hootman, Michigan horticulture specialist. Although the fruit growers do not regard cross-pollination as a cure-all for the difficulties of orcharding, they do consider it as one of the necessary steps in the production of fruit, and each spring about 6,000 bee colonies are moved to Michigan orchards.

When the project was started three years ago, many growers believed that fruit trees were pollinated only by the wind, and few colonies of bees were placed in orchards to aid in distributing pollen. Now the growers understand that pollination is largely accomplished by insects, principally the honeybee.

A well-pollinated apple with a number of seeds and a poorly pollinated apple with few seeds

As many of the bee colonies in the fruit districts were diseased, fruit growers were reluctant to engage in beekeeping for pollination purposes, and commercial beekeepers did not care to move their colonies into fruit districts for the blossoming period. To remedy this situation, appropriations were obtained in fruit counties for foulbrood eradication work. For example in 1928, 382 diseased colonies were located and treated in Oceana County, but in 1929 only 12 diseased colonies were found when the county was rechecked. With the diseased colony menace removed, fruit growers could start to meet their pollination problems.

Fruit Growers Purchase Bees

In a number of counties where conditions are favorable for beekeeping, fruit growers have purchased package bees or colonies and engaged in the beekeeping business. In fact, the demand for information on the care and management of bees has been so great that practically the entire time of the apiculture specialist has been devoted to the fruit growers who are keeping bees. In other counties, colonies are rented during the blossoming season for $2 to $5 per colony. In Mason County 37 fruit growers signed a contract with a commercial beekeeper to assure pollination for the orchards of their district.

Ohter Aids to Pollination

In some orchards the market demands have determined the selection of varieties and the planting arrangements have not provided for pollination. Orchards of self-sterile varieties of apples, pears, and sweet cherries have produced only light crops because provisions for adequate cross-pollination were not made when the orchards were planted. These conditions have been corrected by grafting, interplanting, and placing bouquets of fruit blossoms in the orchards at blossom time.

Although conditions in orchards are not the same for any two years, conclusive evidence has been gathered to show that pollination by bees increases yields. In Clinton County 20 colonies in a 65-acre apple orchard returned a yield of 3,400 bushels more than the yield in any previous year. A Berrien County cherry grower had never harvested more than 120 tons of cherries in his orchard until bees were used for pollination; the first year the bees were used he harvested 188 tons. In one orchard a tree was screened to keep out bees, the rest of the orchard being well supplied with bees. The screened tree set 25 apples while its nearest neighbor set more than 1,200 apples.

Not only does pollination increase the yield of fruit, but it also increases the quality of fruit. The above illustration shows a well-pollinated apple with a number of seeds and a poorly pollinated apple with few seeds and a warped, irregular shape.

Motion Picture Suggestions

NINE new films sponsored by seven different bureaus of the Department of Agriculture have been made and released recently by the Office of Motion Pictures, Extension Service, and are now available to extension workers, club leaders, and interested organizations and individuals. These new films illustrate the three general types of films produced by the department and cover a wide range of subject matter, as is shown by their titles: Why Moths Leave Home (Bureau of Entomology), Food Makes a Difference (Bureau of Home Economics), Layers or Loafers (Extension Service), Unburned Woodlands, How Forests Serve, Forest Fires—Or Game? (Forest Service), Cooperative Marketing—Dried Prunes (Federal Farm Board), Back of the Weather Forecast (Weather Bureau), and The Cougar Hunt (Biological Survey). Two of these, which are described in detail, will be of especial interest to county agricultural and home demonstration agents. Descriptions of others listed may be obtained by writing to the Office of Motion Pictures. They will also appear from time to time in columns of the REVIEW.

New Film for Housewives

Why Moths Leave Home (one reel) sponsored by the Bureau of Entomology, is designed primarily for housewives and members of 4-H clubs to show them how to prevent and control the two common species of clothes moths, the case-making moth and the webbing moth, which cost American householders millions of dollars annually. The film opens with close-ups of the common species of moths and shows that the adult moth or miller does not actually eat clothing but deposits eggs in fabrics and from these eggs come larvæ which feast upon our clothes. After gorging themselves with expensive fabrics, the larvæ spin cocoons about themselves and become pupæ. The pupæ do not eat but remain motionless for a time and transform to the adult stage, ready to begin all over again.

The next sequence shows preventive measures to keep moths out and methods of getting rid of them when they gain entrance, and damage that moths do—damage to woolens, damage to feathers and expensive furs, and damage to rugs and carpets, and bristles. Moths eat the wool loops which secure the nap to the warp in upholstery. They do not eat linen, cotton, or silk, but will eat the wool threads in combination fabrics. What fumigants to use and how to use them is also shown in this how-things-are-done film.

A Culling Demonstration Filmed

Layers or Loafers (one-reel), sponsored by the Extension Service, shows how the Jones family increased egg production by culling the flock. It replaces the old film, Layers or Liars, made in 1920, which had such a widespread distribution the past 10 years and proved so popular that a new and more up-to-date film on the same subject was made in 1930.

Opening scenes show Mr. and Mrs. Jones discouraged because their flock of 150 hens are such poor layers. Mrs. Jones, who has been counting on the egg money, decides something must be done about it and takes her husband to a culling demonstration given by the county agent at a neighbor's farm.

From this demonstration, which is pictured in detail, Mr. and Mrs. Jones learn many things, such as: All flocks should be culled; the layers should be kept and the loafers sold; loafers consume as much food as the layers and do not earn their overhead; it is necessary to feed full rations three weeks before culling because such feeding gives the good hens a chance to do themselves justice and shows up the poor ones; you can not expect eggs, even from good hens, without proper feed. They also learn the physical characteristics of layers and loafers, these being clearly shown in a series of close-ups. The hens cast for these rôles are excellent types, having been carefully chosen.

This film culling demonstration, made especially for county agents and extension workers, has advantages over an actual demonstration, in that the film close-ups enable large groups to see clearly the characteristics of specially selected types.

This film had its first public showing during the World's Poultry Congress at the Crystal Palace, London, England.

How to Borrow Films

Copies of department films may be borrowed free, except for transportation charges, by applying to the Office of Motion Pictures, United States Department of Agriculture, Washington, D. C.

Copies May be Purchased

The demand for department films is often greater than the supply. Directors of extension, home economic groups, and organizations interested in nutrition, or individuals who might feel it advantageous to purchase copies, are advised that prints made from the department's negatives may be purchased at cost of manufacture, which is about $27 for a thousand feet of film on 35-millimeter slow-burning stock. If printed on 16-millimeter film, the cost is much less, about $10. Some agricultural colleges and extension directors are gradually building up a library of educational films for their own use, since it has become possible to buy new copies made from the department's negatives at the cost of printing.

In some communities, women's organizations, county agents, school authorities, or local clubs have arranged special film programs for joint meetings to which the entire community is invited.

Suggested Community Programs

From the nearly 300 subjects in the department's film library, film programs of varied interest can be arranged. Here are a few suggestions for community programs of from one-half to one hour in length of showing:

(1) Food Makes a Difference (2 reels) and Cooperative Marketing—Dried Prunes (2 reels).
(2) Lamb—More than Legs and Chops (2 reels) and Wild Flowers (2 reels).
(3) Home is What You Make It (3 reels) and Why Moths Leave Home (1 reel).
(4) Unburned Woodlands (1 reel) and Carry On (2 reels).
(5) How to Get Rid of Rats (1 reel), How Forests Serve (1 reel), and The Cougar Hunt (1 reel).
(6) Back of the Weather Forecast (2 reels) and Forest Fires or Game (1 reel).

Poultry Pays One Club Woman

Mrs. J. W. McFarland, a member of the Green Bay, Prince Edward County, Va., home demonstration club, made money from her flock of Barred Rocks this year when prices for poultry products were low in comparison with other years. Mrs. McFarland has only 44 hens, but her account kept since January 1 shows that they have laid 4,075 eggs. After using all the eggs and poultry she wanted, Mrs. McFarland sold $94.91 worth and received $32.96 for poultry sold. She bought all the feed that she used which cost $96, making a net gain of $31.87.

Tune in

ON THE

NATIONAL 4-H RADIO PROGRAM

Join the rest of the 4-H club family in a monthly radio get-together

United States Marine Band and 4-H club member broadcasting during a National 4-H club radio program.

Hear club members tell about their 4-H experiences ↘ Hear what National, State, and county extension workers have to say about club work ↘ Hear the United States Marine Band play famous musical compositions selected for the National 4-H Music Achievement Test

4-H radio programs are arranged cooperatively by the United States Department of Agriculture and State agricultural colleges. They are broadcast over a network of 49 radio stations associated with the National Broadcasting Co. Thousands of club members listen in regularly. Many counties hold group meetings of local clubs at the time of the broadcasts. Much interest in club activities has been aroused among people not connected with extension work. County extension agents are urged to keep their club members and local newspapers informed regarding each monthly program. Watch for announcements

REMEMBER THE DATE—ALWAYS THE FIRST SATURDAY IN THE MONTH
FROM 12.30 TO 1.30 P. M., EASTERN STANDARD TIME

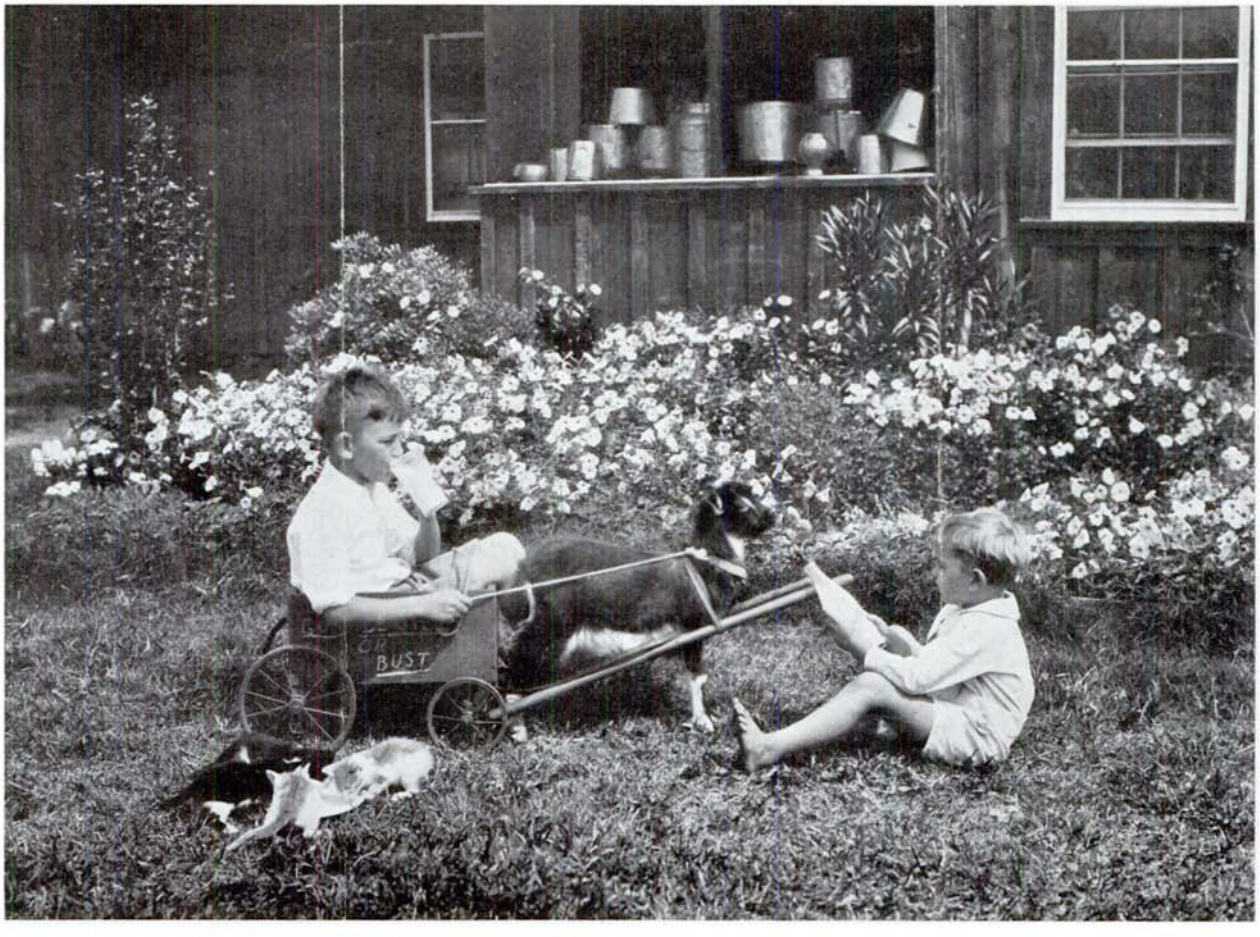
HE WHO digs a well, constructs a stone fountain, plants a grove of trees by the roadside, plants an orchard, builds a durable house, reclaims a swamp, or so much as puts a stone seat by the wayside, makes the land so far lovely and desirable, makes a fortune which he can not carry away with him, but which is useful to his country long afterwards.

RALPH WALDO EMERSON

U. S. GOVERNMENT PRINTING OFFICE: 1931

Extension Service Review

VOL. 2, NO. 5 MAY, 1931



EXTENSION SEEKS THE HEALTH AND HAPPINESS OF THE COUNTRY CHILD

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

The EXTENSION SERVICE REVIEW is the official organ of the Extension Service of the Department of Agriculture. It is issued monthly throughout the year. The subscription price is 50 cents a year. All subscriptions should be sent direct to the Superintendent of Documents, United States Government Printing Office, Washington, D. C. Single copies may be obtained at a price of 5 cents each. For postage to countries that do not recognize the United States mailing frank, 25 cents a year should be added. Remittances should be made to the Superintendent of Documents by coupon, postal money order, express order, or New York draft. Remittance in currency will be at the sender's risk. Postage stamps, coins defaced or worn smooth, foreign money, and uncertified checks will not be accepted.

CERTIFICATE.—By direction of the Secretary of Agriculture, the matter contained herein is published as administrative information and is required for the proper transaction of the public business

Extension Service Review

VOL. 2 WASHINGTON, D. C., MAY, 1931 NO. 5

Purposes of 4-H Club Work

C. B. SMITH

Chief, Office of Cooperative Extension Work, U. S. Department of Agriculture

COOPERATIVE extension work is based on a Federal law, designed to improve agriculture, farm home life, and rural conditions. Boys' and girls' 4-H club work has developed as a part of extension to further these ends. The work with young people is so organized that in carrying it out they grow mentally and in knowledge and skill. They learn something through actual participation in a great basic industry. Their vision is expanded and their ambition stirred.

First of all, each boy or girl who becomes a 4-H club member must do a definite piece of farm or home work in an approved way. In this work they are brought in touch with modern agricultural thought, the latest agricultural technique, and outstanding trained men and women who guide them. Again, the work they do is a needed piece of work on the farm, in the home, or in the community. It is not just an exercise or an assignment but a demonstration of an approved way of doing part of the world's work, related to the needs of the community. That is why the work is interesting. That is why young people take hold of it with zest. That is why the membership has grown to over 850,000 and is increasing at the rate of 8 to 10 per cent annually.

May we illustrate. The boy may do the homely thing of growing a fourth or half an acre of potatoes. He prepares the ground, probably plows under a clover sod. He uses a high-grade fertilizer at the rate of approximately one-half a ton per acre. That is significant. He plants disease-free seed, probably certified seed. When the crop comes up, he cultivates it and sprays it several times for both insects and disease, possibly using a high-pressure sprayer, and that is significant. He digs his crop and gets 250 to 300 bushels per acre. He makes

The 4-H club member learns business methods

an exhibit at the local fair and explains to the people how he grew and handled his crop, the records he kept, and the returns he got, and these are all significant.

Meanwhile, he has belonged to a club of 8 or 10 boys and girls and has met monthly with them. At each meeting they have had a program that has centered around what each one is doing, what troubles they are having, what steps they have taken to meet the situation. They have visited each other's potato plots. Their meeting has been conducted in accordance with parliamentary law. They have sung songs together, played games and had a good social time, and all these things are significant.

Also, they have been guided in their work and had the counsel of one of the good farmers or farm women of the community who sponsors the club. They have been visited by the college-trained county agent or extension specialist of the State agricultural college. Possibly they borrowed money for their potato crop from the local banker and marketed their crop in cooperation with others, which gives them a touch of business training. These are real life situations which have significance for the boy.

All this time, the boy's father has watched his son's work; the community may have seen his clean fields of deep green, copper-plated vines and noted the substantial yield of clean potatoes when they were dug. The boy's plot has not only been a source of education to him but it may have significance to the boy's father and to the whole community as well. That is why, perhaps, potatoes were suggested to the boy for growing. It was foreseen his results would have significance to the community. The boy has grown, his father has grown, and the community has grown through this boy doing a useful piece of work in a better way, and all these are purposes of 4-H club work.

Girls, too, in 4-H club work may grow potatoes or they may grow a garden. You learn much when you work with the soil, and it is just as informing and educational for girls to work in the soil or care for a flock of poultry or a calf or a pig as it is for boys.

In gardening work, the girls may sell part of their crop fresh and may can or preserve the surplus. They even go fur-

50870—31——1

ther and prepare and serve it on the table and perhaps act as hostess at the table. The intent is that the work shall be of such size and content as to be a substantial contribution to home activities and to the development of the girl's ability to participate helpfully in these activities.

New Situations Met

Many of the situations confronting the boy and girl as members of 4-H clubs are new, and most of them are solved by methods different from those commonly practiced in the community. Thus, in addition to growing a large crop of potatoes successfully, he himself grows and develops the ability to meet new situations successfully. This ability is probably of more value to him than all the skill he has acquired in potato production. By following new or improved methods of production his imagination and initiative have been called into play. By continuing this process, his persistence is tested and ability to accomplish developed. Whatever the enterprise undertaken, these are some of the necessary qualifications for success. As a member of an organized group, his experience with the group goes through the same process. Thus, out of club work grows the ability to deal successfully with human as well as physical situations.

Responsibility Encouraged

One striking difference between 4-H club work and school work is that club work is voluntary. It is not out of books but out of life and things as they are. It is a voluntary seeking of knowledge. The club belongs to the members. They run it. They are responsible for it. It is their meeting. That is significant to them, and significant in the educational process.

4-H club work has both vocational and broadly educational aspects. The vocational aspects are incidental but are there. It is immaterial to extension forces whether 4-H club boys and girls ever become farmers or farm-home makers. It is the intent that out of 4-H club work shall come an understanding and sympathetic attitude toward both agriculture and work—that the outlook on agriculture and home making and community life shall be broadened—that the need for education and training, if one is to live an abundant life or contribute most to himself or the world, shall be made clear to every member.

There is another and indirect purpose of club work that is of increasing significance. Urban population exceeds rural population two to one in this country. This relationship is reflected in State legislation, and national laws and policies governing agriculture are within the control of urban groups. How important that urban groups have an intelligent understanding of rural matters!

Now, with the coming of power on farms, the increasing use of tractors and other labor-saving machinery, the use of improved seed and high-grade fertilizers, fewer and fewer farmers are needed to produce all the food, feed, and fiber the Nation needs and for which it will pay a fair profit to the farmer. As a result, many farmers are moving to town. It is estimated that 25 to 35 per cent of the young people 16 years of age and over leave the farms for town. Many in this group are the very cream of rural youth. They constitute an invigorating life stream from the country to the city. Many of the group become in later years merchants; bankers; captains of industry; city, State, and national officials. They occupy positions of responsibility and power. How very desirable, in the interests of right relations between city and county and in the making of national laws affecting agriculture, that this continuous stream of youth from the country to the city carry with it a sympathetic and understanding knowledge of agriculture. We are rapidly coming to see that 4-H club work is the most significant medium yet found for carrying this information and acting as a little leaven in acquainting urban people with the place of agriculture in the national life and in securing a sympathetic and constructive attitude toward it.

Chief Purposes

Without going further into detail, these are some of the thoughts, then, that we would leave in your minds as to the purposes of boys' and girls' 4-H club work:

(1) The primary purpose of 4-H club work is "to aid in diffusing * * * useful and practical information on subjects relating to agriculture and home economics and to encourage the application of same"; and its primary result is to make young people intelligent about a major basic industry and the possibilities of rural life.

(2) So to organize the work that it may serve as a demonstration of the better way in agriculture or home making and so that boys and girls who take part in it grow mentally and in knowledge and skill, with vision expanded and ambition to accomplish stirred.

(3) To train rural youth in better ways of carrying on agriculture and home economics and to be constantly on the lookout for newer and better methods.

(4) To acquaint rural boys and girls more thoroughly with the beauty and significance of the things of nature that surround them in the country.

(5) To help them to earn money, acquire property, establish a bank account, accomplish.

(6) To bring them in contact with accomplishing men and women, bankers, merchants, educators, technically trained men and women.

(7) To give them group training through clubs in parliamentary practice, recreation, social intercourse, program building, committee work, discussion, demonstration, cooperation, community activities.

(8) To acquaint them in their youth with the sources of agricultural and home economics information, institutions of research and education, and to enable those who leave the farm for work in town to carry with them a sympathetic understanding of rural life.

(9) To teach the dignity of labor, to play the game fairly, to cherish clean living and right thinking, to serve.

(10) All to the end that there may develop in the country high-minded, competent, efficient men and women, a satisfactory country life, and a wholesome leaven in the Nation.

Accounts Audited

The Tazewell County, Ill., home demonstration organization has had its books audited each year since the beginning of 1928. The audit serves as a summary or record of the year's income and expenditures. It gives the advisory council working plans for compiling the next year's budget, which amounts annually to over $2,000, a basis for a statement of financial requirements when the council members go before the county supervisors to secure the annual county appropriations, and also places the organization on a businesslike basis. Careful records are kept of income from various sources and of expenditures made by the officers. These expenditures include share of salaries of agent and secretary paid from county funds and money raised by the organization; general expenses, such as postage and printing; automobile expenses; and such other disbursements as are needed for the women's camp and fair exhibits.

An auditor lent by the Illinois Agricultural Association, makes official examination of the books of the home demonstration organization. Members of the county advisory board were active participants in the home-account project.

Building up the Cooperative Movement

CHRIS L. CHRISTENSEN

Dean, College of Agriculture, University of Wisconsin
Former Secretary of Federal Farm Board

COOPERATIVE marketing has reached its present development because farmers have learned to cooperate. They have learned to do this by cooperating. "Learning by doing" is a sound educational process. Naturally there have been many problems and difficulties to be overcome. Until a few years ago there were no State laws under which cooperative associations could incorporate. There was lack of knowledge and experience in organization on the part of both the management and the membership of the associations, and there was no tested operating and business procedure.

But, in spite of these difficulties the history of cooperative marketing has been one of progress. As early as the fifties farmers in this country began to organize locally for the assembling and manufacture of dairy products. In the late sixties, the seventies, and the early eighties, grain and livestock farmers in the Middle West organized farmers' elevators and local livestock shipping associations. About the same time, fruit and vegetable growers began to form local associations to assemble, grade, and prepare their products for shipment to distant markets.

Local Development

The period from this time to the end of the nineteenth century was one of local development and experimentation. The beginning of the twentieth century, however, brought in a second stage of growth in the farmers' cooperative movement. Large gains were made in the number of local cooperative associations representing every major commodity in American agriculture. According to the records of the United States Department of Agriculture, it is estimated that there were, in 1920, approximately 3,300 farmers' cooperative elevators, 3,000 cooperative livestock shipping associations, 1,500 cooperative creameries, 700 cooperative cheese factories, and 1,000 cooperative fruit and vegetable packing associations. At the same time, several large-scale associations also came into existence. These were, as a rule, federations of locals. The farmers entered a new field. They began in isolated cases to retain control of the sale and the distribution of their products beyond the local community.

The third stage, beginning about 1920, was characterized chiefly by the development of large-scale cooperative marketing associations, either federations of locals or large, centralized organizations covering an entire State or region. There was a natural development from many separate local shipping associations into large, strong organizations for the selling of the products delivered by their farmer members. During the first period, farmers learned to cooperate in their local communities. During the second period, they capitalized the knowledge they had obtained by greatly expanding and strengthening their local organizations, and made the first experiments necessary to develop large-scale marketing associations. During the third period, large-scale marketing associations and terminal market sales agencies expanded and strengthened the services which they were able to render the producers. The growth of these large-scale associations is still going on.

A few figures will serve to illustrate this development. In 1925 Land O'Lakes Creameries, Minneapolis, Minn., handled products valued at approximately $39,000,000. In 1929 the business of this organization exceeded $52,500,000. The National Cheese Producers Federation, Plymouth, Wis., increased its volume of business from $6,654,113 in 1925 to $11,886,102 in 1930. The business of the Dairymen's League Cooperative Association, New York, N. Y., has grown from $66,600,000 in 1925 to more than $89,000,000 in 1929. The California Fruit Growers Exchange handled citrus fruit with a shipping-point value of $70,700,000 in 1925 and fruit with a value of $104,900,000 in the 1929–30 shipping season. Time does not permit discussion of the services which these organizations have rendered to their members. It is obvious, however, that their business would not have grown as it has during the last five years if they had not been able to render substantial services.

I have given this historical account of the development of cooperative marketing to illustrate one point, namely, that farmers' cooperative associations must be developed by the farmers. They must learn to cooperate by cooperating. Neither the Federal Farm Board nor any other agency can present them with a ready-made system of marketing.

Service Given

But, farmers are often handicapped in developing their cooperative associations, both by lack of knowledge and by lack of funds. This is where the Federal Farm Board comes into the picture. The board was set up under the agricultural marketing act to assist farmers' cooperative associations, first, by offering the advice and guidance of its cooperative marketing specialists and, second, by lending to cooperative associations on favorable terms money which they need to establish their business. This is the fundamental service which the board is able to perform. The board can not, and should not, set up and operate cooperative organizations. That is the farmers' job. These associations are the farmers' organizations through which they market their own products. They must be set up by farmers and the farmers must become responsible for their successful operation. The board can help greatly. It can lend money; it can advise and guide. This teamwork between the farmers and the board should result in the development of strong, substantial cooperatives which will render real service to their members and which should become the prime factor in the stabilization of agricultural conditions.

My association with the board since its establishment on July 15, 1929, has convinced me that the outstanding benefit to agriculture which can come from the work of the board is the development of a permanent and successful cooperative marketing system. I believe that nothing is more fundamental to the welfare of the farmers than that they should work together to create and operate their marketing associations, and that they should use the resources of the Federal Farm Board to assist them in this work.

Professional Improvement of Extension Workers

T. ROY REID

Assistant Director, Arkansas Extension Service

IT IS ONLY during the latter part of the quarter of a century of extension work that a position in an extension service has been generally considered as a profession. Some of the early pioneers in extension have made it a profession; many others considered it as a temporary position to be used as a means of accumulating additional experience, and maybe originally expected some accumulation of funds, to be used in other occupations or professions in which they were engaged or hoped to engage.

Extension work is now definitely a profession for individuals who wish to make it such. The standards which are fixed as prerequisites for one to engage in extension work are such as to give professional standing to this branch of educational service. The term of service of those engaged in extension work at present is of sufficient length to indicate that it is being considered as a permanent field of service rather than a stepping stone to other lines of service or preparation for some other profession.

Profession Offers Challenge

The profession of an extension worker is one which offers a challenge to men and women now engaged in it and those who expect to engage in it.

It is a profession which is relatively new and which is yet unhampered by many traditions and precedents, in which many methods and practices are yet to be worked out, and in which those who engage in it now will have a big part in establishing the prestige of extension work both for the present and the future.

It is a profession which is educational and has the support and confidence of high-minded, thinking people who are interested in educational advancement.

It is a profession in which those who are engaged in it help solve economic difficulties and improve standards of living at the point where these are basic to the welfare of all society.

It is a profession which has fairly constant support. In times of stress the demand for extension work increases. In times of prosperity it gets some credit for the prosperity, and deserves the credit it gets. This offers security and at the same time a challenge to maintain this security.

It is a profession which is growing rapidly and which requires hard, constant, intelligent thinking and effort to keep up with the growth of the profession. There is no reason for an extension worker to get into a rut unless as an individual one is satisfied to do so.

The recognition of these attributes of the profession of being an extension worker brings with it a responsibility for professional improvement of individual workers which will help to still further expand the service, raise the standards of service, and bring greater prestige to those engaged in the service. The rapidity with which changes are coming among the rural people with whom extension workers deal and the progress being made in the development of rural life demands that extension workers constantly study in order to keep ahead in thinking and leadership.

Improvement Studied

The need for professional improvement is being constantly emphasized by Director Warburton, Dr. C. B. Smith, and others in the Federal Extension Service. Directors in the States and groups of extension workers make the need for and means of bringing about greater professional efficiency a topic for frequent discussion in conference with extension agents' meetings. The results of the study of methods of doing extension work now being carried on by M. C. Wilson, Office of Cooperative Extension Work, offer a source for much thought to those who wish to improve their methods. Already a great fund of important data has been collected and analyzed for the use of those who are engaged in extension. These studies are being continued, and there is being constantly accumulated information, which, if carefully studied by those who are interested in the actual practice of extension work, will greatly add to the results secured from the public money expended, and lead to the growth of the individual worker who takes the time to study these data.

The summer courses in extension methods offered at the University of Wisconsin, Cornell University, and other institutions give an opportunity for a limited number of extension workers to study the science and philosophy of their profession. The fact that the number of courses now offered in extension methods is still limited and a small number of institutions are offering any courses which have an appeal for trained and experienced extension workers handicaps many of those who might be interested in taking advanced training which would lead to further improvement in the profession.

The policy announced recently permitting the use of Smith-Lever funds for sabbatical leave is one which will furnish, in those States where such leave is possible, an additional aid in helping to make it possible for more extension workers to take leave for study.

Training Course

The training course provided for negro extension workers and arranged by the Federal Extension Service this past summer provided a very helpful means for study and improvement of these workers. A similar arrangement of summer schools, located where they would be convenient to all sections of the country, with advanced courses dealing with extension methods and policies and subjects relating directly to these would undoubtedly prove attractive to a large number of white extension workers who are interested in advanced study which would lead to improvement in their profession as well as to advanced degrees. Additional universities may render a great service to the extension service of their institutions by providing for advanced courses for extension workers.

In the discussion of tenure of service the report on extension services in the recently issued study of the Association of Land-Grant Colleges and Universities says:

The process of lengthening the tenure demands the thoughtful attention of administrators of extension work. With continuous service in these as in other positions that are closely limited as to promotion in rank or salary, the tendency is for workers to fall into ruts and to be content if the routine tasks necessary to hold the job are performed.

In all public and institutional service such ruts are quickly developed, and they as quickly become the traveled road to mechanical performance of monotonous duties. This is true in extension work—so true as to offer startling proof of its existence in both State and county positions. It seems almost inevitable that long tenure of service should be associated with loss of enthusiasm and initiative. This tendency can be counteracted only by measures taken to develop those human qualities and interests that broaden

(Continued at bottom of page 69.)

Moisture Conservation in New Mexico

From 5,000 to 7,000 acres of land have been terraced and contoured in several counties in New Mexico because of the obvious difference in crop production that terracing makes.

Where this field was terraced, a good crop of alfalfa was grown. The section illustrated at the left was not terraced

CONTROLLED erosion, preserved soil fertility, and increased crop yields are being obtained in New Mexico by moisture conservation work, reports G. R. Quesenberry, New Mexico extension agronomist.

Some means of moisture conservation is essential for successful farming in New Mexico because of the light annual rainfall, the dashing summer rains, and the dry winds in the late winter and spring. Frequently 50 to 75 per cent of the moisture in the short, hard summer rains passes off to creeks or wet-weather lakes. This rush of water and the high winds carry away the fertile surface soils, unless they are protected. On the eroded fields, yields are decreasing markedly, gullies are reducing the tilled acreage, and the costs of cultivation and harvesting are steadily increasing.

However, it has been found that terracing will retain the moisture and prevent erosion. The terraces recommended at the present time in New Mexico are wide and level with well built-up ends so that the water will penetrate the soil where it falls and will be stored there for future crop production.

The dust mulch has been recommended also, and now the rougher the surface the less effect the early winds have on the surface soil and the more winter moisture conserved.

Few farmers with properly terraced or contoured land have reported less than a 50 per cent increase in yields. Tests in all the eastern counties of the State have shown that terracing increases the yields from 50 to 60 per cent, and occasionally over 100 per cent.

During the drought of 1930 terraced fields became outstanding, and in some cases produced their largest crops. In fact, Mr. Quesenberry says "the smaller the amount of precipitation, the greater the proportionate returns."

In eastern New Mexico it is possible to grow two or three tons of alfalfa per acre almost every year by terracing the land, conserving the rainfall, and diverting the adjacent run-off from sod lands; whereas, without terracing, it is seldom possible to even grow alfalfa. For example, in spite of a very dry season in Curry County one year, as much as 2 tons of alfalfa was produced per acre where the scanty run-off was controlled by terraces. In other sections, unterraced alfalfa fields were practically a failure in spite of normal rainfall.

In Mora County, 76 tons of hay was cut from a 25-acre terraced field of alfalfa, but an adjoining unterraced cornfield produced practically nothing.

The above illustrations show two sections of the same field with the same kind of soil which were planted with alfalfa at the same time.

In another county, the terraced wheat which was plowed deep and early produced 550 per cent more than the wheat on the same farm which was tilled with the methods commonly used.

---

the intellectual horizon and by provision for advancement of economic opportunity commensurate with growth in the field of employment.

There can be no shirking from the responsibility of developing county extension work into a living, growing permanent opportunity for initiative and personal incentive, with adequate recompense for outstanding performance and growing satisfactions for those engaged in this phase of institutional service.

If the individual wills to keep out of the rut he can. With more individual workers taking every opportunity to improve themselves professionally, those who administer extension funds may receive much greater financial support which will make it possible for an economic opportunity to come within the extension field for those who have prepared for advancement in the extension profession.

Every additional year added to the age of the extension services will further increase the necessity for additional means of adding to the fund of information on extension work, otherwise, as suggested, a routine may be developed which will hinder rather than foster the expansion of the service which is now adding so greatly to the incomes and satisfactions of many individuals now engaged in the business of farming. Constructive thinking, quiet study, and a utilization of all suggestions and methods providing for increasing the knowledge of extension work by the mass of extension workers is necessary in order that the profession of extension work may advance rather than tend to settle into a routine.

Illinois Readjusts Home Management Project

KATHRYN VAN AKEN BURNS

State Home Demonstration Leader, Illinois Extension Service

AN evolutionary change has taken place in the manner of launching the home-management project in a county during the past three years. Three years ago the emphasis was placed upon some of the techniques of housekeeping in the hope that from this point we could lead farm women to a consideration of some of the larger objectives that underlie home making.

Our immediate concern was the number of improved practices that might result from the technique demonstrated, so the efficient performance of routine physical practice of home making was given primary consideration. Although we indulged in considerable wishful thinking about the larger benefits of the home management project to farm women, in private we had to admit that its results were not carrying over into other situations that we chanced to see or hear about on subsequent visits to the county. Our home-management project was evidently not affecting the thinking and judgment of the farm woman to any appreciable degree when she was confronted with a decision that needed a selection of choices in new conditions. While no doubt we were helping her to be more efficient in household routine, we were failing to arouse in her standards of excellence for family living. What we thought was education was in reality not modifying her behavior.

About this time C. H. Schopmeyer of the Federal Extension Service came to assist our home-economics staff in an analysis of projects. He helped us crystallize the idea that we need to check the subject-matter content of our projects in terms of the farm home maker. Specialists may be interested in subject matter for its own sake, but the home maker is interested in subject matter when it is pinned to some problems she has to meet.

Mr. Schopmeyer's explanation of his Analysis of the Managerial Responsibilities of the Farm Home Maker got into the thinking of the State staff and has been responsible for making our projects enormously more effective.

Standards of Living

Now instead of launching the home-management project with a study of equipment or kitchen improvement, we start with a standards of farm family living summary that has about six thought-provoking questions under each of the following headings: Wholesomeness of family relationships, adequacy of farmstead, adequacy of the dwelling, status of family health, and extent of the participation in civic, social, and economics affairs. The questions are framed to suggest alternative situations that will stimulate thought and probably in no case can they be answered by a simple yes or no. This summary is designed to give the home maker the whole picture of family living and her part in it, and is checked at the beginning of the project to give her a perspective and checked again at the end for summarization.

That it has stimulated thinking is shown by the project reports of home advisers who indicate a clearer idea of the objectives of the project than ever before. That it is stimulating thinking among farm women is shown by their requests for help with such problems as evaluation of time and evaluation of money. A few years ago the demand was for something so specific and tangible that it had physical measurements. Perhaps the objective Mr. Schopmeyer tried to help us see was achieved in the case of one woman who said, "As I see it, the aim of the home-management project is to make us desperately curious about the whys and wherefores of everything we do."

We are now trying to develop all our projects upon this managerial idea. While we know of no quantitative way to measure our results we believe that the new method of approach is developing attitudes and judgments regarding family living that are having a bearing in developing new standards of excellence for farm living as well as adding to the number of improved practices in housekeeping techniques. The latter now seem of lesser importance because once an inquiring mind can be developed, improved practices take care of themselves.

Growing Potatoes Under Contract in Utah

In its effort to develop an agronomic program on the farms which will furnish an ample supply of feed for the farm animals, food for the farm family, and, if possible, a cash crop, the Utah Extension Service found that potatoes would materially contribute to the completion of this program in the Parowan Valley in the southern part of the State, according to J. C. Hogenson, Utah extension agronomist.

Southern Utah is a cattle and sheep country, but during the early part of 1930 the prices for livestock were very low, therefore, most of the farmers were ready and willing to listen to the suggestion that a cash crop be grown on their farms. The main reasons for deciding on potatoes were that the elevation of the valley is between 5,000 and 6,000 feet; the soil is a rather heavy, red sandy loam; and the natural gravity water supply can be supplemented by underground water that can be brought to the surface by electric power at a reasonable cost.

The Contract

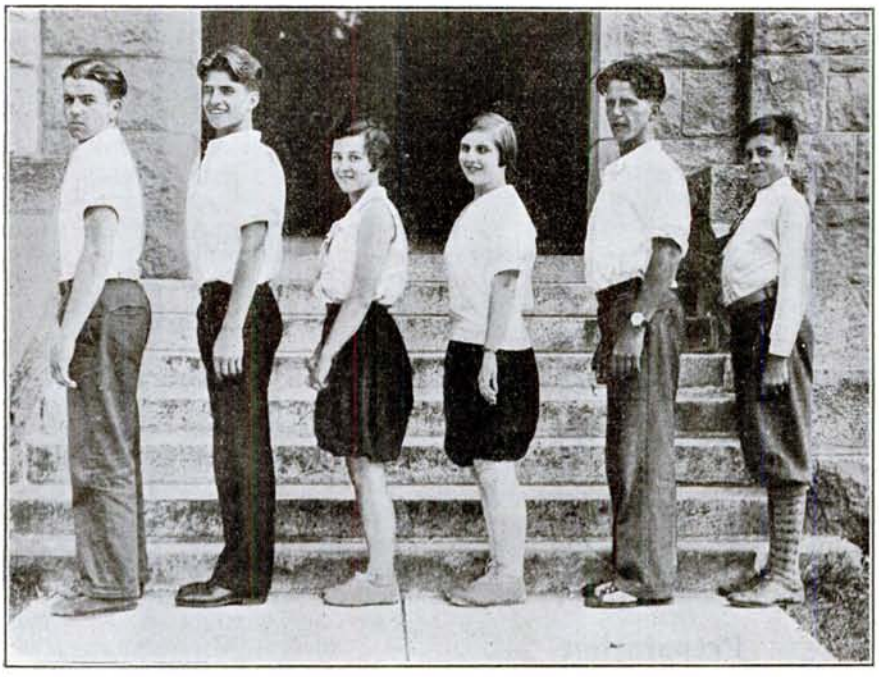
Just at that time a potato contractor from a large reliable produce company came into the valley and offered the farmers a contract which provided that the contractor would obtain good reliable Russet Burbank seed from Idaho for the farmers at $1.50 a hundredweight, and in the fall the contractor would take the potatoes produced, graded and on board cars, at $1 a hundred for the first 125 bags per acre and at the regular market price for the balance produced. This contract was accepted by 30 growers who signed up for more than 400 acres.

The seed potatoes were treated with hot formaldehyde and planted in plowed alfalfa ground. Throughout the summer the fields were irrigated and cultivated. Last fall the potatoes were dug with mechanical diggers and culled in the field. Then they were sacked and hauled to the railroad depot where they were graded into U. S. No. 1 and U. S. No. 2, placed in new, branded bags, and shipped to Los Angeles. The average yield of potatoes was 140 bags of U. S. No. 1 and 40 to 50 bags of U. S. No. 2.

Although the prices for potatoes were low last fall, all of the farmers made a little profit on their crops and nearly all of them are signing a contract to grow potatoes again next year, Mr. Hogenson reports.

Five Years of 4-H Health Club Work

THERE have been more completed records in the health project in Rhode Island for the past two years than in all of the other projects combined, reports Lorenzo F. Kinney, jr., Rhode Island State club leader. In northern Rhode Island, Dorothea M. Hoxie, county club agent, reports that 98 per cent of those enrolled in the health work completed the project. The State enrollment for 1929 was 1,838, and for 1930 it was 2,073, which represents over 90 per cent of those enrolled in agricultural or home-economics projects.



Rhode Island 4-H health champions in 1930

The Health Program

The health program in Rhode Island is simple in essentials but rather comprehensive in details. First, members are shown how to recognize health and how to score each other. This makes apparent the most prevalent defects in the groups, and then a plan is prepared which will lead to the desired improvements.

At first emphasis is given to defects in which improvements can be made readily, because the feeling of confidence grows with improvements and the desire for a high health score seems to come only after a relatively long period of successfully improving one point after another until the perfect record is within reach. Also, health stunts are used because boys and girls will become interested in clubs which have novel features, but will not even join a club that starts with a visit to the dentist.

In spite of the fact that there is no specialist on this work, it is a state-wide program carried out from the State office through the county club agents to the local leaders, and by them put into effect with the individual club members.

Resulting Improvements

The accomplishments have been principally in raising the average health levels rather than in developing outstanding individuals. The idea that it is in style to have high health scores has been instilled in the minds of the members, and now they have a desire to gain and maintain perfect health.

On the average, each club member has had four defects in food habits, 46 per cent of which were improved in 1926 and 57 per cent in 1930. Each club member has had an average of 5.8 defects in health scores each year. The improvement made in health defects was 52 per cent in 1926 and 59 per cent in 1930.

It was found that in the poorer families, ignorance and indifference rather than lack of finances caused defects in the food habits, such as insufficient milk and lack of fresh vegetables. Even those families with the lowest income can approximately meet the 4-H health requirements because they require small cash expenditures. In fact, the most striking gains in both food habits and health scores were made among the groups which lacked finances or had other unfavorable home conditions. However, medical attention is often provided through the school clinics, if the family is unable to bear the costs.

Cooperating Agencies

This program was originally worked out cooperatively by Miriam Birdseye, extension nutritionist of the Office of Cooperative Extension Work; officials of the American Child Health Association; the director of Child Health of the Rhode Island State Board of Health; and the extension service in Rhode Island. In carrying out the program the extension service receives full cooperation from the above organizations as well as from the superintendents of schools, school health doctors and nurses, and the Red Cross representatives in Rhode Island.

Why Women Attend Club Meetings

In order to determine why women attend home demonstration club meetings, a study was made in North Carolina by Mrs. Jane S. McKimmon, State home demonstration agent in North Carolina. The following reasons were given by more than 300 women:

1. Subjects taught: Clothing, cookery, home improvement, child care, parental education, and kindred subjects.
2. Community improvement: Bringing the women together to work out community problems and to enjoy themselves.
3. Inspiration: New ideas and vision of what is possible for the home maker of the future.
4. Social: Meeting with neighbors and serving as hostess at club meetings and similar activities.
5. Self-improvement: Growth in self-confidence, ability to conduct meetings, ability to speak in public, leadership, and citizenship.
6. Recreation: Relaxation, games, and release from daily tasks.
7. Economic gains: Marketing information for home products and savings in the home.
8. Personal admiration of the agent.

Agricultural extension work based largely on 4-H clubs was introduced in Poland in 1926. There are now 50,000 boys and girls in these Polish clubs.

Extension Service Review

Issued monthly by the EXTENSION SERVICE of the United States Department of Agriculture Washington, D. C.

The Extension Service Review is published in the interests of workers and cooperators of the Department of Agriculture engaged in extension activities. It contains official statements and other information necessary to the performance of their duties and is issued free to them by law. Others may obtain copies of the Review from the Superintendent of Documents, Government Printing Office, Washington, D. C., 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, Extension Work*
C. B. SMITH, *Chief, Office of Cooperative Extension Work*
J. W. HISCOX, *Chief, Office of Exhibits*
RAYMOND EVANS, *Chief, Office of Motion Pictures*

REUBEN BRIGHAM, *Editor*

MAY, 1931

The Country Child

The touchstone of rural progress is the situation in which we find the rural child. Here is where the real interest of the farmer and the farm woman lies. Their hope is for happiness and health for their children, for a better education for their children than they themselves had, for a future of more freedom from financial worries and economies, of greater happiness, of more distinction. Extension thought and endeavor, if they are to be ultimately successful, must contribute, therefore, to the welfare of the country child.

Whatever extension does for the farmer to make his business more profitable contributes to the welfare of his children. Whatever extension does for the farm woman to help her make the home more comfortable and attractive, to give her more generous means with which to feed, clothe, and care for her household, to lessen her drudgery, and to give her leisure for social contacts, recreation, and rest, to that degree does extension aid in improving the situation of the country child.

It is only right that extension should concern itself actively with the country child. Proper food and clothing; comfortable and attractive surroundings; proper conditions of lighting, ventilation, and sanitation; correct habits of personal living; discovery of the special abilities of children in the activities of the farm and home; their protection against labor beyond their strength that will stunt physical and mental growth or deprive them of their natural right to comradeship and play; the development of an appreciation and full enjoyment on their part of the woods, fields, and streams, of flowers and birds, and of the many simple joys with which country living abounds—these are matters of active extension concern.

In whatever is undertaken or proposed for the improvement of the farm business or of the farm home, there is in the mind of the thoughtful extension worker a picture of the children who will be affected. Happiest of all the experiences of the extension agent are the contacts he has with country children. In counties where the agent has won his welcome he knows every last chick and child on each farm he visits. The spontaneous and enthusiastic greeting he receives from these children puts light and hope into the grind and wear of many a hard and discouraging day. Extension would have little to hold the men and women of warm sympathies and enthusiasms that it now attracts if there was not in their minds the hope of contributing to the greater happiness of the country child. It is only fitting, then, that this first anniversary issue of the REVIEW is dedicated to the country child and to extension effort in his behalf.

Preparation

Words are useful in extension only in so far as they make definitely helpful facts understandable. Volume never makes up for deficiency in content. Not how much is said but what is said. Not how many jobs are done but how well they are done. These are the things that count in carrying out any permanent extension program.

Extension lends itself too readily to a hand-to-mouth existence. The temptation is too often with us to delay preparation until the event or job calling for our efforts is immediately at hand. Usually we know a month, two months, or even six months ahead that we will have a meeting to hold, a job to do, a situation to meet. When we are dealing with a fundamental situation, when we seek the permanent improvement of an agricultural industry in a county, we need to have our foundations deep, our preparation thorough, and our answers ready. This means that we must know exactly what we have to say or offer and why we propose what we do. We must know, too, to whom we are to give these facts, how this audience can best be reached, and how to use the mediums employed with greatest effectiveness. The meeting we hold, the tour we arrange, the news item we supply, the circular letter we write, the exhibit we make—all these must be planned carefully and made to drive home to the people we seek to aid, the facts we have to give.

To attain each objective we set up for the year, we need a well thought-out plan. We need to know how and when we are to carry out each part of this plan. The facts we are to use must be at hand and in the right form to present. Nothing should be left to the spur of the moment that can be figured out in advance. The ability to meet emergencies capably is a trait much to be desired in the extension worker, but it is of itself not enough, to carry through a serious educational effort that is based on the findings of science and that seeks fundamental and permanent improvement in farming as a business.

Find the Man

Find the right man to do the job. That, according to Chris L. Christensen, former secretary of the Federal Farm Board, is the key to success in cooperative marketing operations. The selection of a competent manager without doubt is one of the most important responsibilities of the board of directors of a marketing association.

The competent manager must be a man with the ability and experience to carry out policies consistently and to handle administrative matters efficiently. To obtain such a man, the members of cooperatives must be willing to offer salaries comparable with those paid to executives in other businesses. The manager and his executive staff are responsible for carrying out the policies laid down by the board of directors. The manager is, also, an adviser to the board. It is a part of his job to present to the board thorough and complete statements, with clear interpretations as to the actual condition of the operations of the business. He must be ready with suggestions concerning new policies or changes in old ones, together with the reasons why changes should be made. Finally, it is the duty of the manager and his staff to translate the policies and plans of the directors into action and to do so efficiently and economically.

Here is the picture of the manager that each cooperative requires. To get clearly before the membership the nature of the job, to find the right man to do the job, and to pay him what the job is worth. These are things that must be done if a cooperative is to succeed.

Extension Activities in Child Care and Training

A FUNDAMENTAL activity which is finding a major place in the extension program is that concerned with the right training of children for satisfactory living. A happier home life is the objective, and this objective is being sought through the specific training of parents and children.

The work in child care and training is conducted usually by study groups which are composed of mothers of young children. Specialists in child care and training or parent education and child development are employed in Georgia, Illinois, Iowa, Massachusetts, Michigan, Minnesota, New Jersey, New York, and Oklahoma. A brief summary of some of the results achieved is given.

New York

An outstanding fact is that parents wish an educational program which involves study, reading, the preparation of papers, discussion, and use of a textbook. There are 84 clubs in 20 counties, with an enrollment of 991. During 1930, 239 meetings with an attendance of 2,094 were held. Many clubs meet in the evening, thus making it possible for fathers to attend. At present there are only a few men in the clubs, but one club has a father as chairman.

The courses available in the study clubs are: Routine behavior of young children, nonroutine behavior of young children, and reading courses on such topics as problems of parenthood, and sex education. The study program consists of 12 lessons. The work begins in October and continues to May. The clubs met in several county-wide sessions during the year. Conferences with club officers and members were held on club problems and lecture discussions were given on topics requested by groups. During the year there were 84 conferences of this kind with 708 in attendance, and 34 lectures with 2,181 in attendance.

A group of 15 women were given training in May, which consisted of 3 all-day meetings at the college, when instruction in the giving of 2 lessons on eating and 2 lessons on sleeping was given. Each leader agreed that within the year following the conference she would meet 3 groups and give the 4 lessons to each group. There are 7 counties with such leaders at work, 17 lay leaders reporting 43 groups and holding 143 meetings with 1,155 in attendance. The groups have averaged about 8 members. Perhaps the most interesting development of this work was the continuance of 4 of these groups into child study clubs after the 4 lessons had been given by the lay leaders.

In New York the number of homes making changes was as follows: Improving habits, 1,381; positive method for negative, 1,657; recommended play equipment, 995; recommended physical adjustments to better meet children's needs, 1,294; and better adult habits with respect to development of children, 3,411.

MAY 1 IS CHILD HEALTH DAY

May 1 is to be observed throughout the Nation as the eighth annual Child Health Day in accordance with the proclamation of the President. Cooperative extension workers have been much interested in the observance of this day in past years and are continuing to carry their share of active responsibility for the success of the movement which is so closely allied in purpose to their own objectives.

The 1931 program for Child Health Day is based on the findings of the White House Conference on Child Health and Protection on recommendation of the National Child Health Day committee. The committee also indorsed the keynote which had been chosen as best representing the total purpose of the conference, "Community responsibility and cooperation for child health and protection." Many organizations, both public and private, as well as the cooperative extension service, are cooperating with the American Child Health Association in the observance of Child Health Day and the promotion of child health throughout the Nation.

Georgia

The specialist in parent education and child development, Certie Reynolds, conducted study groups in cooperation with the home demonstration agents in organized clubs in 23 counties. The clothing specialist cooperated in work pertaining to clothing for children. A combination of lecture and discussion is most generally used, supplemented by pictures, charts, and exhibits, to bring out special points. In this State in 1930, 116 rural groups of 2,496 people devoted the major part of 6 to 8 months to this program under the direct supervision of the specialist. The specialist has met 78 of these groups from 2 to 4 times each; and the home demonstration agents conducted from 2 to 5 meetings with each of the 116 groups.

Illinois

The McLean County Farm Bureau, Bloomington-Normal Women's Club, Parent-Teacher Association, City Health Department, and the Daily Pantograph cooperated in holding a child-welfare conference of four sessions in February at Bloomington. Prominent speakers addressed the 500 people in attendance. These organizations have written the Governor of the State, asking if the State white house conference might be held in Bloomington.

Iowa

In the study groups assigned readings were studied by members, the specialist presented subject matter, and discussions were held. Plays and slides were presented at general meetings. Contests were held, exhibits made, and demonstrations were conducted in child feeding, solving problems of fussy food habits, improvements of other habits of children, home arrangements for children, and cooperation of children in home tasks. Psychologists cooperated in the mental testing clinics and demonstrations. The number of homes adopting suggestions was 6,809.

Michigan

Twenty study centers were organized. The 616 women enrolled have 1,418 children. Plans were made so that fathers can attend part of the meetings, and 506 fathers cooperated.

Minnesota

In Minnesota 93 community groups with 1,192 members carried the child development project. During the year 1,642 people adopted 3,073 improved practices.

Massachusetts

In the spring of 1930 a group of 25 women representing 12 communities attended a series of 5 meetings led by Mrs. Ruth D. Morley, specialist in child development and parent education. Topics discussed were heredity, invironment, attitude of parent to child, value of companionship, individuality of the child, and physical growth of the child. The women attending these meetings carried

back to their communities some knowledge of what the project really means and how it meets the needs of young mothers. This year the project will be conducted in the same section of the county and the representatives will act as project leaders.

In Middlesex County monthly service letters containing information on children's clothing, toys, books, child feeding, sun baths, and health are sent to 1,800 mothers. In 1930, 314 mothers reported 665 improved practices in nutrition.

New Jersey

The specialist in child care and parent education devoted a major part of her time to the training of the 22 home demonstration agents.

The agents were grouped in three districts and a central point of meeting arranged for each district. The specialist met each group once a week for 1 day's work which included 2 hours of observation in the morning in the nursery school in the district, 2 hours of class discussion in the afternoon, 1 hour of which is devoted to subject matter and 1 hour to methods of organization. Some help was given by professors from Rutgers in giving 4 periods to mental hygiene and 2 to vocational education. Play centers are being organized.

In Sussex County schools gave programs on health and food habits in which all children took active parts which interested them and their parents. The nurse also gave suggestions on health and urged that the children work to win a place in a future health parade.

Emphasizing the Health "H"

The health "H" of 4-H club work is being emphasized this year in Minnesota where they are trying to have every club member in the State do at least something to improve his or her own health, reports T. A. Erickson, State club leader in Minnesota.

Mr. Erickson believes that unless a strong health program is carried, there will be "3-H" clubs instead of 4-H clubs, and therefore he advocates as a slogan "The fourth 'H' as strong as the other three." The plan for the work in Minnesota provides that the health work will not be compulsory and that there will not be any special enrollments, although the agents are urging every member to carry out the suggested health program and to fill out a simple health report blank.

In this project the club workers have the cooperation of the extension nutrition specialists and the county and school nurses.

Child Care in Alabama

Demonstration in child training

ALTHOUGH Alabama has no extension specialist in child care and parental education, the project on this subject has been carried on by home demonstration agents in Montgomery, Jefferson, and Macon Counties, Ala., during the past three years.

The extension nutritionist and the extension economist in home management planned the initial work with the home-demonstration agent in Montgomery County in 1928–29.

Demonstration methods were used in 8 leadership schools which were attended by 148 leaders from 7 home demonstration clubs. These demonstrations were repeated by the home demonstration agent and the leaders before 1,010 club members and visitors.

In 1929–30 Jefferson and Macon Counties carried the program, which had been expanded to include not only the work of the extension nutritionist and extension economist in home management but also the work of the clothing specialist.

Lecture demonstrations at the leadership schools in the three counties were given by the extension specialists and county health officers, who were assisted by county health nurses, local physicians, and members of the faculty of the Alabama Polytechnic Institute. The preliminary and final clinics for children of preschool age were held in each community by the county health units. The course consisted of eight demonstrations covering the following subjects: Inheritance and environment, prenatal and first-year feeding, nutrition of the preschool child, nutrition of the adolescent, infant and maternity clothes, stages of development, and training for parents.

Results Accomplished

The majority of the club women report that they are serving more green leafy vegetables, fruits, potatoes, milk and butter, whole grain cereals, bread, and eggs as a result of the nutrition instruction given them in club work. The women used improved methods of cooking vegetables and meats and put into practice their knowledge of planning balanced daily menus.

One hundred and six preschool children were given physical examinations. Sixty-five were examined at the beginning of the course and again at the close of the work. Twenty-seven mothers followed the diet schedule for their babies. Children have played in the sunshine more during the winter and have had fewer colds than in other winters.

Mothers are teaching their children to dress and undress themselves and are making simple garments that are easy to put on. They have made sun suits and play suits, some of which have been made from feed sacks, stockings, or dishrag netting.

Mothers have made an effort to establish for their children regular health habits, sleeping hours, regular hours for meals, and less eating between meals. They are encouraging self-reliance, developing initiative, teaching them courtesy, unselfishness, and more prompt and willing obedience, and are explaining to them why they are asked to do certain things.

Eastern States Outline Agronomy, Clothing, and 4-H Club Programs

DEFINITE directions to agronomy, clothing, and 4-H club work in the Eastern States were given in the recommendations made by the several groups representing these three lines of extension activity at the annual Eastern States Extension Conference, which was held in New Brunswick, N. J., February 24, 25, and 26, 1931.

The tenor of these recommendations was influenced to a marked degree by the discussion of significant social and economic trends and their effects on extension programs, which was the central theme of the conference.

Recommendations of the Club Leaders

The State 4-H club leaders recommended that a more flexible 4-H club program should be planned within the States to meet the needs for (1) the organization of 4-H club work according to the changing natural social and economic areas; (2) the additional preparation for life and vocational guidance of rural youth; (3) the training of farm girls and boys to participate in the family group in a more satisfying and constructive way; (4) social and recreational activities that are adapted to the age and interests of farm boys and girls; (5) evaluation of 4-H club activities in terms of the needs of youth and the objectives of extension work; and (6) the development of a philosophy of rural life that will equip farm youth to make intelligent decisions.

The other recommendations of the club leaders were:

1. That the club leaders study and apply in their programs more of the available facts relative to the economic and social situations and trends of rural life.

2. That the State club leaders make studies of specialized problems relating to methods of club organization and promotion.

3. That, as a sequel to this conference, there be held in the different States similar conferences to effect a more widespread understanding of the significant social and economic trends and problems as they concern farm youth.

4. That the Office of Cooperative Extension Work be asked to have prepared a handbook of social and economic information for use with 4-H club leaders and members (particularly older boys and girls), in order to facilitate the application of social and economic facts in 4-H club planning and programs.

Agronomy Sessions

The agronomy specialists centered their discussion around the marginal land problem, dairying and pastures, and agronomy in 4-H club work. They recognized as marginal land that land which does not at present return enough net income to enable the operator and his family to maintain a reasonable standard of living. It was agreed that this marginal-land problem should be studied jointly with the forestry, animal-husbandry, marketing, and farm-management groups.

The specialists decided that the production of harvested forage crops and the production of pasturage should be emphasized in building agronomy programs to meet the needs of the dairy industry. They recommended legume growing because legumes go far toward replacing grain feeds, and because they afford large hourly labor incomes, according to farm-management records. The advantages of better pastures were pointed out as including cheap and abundant milk production, healthier and more vigorous cattle, and less trouble in breeding. It was emphasized that these advantages are obtained by the more abundant and better quality forage that improved methods of pasture management and fertilization bring about.

They recommended that pastures should be given more attention in formulating agronomy extension programs.

Recommendations Made by Clothing Specialists

In order to have facts on clothing costs and appearances to serve as a basis for discussion during the conference, preliminary studies were made by home demonstration workers in the various States. The estimates obtained from about 400 farm families showed that the average annual cost for clothing a farm family of 4.4 members is $244. Almost 600 farm women and girls and more than 500 farm men and boys, as dressed for church or trips to town, were scored on their appearances. Although the average score was 80 per cent, the women were scored low in all the States on "appearance of entire costume" i. e., suitability to occasion, harmony in color, etc., and the men were scored low on "overcoat" and "grooming."

Three purposes were outlined for the clothing extension program: First, to study and determine economic facts and social needs of rural people in relation to clothing; second, to work with rural people in establishing standards for suitability of clothing, posture, grooming, and personal neatness; and third, to develop a clothing program to fit the needs as shown by the above studies.

In general, the recommendations for carrying on the work were: (1) That clothing accounts should be obtained to serve as a basis for planning a family clothing budget; (2) that the projects in construction and remodeling of clothing should be continued; (3) that emphasis should be given to cleaning and storage, good posture, and children's clothing; (4) that the simplicity, becomingness, and health aspects of clothing should be emphasized rather than the prevailing fashion; (5) that a study be made to compile a list of noninflammable cleaners which will not injure fabrics; and (6) that other extension specialists and the resident staff should be cooperated with in all these efforts.

Other recommendations were that the specialists should exchange "round robin" letters semiannually and that an extension clothing specialist should be employed by the Office of Cooperative Extension Work. As a result of one recommendation of this group, a committee has been appointed to work out standard clothing budgets for a family of five on the basis of expenditures of $150 and $250 a year.

The clothing specialists also believed that their program should include work with men and boys as well as with women and girls.

NATIONAL 4-H CLUB RADIO PROGRAM

SATURDAY, JUNE 6

Music from Pan America will be played in the National 4-H Music Achievement Test to be broadcast on Saturday, June 6, during the United States Department of Agriculture Farm and Home Hour as a feature of the monthly 4-H club radio program. The United States Marine Band will play the following selections:

La Paloma (Cuba)_____ *Yradier.*
La Golondrina (Mexico)_*Serradell.*
Cuban Dances (Cuba)__ *Cervantes.*
San Lorenzo March (Argentina) *Silva.*
Soldiers' Song (Brazil)__ *Salutari.*
El Condor Pasa (Peru)____ *Robles.*

The New Western Radio Program

M. S. EISENHOWER

Director of Information, U. S. Department of Agriculture

NEWS of agricultural extension work in the Western States figures extensively in a new network radio program, started by the Department of Agriculture on January 1, 1931, at the invitation of the National Broadcasting Co.

The new program is known as the Western Farm and Home Hour. It originates in San Francisco and is broadcast daily except Saturday and Sunday from 12.15 to 1 p. m., Pacific standard time, by a network of eight stations.

Daily except Thursday, this program carries a 5-minute review of extension news of the seven westernmost States. The daily reviews contributed by the extension services of these States present three sorts of information for Western farmers and home makers: (1) Current recommendations of the extension services; (2) announcements of meetings of wide interest to farmers and home makers; (3) announcements of publications of the colleges which are currently useful to farmers and home makers. This news from the States is compiled into a running story and delivered by R. H. Lamb, western radio program manager for the Department of Agriculture.

Plans are afoot for a monthly 4-H club program in the Western Farm and Home Hour. To accomplish this the department is soliciting the cooperation of all the Western States served by the new network program. One program already has been presented with the aid of the California Extension Service.

Department Features

The department features of the Western Farm and Home Hour include weekly market reviews, showing trends, but not quoting prices, on grains, hay, and feedstuffs; on livestock, meats, and wool; on dairy and poultry products; and on fruits and vegetables. The Forest Service presents at least one weekly talk or dialogue dealing with its work and urging the public to help in conservation. A daily weather report contributed by the Weather Bureau shows conditions and gives forecasts for the Pacific and Western Intermountain States. Other items are a weekly "read-the-label" interview with the chief of the western district of the Food and Drug Administration, and talks on current production problems of Western farmers and management problems of Western home makers by members of the department and by visiting State agricultural authorities.

The National Broadcasting Co. contributes an entertainment program as a setting for the information features, and has arranged with the United Press, the International News Service, and the Pacific Coast News Service to provide a daily digest of governmental news of interest to agriculture.

The Department of Agriculture defrays the cost of the program management. The National Broadcasting Co. provides without charge the network telephone facilities and the musical program. The associated stations contribute their facilities without charge. These stations are: KGO, Oakland; KECA, Los Angeles; KFSD, San Diego; KTAR, Phoenix (broadcasts only from 1.45 to 2 p. m.); KSL, Salt Lake City; KGW, Portland; KOMO, Seattle; KHQ, Spokane.

Extension workers of the Western States whose travel schedules take them to San Francisco will confer a favor upon the department program manager by notifying him of their intended visits and of topics of general interest in the West which they will discuss with the network audience. Address R. H. Lamb, Room 33, Appraiser's Building, San Francisco, Calif.

Disseminating Outlook Information in Indiana

OUTLOOK information is being satisfactorily disseminated in Indiana by the use of several different methods, according to J. C. Baker, assistant extension editor in Indiana.

A mimeographed report on the outlook for the various farm commodities produced in Indiana is prepared in February and sent to all county agents, teachers of vocational agriculture, and members of the agricultural staff at Purdue University. In addition to these agricultural workers, the report is sent to the leading bankers, farm bureau officers, officers of the Grange and Farmers Union, and cooperators in the farm-account project.

This report forms the basis for discussion at the various extension meetings during the following months. Charts covering the relative purchasing power of beef cattle, sheep, and horses in Indiana from 1870 to 1929, the corn-hog ratio from 1910 to 1929, the ratio of the prices of poultry feed to the prices of poultry and eggs from 1910 to 1929, and the seasonal variation in the prices of hogs from 1921 to 1929, are also presented at a number of these meetings.

In addition to the presentation of economic material at meetings, the outlook report was summarized and published in news articles and eight radio talks were given by county agents and farm management specialists.

In the 66 counties doing outlook work last year, 245 meetings were held with a total attendance of 19,976 persons. The county agents in Clay, Vigo, and Sullivan Counties found it advantageous to hold joint meetings; that is, the three agents united and jointly held their meetings, each presenting some phase of the outlook report.

Mr. Baker reports that in all the outlook work carried on in Indiana emphasis was given to the value of economic information for stabilizing production rather than for encouraging fluctuations in production so that some farmers could "out-guess the market."

The home demonstration department and the animal industry department of the University of Idaho are cooperating in giving a series of demonstrations in different parts of the State, which will bring about a greater utilization of lamb by the use of the less used cuts. The demonstration consists of cuts of lamb given by a meat cutter and the preparation of some of the less used cuts by Miss Marion Hepworth, State home demonstration leader and nutrition specialist.

Negro Agents Demonstrate Home Improvement Work

AFTER directing negro extension work for 10 years in Texas toward production, conservation, and preservation of food; clothing; home-improvement work; poultry raising; and dairying; the extension agents felt that the confidence of the people had been gained so that they would be willing to cooperate in an attempt to improve housing conditions, according to Mrs. M. E. V. Hunter, negro district agent.

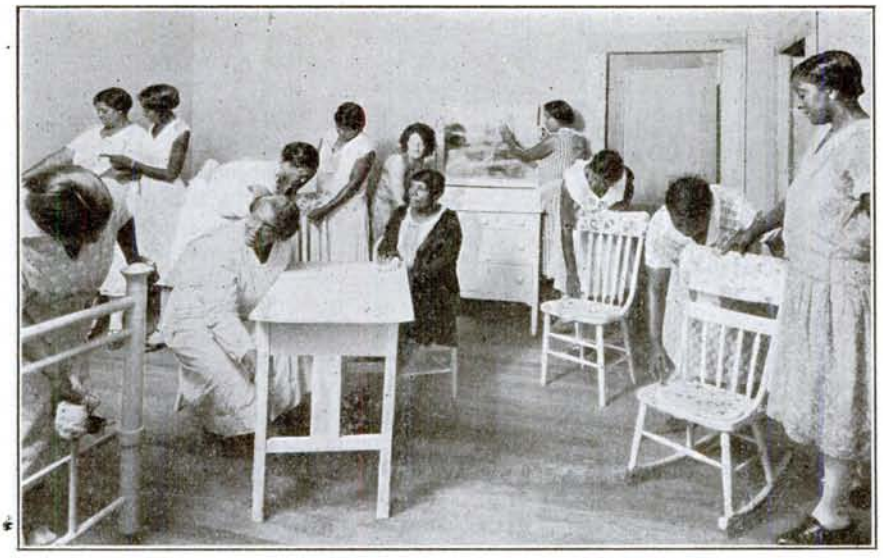
Each home had different problems because little thought had been given to the location of the lot, house, barn, orchard, well, and garden. The minimum standard set for a home included all comforts necessary for the development of children and for the preservation of the health of all members of the family.

The various tasks necessary for the improvement of the farm home were divided into 5 units in the interior and exterior of the home and 5 units in the farm, making a total of 10 units in the development of the entire layout. By dividing the work into units the necessary improvements could be made step by step, taking one interior and one exterior unit per year until the farm family would have a well-planned home.

One of the greatest handicaps in improving the farm home is the lack of sufficient funds. To raise money for improvements each family plants 2 acres in cotton, potatoes, or in any other money crop. This method is continued until the work is completed, which requires from one to five years, according to the financial progress of the family.

Twelve homes to be used as demonstration homes were selected in each county which has a home demonstration agent. Units will be developed step by step with the idea of having other farm families participate in the demonstrations from time to time and put the information into practice in their own homes.

The negro home demonstration agents of Texas were requested to demonstrate their home-improvement work to the agents of three States who were attending the summer school held at Prairie View, Tex. This school was one of three conducted in the South for negro extension agents under the direction of the Office of Cooperative Extension Work in cooperation with the State extension services of the Southern States, and partly financed by the Julius Rosenwald Fund.



Demonstration in the refinishing of bedroom furniture

An old dilapidated 3-room box house was used in conducting the various demonstrations which would ordinarily be given in the development of the average farm home. A plan was made for the work, and the men and women agents participated in changing the house into a neat 5-unit home at a total cost, excluding labor, of $408.

The house was remodeled and refurnished. The carpentry work, painting, building of a sanitary toilet, tree surgery, plotting a home garden, constructing a poultry house, and grading and replanting of the grounds around the house were all done by the agents as a part of the course. The women agents redecorated the walk, refinished the floors, made curtains and draperies, painted and refinished furniture, made rugs and screens, put rollers on the table and wood box, raised the height of the cookstove, selected and framed appropriate pictures from magazines, stained the frames, and placed pictures on the walls, made a convenient place for the mop, broom, and irons, and made an adjustable bathroom which is especially designed for a small house as it can be removed when not needed and the space utilized for other conveniences.

The house was equipped with all modern conveniences, such as a built-in kitchen cabinet, sink, glass in the upper part of the kitchen door to let in more light, and a screen 5½ feet high to separate the dining room from the kitchen, bedroom with a closet, semiliving room, and front and back porch. All floors except the kitchen floor were stained. A linoleum was neatly arranged on the kitchen floor. This house, the improvements of which cost $408, looks as well as other cottages on the campus which had just been completed at a cost of $2,200 each.

The work, under the direction of two instructors, was accomplished in two weeks, which included six class periods of two hours each. Considerable material for the work had been assembled. Each agent who attended the short course was furnished with an outline of this material, together with a mimeographed list of materials and references giving sources of information on how to develop home-improvement work.

The method used in remodeling this old building should be of great value to the average farm family in making homes of the present huts that are so commonly seen in the rural districts of the Southland.

Illinois Summer Courses

The University of Illinois for the first time is offering 4-weeks' summer courses in agricultural economics, marketing, agricultural economic theory, farm mechanics, and farm management. These are the same courses that are offered in the regular sessions of the university, but are being given for four weeks during the summer to enable county agents and Smith-Hughes teachers to get advanced training.

Buying Clothing Studied in California

BETTER buying studies have aroused considerable interest in the clothing program in California during the past two years. The aim of these studies is to familiarize the women with information such as textile values, cut of garments, standard sizes, cleaning, laundering, and wearing qualities. This information helps them to be more intelligent consumers. Fourteen counties participated in these studies. The subject of buying had been discussed previously in connection with demonstrations in clothing selection and construction.

In each of the counties the subject of better buying was discussed and demonstrated in meetings covering one or two months. However, several months of preparation were spent by the home demonstration agent and women, who voluntarily served as home demonstrators in preparation for the work at the meetings. Records were kept of cost, labor, laundry, and wearing qualities of both ready-made and homemade house dresses, various makes of stockings and underwear. The demonstrations included also reports of studies on textiles and accessories.

With plenty of wash dresses on the market priced within the reach of everyone, and also an attractive array of yard goods on sale, the question to buy or to make entered into the project.

In Butte County where Irene Fagin is home demonstration agent, 11 demonstrators made a comparative cost study of dresses for adults between the sizes of 34-inch and 44-inch bust. The following conclusions were reached. The cheaper the ready-made dress the less was actually saved in making a similar one at home, and if a person were busy, the saving was not sufficient to warrant spending the time in sewing. The saving depended also on whether or not the woman was easy to fit. Some said they spent as much time and effort in trying to get a ready-to-wear dress that would fit as they did in making one. Most of the women found there was a definite saving in making children's clothing. The amounts saved by making at home varied from $0.08 per hour to $2.50 per hour.

In Napa County where Ruby Flowers is the home demonstration agent, the women contributed to the meeting on the subject of buying underwear, by bringing in examples of their good and poor "buys." These created interest and served as a starting point for the study. The home demonstration agent selected examples of ready-made underwear from local stores, which were considered good garments. The conclusions of these meetings were that most types of underwear could be purchased more satisfactorily ready-made with the possible exception of costume slips. The cut and the wearing qualities of the average ready-made slip was below par of the homemade slip.

Buying Hosiery

Another demonstration was that of buying hosiery, consideration being given to such points as fibers, knitting, shape, and reenforcements. Local exhibits which included full-fashioned, nonfashioned, outsize, misses' sizes, and opera lengths of various kinds were collected from stores. Women tested and reported on the wearing and laundering qualities of certain makes of hosiery. After a result demonstration was given at a meeting, round-table discussions followed. Although there are no definite means of measuring the results, says Ethelwyn Dodson, clothing specialist, 2,139 families reported improved practices as a result of the project in 1930.

Maryland Agents Develop Local Film Strips

The use of the film strip in extension teaching by the group of six county extension agents of Harford and Frederick Counties was demonstrated before the 1931 annual conference of Maryland extension workers. In discussing the educational merits of the film strip and in explaining how to organize film strip series, the agents illustrated the talks with film strips prepared from photographs that they had taken in their counties locally.

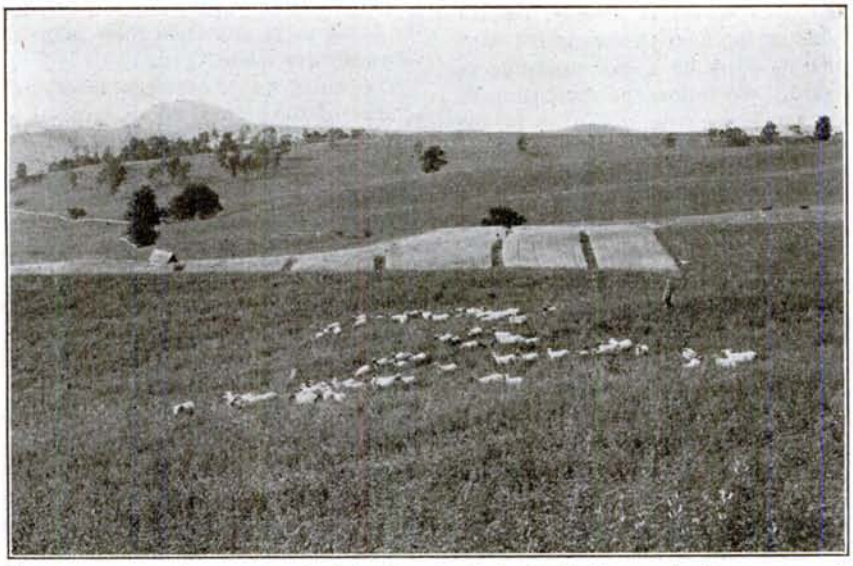
This presentation was the culmination of a demonstration that the Maryland extension service carried on during 1930 in cooperation with the Office of Cooperative Extension Work of the United States Department of Agriculture. The objectives of this demonstration were: (1) To provide the county extension agents of both counties with instructions regarding the operation of cameras and methods of taking good extension photographs; (2) to obtain a pictorial record of selected extension activities in the counties, showing in detail the development of the various projects and the accomplishments during the year; (3) to procure photographs for use in illustrating several series of film strips on agricultural, home demonstration, and 4-H club activities; and (4) to organize a collection of pictorial records of extension work in the counties that would provide a source of photographs for county, State, and national information; for use in the preparation of posters and other visual aids; and for the illustration of annual reports, publications, and magazine articles.

Each of the county extension agents in Harford and Frederick Counties selected topics to be visualized that would illustrate the more important phases of the extension projects that they wished to emphasize during the year. Outlines of the major points involved in the proper presentation of these topics were prepared. The various points were placed in orderly sequence and furnished the basis for the arrangement of the pictures in the film strip. A list of the photographs that were needed to illustrate the series was then prepared. The subjects of these pictures were then rearranged in a new list which indicated the months of the year during which the various subjects could best be photographed and the names of the farms where the pictures could be obtained. A frequent consultation of this list enabled the county extension agents to procure the needed photographs at the proper time of the year and helped them to avoid overlooking any subject until the season was too far advanced to obtain a suitable photograph.

Visits to each county were made during the year by George W. Ackerman, the department extension photographer. Mr. Ackerman accompanied the agents on photographic trips and showed them how to stage and take successful extension pictures. Such points as staging the picture, posing, proper exposure, use of stops, lighting of subject, and similar features were carefully covered. After all the photographs listed in the outlines had been procured, they were arranged in the proper sequence and made into film strip series.

The agents who cooperated in this enterprise were H. M. Carroll, county agent; W. H. Evans, assistant county agent; and Catherine Maurice, home demonstration agent, of Harford County; and H. R. Shoemaker, county agent; Helen Pearson, home demonstration agent; and Ernestine Chubb, assistant home demonstration agent, of Frederick County.

Pastures in North Carolina



Sheep on a sweetclover pasture in Ashe County, N. C. E. C. Turner, jr., the county agricultural agent in that county, reports that in 1930 over 8,000 pounds of sweetclover seed—more than three times as much as in 1929—was sold in his county. Old stands of sweetclover last year gave more grazing than grass pastures, even in spite of the drought

DURING 1930, 77 of the 82 county agricultural agents in North Carolina reported pasture work as an extension project, with 2,304 completed result demonstrations, involving 10,761 acres of land, which, according to the farmers' figures, were worth over $250,000. S. J. Kirby, North Carolina extension agronomist, reports that these demonstrations showed that permanent pasture can be made at low cost, that pasture offers the best feed available for livestock, and that much of the land which will not produce cultivated crops satisfactorily can be profitably seeded to pasture and grazed by livestock.

Outstanding work has been done in Alamance County, where last spring over one-third as many pastures were seeded as there were farms. In this county a pasture campaign was started in 1929, and has been continued during 1930 and 1931 under the leadership of W. Kerr Scott, county agricultural agent; H. M. Singletary, assistant county agricultural agent; and J. W. Jeffries, negro county agricultural agent.

The dairy, pasture, and agronomy specialists, district agents, county agents, teachers of vocational agriculture, banks, and local civic clubs cooperated in this campaign. For instance, the banks inclosed with their monthly statements for February circular letters on the pasture program and the importance of lespedeza as a soil improver and grazing legume. While meeting to study the needs of their county from an extension standpoint, 40 of the best Alamance County farmers unanimously voted that the pasture program should be continued and that lespedeza was the most economical soil-building legume, as it grew under practically all conditions.

Cold Storage of Eggs Pays in Alabama

In the spring of 1928 when Alabama hens were producing eggs at top speed prices dropped to 15 cents a dozen, and farmers and poultrymen were discouraged. Prior to that the poultry industry had been developing rapidly and the owners were enthusiastic, but the price of 15 cents a dozen put a wet blanket on their enthusiasm.

But J. T. High, district agent, and the county agents in his district, which comprises the northern third of Alabama, were not discouraged. They reasoned that "the way to deal with trouble is to face it," which they did. They decided to try a cold-storage project. Their objectives as stated in their plan of procedure were:

"(1) To enable poultrymen to realize a greater net return than would be secured were the eggs dumped on the local market at prevailing low prices.

"(2) To remove a quantity of eggs from local markets during the season of high egg production and prevailing low prices.

"(3) To further convince egg dealers and the consuming public of the fact that good Alabama eggs will come out of cold storage in as good condition as eggs produced in any other section of the country, and to encourage people of this State to use Alabama-stored eggs."

The project was carried on with the cooperation of the extension service of the Alabama Polytechnic Institute, the Alabama Farm Bureau Federation, the county farm bureaus, individual poultrymen, and a cold-storage company in Birmingham. Only 53 cases of eggs were placed in storage that spring. These cases contained 5,100 dozens of eggs from 15 poultrymen in 5 counties. The eggs were inspected while in storage at various intervals and at the close of the storage period were carefully candled and graded. The average sale price of the entire lot when sold from storage was slightly over 30 cents per dozen. After deducting the cost of cases, storage, and express, the poultrymen realized an average of 6 cents per dozen, or $1.80 per case, more than would have been obtained had the eggs been sold in the spring at prevailing local prices. In addition, the prevailing local price was raised and poultrymen generally were benefited by the cold-storage movement.

The agents thus attained each of their three objectives as set forth at the beginning. As a result poultrymen were encouraged. Had they sold their eggs they would have received about 15 to 18 cents per dozen. By storing them they received loans amounting to 20 cents per dozen, and later when the eggs were sold they received an additional amount. In other words, the loan which was made through the farm bureau was more than the current price; and, in addition, the poultrymen received more after the eggs were sold.

The average price received that year was 31 cents per dozen for No. 1 eggs, or twice the market price when the eggs were stored. The next year, 1929, the project spread into other counties of the State, and 187 cases were stored. They sold for an average of 36 cents per dozen for No. 1 eggs.

The third year, 1930, 3,762 cases were stored against 187 the second year and 53 the first. The average price for No. 1 eggs in 1930 was 24½ cents per dozen.

In addition to better prices Alabama poultrymen have learned the value of better eggs and they are producing them. Moreover, their storage project has proved conclusively that Alabama eggs properly produced will keep in storage. Prior to this storage project it was asserted by many and accepted by more that Alabama eggs would not keep in storage.

New Motion Pictures

THE Office of Motion Pictures, United States Department of Agriculture, has recently made and released the following motion pictures:

Food Makes a Difference

Children are the featured players in Food Makes a Difference, two reels, sponsored by the Bureau of Home Economics. White and colored children appear in the film; children who are thin and undernourished, with stooping backs and winged shoulder blades, contrasted with fine, healthy children, bright-eyed, laughing, sturdy, and well nourished, with straight backs and legs, showing that food does make a difference.

In addition to statements of food facts by home-economics specialists, illustrated with a succession of children, the film shows these facts in the results of laboratory experiments conducted with white rats.

As children can not be used in experiments that show what happens on a poor diet, white rats were used, because rats show results of poor diets in much the same way as children do, and rats grow rapidly and mature early. Two white rats from the same litter were chosen as the film actors in the laboratory experiment. Both were fed meat, potato, whole wheat, butter, sugar, and salt, all good foods but not a balanced diet. The second rat was fed milk and vegetables in addition. The result is vividly and convincingly shown on the screen.

The conclusions drawn from the film are that defects resulting from poor diet can be prevented by good diet and that well-nourished children are happy, keen, energetic, and have healthy appetites and sturdy bodies. The film closes with a series of scenes showing healthy children at play and the caption, "Grain, livestock, vegetables, and all other products of the soil are necessary to our well-being, but there is another crop infinitely more precious, the crop of children."

Cooperative Marketing—Dried Prunes

Where and how prunes are grown, handled, and marketed cooperatively is shown in the 2-reel film Cooperative Marketing—Dried Prunes, sponsored by the Federal Farm Board.

There are scenes of pictorial beauty showing the plum trees in bloom and a harvest sequence showing trees laden with luscious fruit and the pickers at work. The pickers, many of whom are young boys and girls earning their way through high school or college, live in tents during the harvest season and earn as much as $6 or $8 a day according to their skill. We follow the fruit through various processes from the tree to the housewife. In Oregon and Washington, where these scenes were made, plums become dried prunes in artificial driers. We see the fruit being washed and trundled into tunnel-like driers where it is left for 48 hours to be dehydrated. The dried prunes are then sent to the packing plant, thoroughly inspected, sorted, graded, and finally put in bags or boxes for shipment. Scenes showing shipping and the arrival and handling of the dried prunes in foreign countries follow.

We learn from the film that seven-tenths of the prune crop of Washington is marketed cooperatively; that a dozen local cooperatives handle one-third the Oregon crop; that each grower's prunes are graded to size, there being 10 or more recognized sizes; that the 2 principal varieties are the Italian type prune, large and tart sweet, and the French type or petite prune, which is smaller and sweeter; and that all varieties are given the same careful treatment in cooperative factories. The purpose of the film is to show the accomplishments of cooperative organizations in the marketing and distribution of prunes, and their success in placing an attractive food product on the market. Though designed primarily for showing to dealers and growers, the film is of interest to consumers everywhere.

Back of the Weather Forecast

The question asked by Young America, "How does the Weather Bureau know what the weather's going to be?" is answered in the new 2-reel motion picture, Back of the Weather Forecast, sponsored by the Weather Bureau. The film is divided into three parts. The first part introduces a father and son discussing the weather. Dad, unable to answer his son's questions, takes him to the Weather Bureau to get the correct answers from headquarters.

What the interested boy learns comprises the second part. He learns the names and uses of the "funny-looking instruments" he has seen in Weather Bureau pictures; he learns the meanings of the weather symbols that appear in the published weather maps; he learns how the information is assembled at the 200 weather-bureau stations scattered throughout the United States; he learns that Washington receives daily telegraphic reports giving conditions from the Arctic circle nearly to the Equator and from Central Europe westward to the coast of Asia; and that all of this information from the reports is plotted on the blank maps and from these maps the forecasts are made.

The third part explains briefly the science of forcasting—to explain all the details of complex cases and the use made of the forecasts would require a half dozen reels.

There are a number of effective scenes of technical animation, such as the parade of the symbols, the weather map building itself up bit by bit, the isobars drawing themselves in a scientifically accurate manner, and an actual 4-day record of the thermograph making a continuous record of temperature changes, made under the time-lapse machine. This machine is the invention of Howard Greene, late of the technical staff of the Office of Motion Pictures and the director of the film.

Back of the Weather Forecast will be of interest to schools, colleges, and the general public and will give old and young easily assimilated information about how weather information is assembled and how forecasts are made.

Educational Directories Available

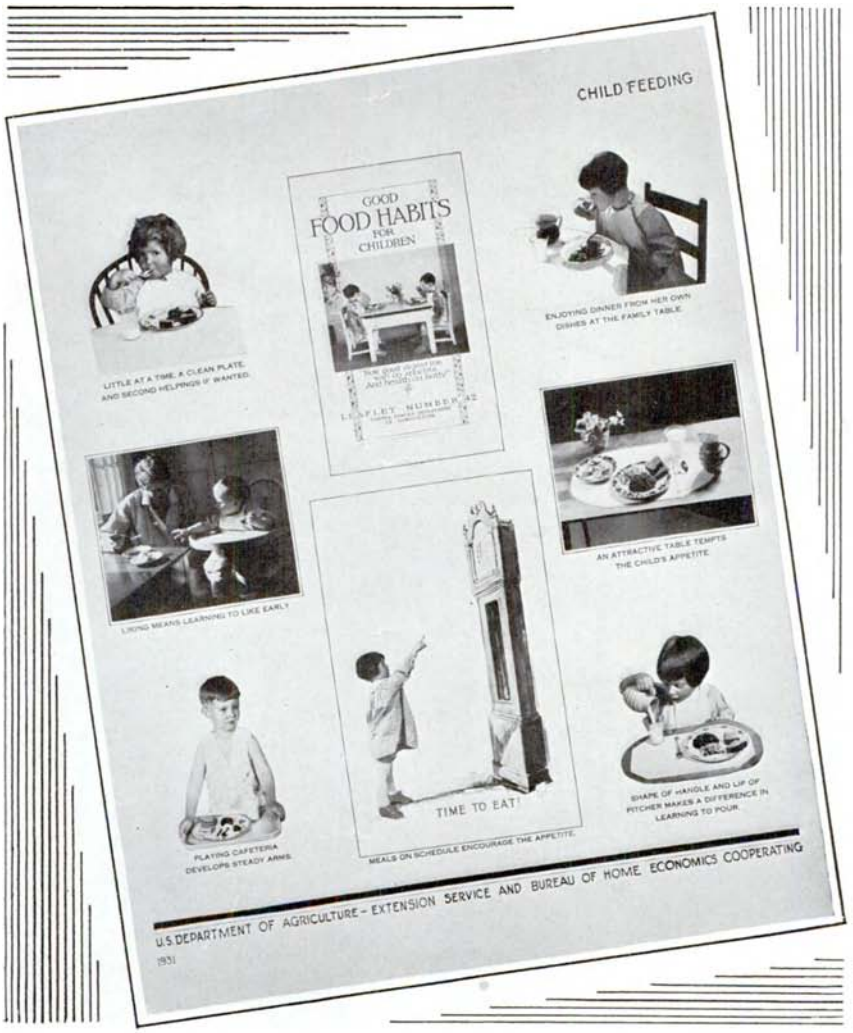
The 1931 Educational Directory, which lists nearly 12,000 school officials in the United States, with their names, positions, and addresses, has been issued by the Office of Education of the United States Department of Interior and is available from the Superintendent of Documents, Government Printing Office, Washington, D. C.

The directory has three separate parts: Part I, Elementary and Secondary School Systems; Part II, Institutions of Higher Education; and Part III, Educational Associations, Boards, and Foundations, and Educational Periodicals. These sell for 15, 10, and 10 cents, respectively.

The Office of Education has also issued two other educational directories: Accredited Secondary Schools (high schools) in the United States, Bulletin (1930) No. 24; and Accredited Higher Institutions, Bulletin (1930) No. 19. These may be procured from the Government Printing Office for 25 and 20 cents a copy, respectively.

The State garden contest in Oklahoma is attracting much interest. The enrollment has increased from 2,437 in 1930 to 5,308 in 1931.

HOME ECONOMICS POSTERS NOW AVAILABLE



A series of 11 posters, prepared by the Office of Cooperative Extension Work and the Bureau of Home Economics is now available for extension workers in home economics subjects . . . . .

These posters, which contain from 6 to 12 prints each, with explanatory legends will be found particularly helpful at conferences and group meetings and for exhibits. New posters will be added from time to time. At present the series includes the following subjects . .

SELF-HELP BIBS : SELF-HELP SUITS FOR LITTLE BOYS : CHILDREN'S PLAY SUITS : GOOD FOOD HABITS FOR CHILDREN : WINDOW CURTAINING : STAIN REMOVAL FROM FABRICS : HOME BAKING : HOMEMADE PICKLES, JAMS AND JELLIES : SAVORY MEAT DISHES : EGG DISHES AND ICE CREAMS : HOME CANNING OF FRUITS AND VEGETABLES

The posters are not available for free distribution, but may be purchased either as photographic prints, size 8 by 10 inches, at 9 cents each, or as bromide enlargements, size 16 by 20 inches, mounted on cloth, at $2 each. Larger sizes can also be obtained at proportionately higher prices, which will be furnished upon request. Do not send remittance with the order. A bill, which will include actual transportation charges, will be sent when the material is delivered. Purchase orders should be sent to the

OFFICE OF COOPERATIVE EXTENSION WORK

UNITED STATES DEPARTMENT OF AGRICULTURE, WASHINGTON, D. C.

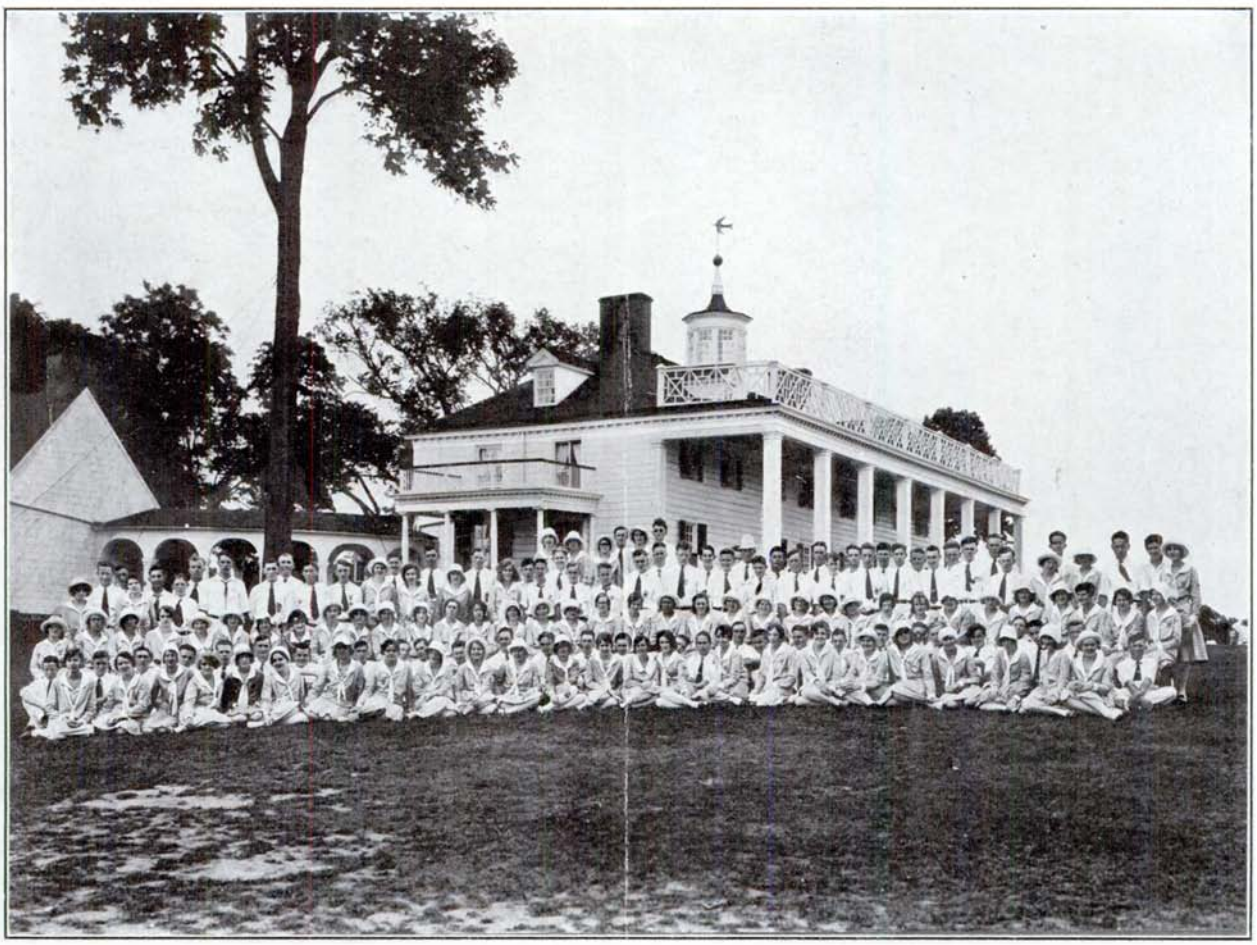
The child of the farm is about the only one who has a fair chance to develop a normal human life. He learns responsibility for his own share of chores and harder work. He learns the value of money, of work, of time, and of recreation. He learns the meaning of duty that must be done at the right time, and the joy of rest after work. He can sleep and enjoy wholesome food and he rarely calls a doctor. He has a thousand sources of information and delight that come only on occasions to the city boy. All these conditions tend to develop a breadth of mind and a sturdy resourcefulness that is the best possible preparation for usefulness in later life.

F. W. HOWE.

U. S. GOVERNMENT PRINTING OFFICE: 1931

Extension Service Review

VOL. 2, NO. 6 JUNE, 1931



NATIONAL 4-H CLUB CAMPERS VISITING MOUNT VERNON

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

The EXTENSION SERVICE REVIEW is the official organ of the Extension Service of the Department of Agriculture. It is issued monthly throughout the year. The subscription price is 50 cents a year. All subscriptions should be sent direct to the Superintendent of Documents, United States Government Printing Office, Washington, D. C. Single copies may be obtained at a price of 5 cents each. For postage to countries that do not recognize the United States mailing frank, 25 cents a year should be added. Remittances should be made to the Superintendent of Documents by coupon, postal money order, express order, or New York draft. Remittance in currency will be at the sender's risk. Postage stamps, coins defaced or worn smooth, foreign money, and uncertified checks will not be accepted.

CERTIFICATE.—By direction of the Secretary of Agriculture, the matter contained herein is published as administrative information and is required for the proper transaction of the public business

Extension Service Review

VOL. 2 WASHINGTON, D. C., JUNE, 1931 NO. 6

The Fifth National 4-H Club Camp

THE FIFTH national 4-H club camp and conference will be held on the grounds of the United States Department of Agriculture in Washington, D. C., June 17 to 23, inclusive. Club-member delegates are expected from 40 States.

The club delegates will meet each day to discuss problems of the farm boy and girl, particularly those pertaining to vocation, family relations, recreation, personal development, and service. They will assemble for their conference committee work in the same five groups. Each group will select its own chairman, secretary, and recorder. The group officers will also meet daily to summarize the discussions and prepare progress reports to be presented to the main club conference on the day following. All committee discussions will be led by club member delegates appointed each day by the committee chairmen.

The State leaders will meet at the same hour in the conference rooms of the department and will continue their discussions again at afternoon sessions. Under the leadership of O. E. Baker, in charge of studies in land resources and utilization, Bureau of Agricultural Economics, the leaders will study the trends of agriculture and its effect upon young people. Nat. T. Frame, director of Cooperative Extension Work in West Virginia, will conduct a round-table conference of the leaders on 4-H club problems.

Experiments Observed

While the leaders are engaged in their afternoon conferences the 4-H delegates will observe the outstanding experiments being carried on by the department in or near Washington, and will visit places of historical and educational interest about the District of Columbia.

One afternoon will be spent at the department's livestock and experimental farm of about 1,500 acres, 13 miles northeast of Washington, D. C., near Beltsville, Md. Members of the staffs of the Bureau of Animal Industry and the Bureau of Dairy Industry will accompany the delegates about the farm and explain the work in progress relating to beef and dairy cattle, horses, sheep, goats, hogs, poultry, and phases of dairy manufacturing.

On another afternoon the delegates will drive to the department's plant industry farm near Arlington, Va., about 1 mile south of the Capital. Here, under the leadership of members of the Bureau of Plant Industry staff, they will visit experiments relating to cereals, orchards, forage and truck crops, potatoes, small fruits, and ornamentals.

Twelve miles down the Potomac is the home of our first farmer President, Mount Vernon, and the journey to this typical early Virginia plantation will be full of interest both educationally and historically.

Tours on the club delegates' program include also the arts and industries, natural history, and aircraft buildings of the Smithsonian Institution, the Bureau of Engraving and Printing, the Washington Monument, Lincoln Memorial, Pan American Building, Corcoran Gallery of Art, and the Library of Congress.

Assembly Speakers

Assemblies will start the days with stirring 4-H club songs and inspirational addresses. Speakers on the 1931 program include Mrs. James Y. Rippin; Charles F. Jenkins; Chairman J. C. Stone of the Federal Farm Board; Secretary of Agriculture Arthur M. Hyde; C. W. Warburton, Director of Extension Work; and C. B. Smith, chief, Office of Cooperative Extension Work. Mrs. Rippin is national director of the Girl Scout organization, member of the National Council of Social Agencies, the National Conference on Social Work, and the National Conference on Outdoor Activities. Doctor Jenkins is president of the Jenkins Laboratories and research vice president of the Jenkins Television Corporation, is the inventor of the projection machine for motion-picture theaters and television and radiophotography devices and author of a number of books on vision by radio. The assemblies will be held in the auditorium of the United States National Museum.

Camp Organization

Every hour of the delegates' seven days has been carefully allotted by committees of the Extension Service staff. Transportation schedules have been made and checked, meals arranged, and quarters assigned in the tent city that is erected on the department grounds each year for the camp. This will leave both delegates and their accompanying State extension agents free to give undivided attention to the week's program.

The camp director, will be assisted by a staff including a general secretary, a financial secretary, supervisor of physical equipment, medical service, and committee members responsible for the club members' conferences, the morning sessions, tours, and the evening programs. An information service will handle news and photographs for the newspapers in the States interested in the delegates and for representatives of agricultural journals visiting the camp. The 4-H delegates will write their own daily camp newspaper, the 4-H Forage. Three of the department's noon-hour radio periods will be made avail-

4-H Clubs Enroll 845,000 Members

The enrollment of 845,000 boys and girls in the 4-H clubs for 1931 is reported by State extension divisions. This is a gain over the 1930 enrollment of more than 22,000 club members and was made in the face of an economic situation and a widespread drought that made heavy emergency demands upon the time and effort of county extension agents.

56894—31

able to delegates in which to tell of their 4-H club experiences, on June 19, 22, and 23.

Delegates coming by train will be met at Union Station and directed to the camp. Those coming by automobile will drive to the department grounds. Each delegation will report immediately on arrival at the headquarters tent to register, receive instructions on camp arrangements and programs, and to learn their tent assignments. Club girls and chaperons will have their tents on the inner half of the camp quadrangle. Tents for the boys and men will occupy the sides of the camp nearer the thoroughfare. Two States will be represented in each tent and work on the problem of getting acquainted with strangers from 40 States will be thus well started.

Reveille will rouse the camp each morning at six o'clock. Twenty-five minutes later the campers will stand at attention while the flag is raised. From 6.30 to 7.30 policing of quarters will keep everyone busy. Then the divisions will form for the walk to breakfast. Assembly will follow, then the club members' conference, the State leaders' conference, noonday meal, educational tours, supper, recreation, camp-fire or special evening feature, and taps.

Facilities will be available for club delegates and leaders to attend whatever services they may wish Sunday morning. The entire camp will go to Arlington Memorial Cemetery Sunday afternoon for a special service in the amphitheater and at the Tomb of the Unknown Soldier. Club-member delegates will have charge of the program for the banquet which will be held at the United States Chamber of Commerce Friday evening. To close the other days' programs, the club members will gather around a campfire built in the center of the camp for an hour of mingled fun and inspiration before the signal comes for "Lights out."

THE AMERICAN Home Economics Association will hold its twenty-fourth annual meeting in Detroit, Mich., June 22–27, with "The Rôle of the Home in Individual and Family Development" as the central theme of the conference.

Just preceding this meeting, the Home Economics Extension Conference will be held at the St. Clair Inn, St. Clair, Mich., June 20–22, for home demonstration agents, extension specialists, and State leaders. All home economics extension workers are cordially invited to both of these meetings.

Importance of Direct Contact

EARLY extension reports emphasized such information as the number of miles traveled, number of meetings held and attendance, the number of farms or home visits made, the number of result demonstrations established, and the number of boys and girls enrolled in clubs and similar activities. It was held that such activities were essential to the influencing of farmers and farm women to accept the better farm and home practices taught.

That this theory was correct has been demonstrated by the data from extension field studies which have been conducted in recent years, reports M. C. Wilson, of the Office of Cooperative Extension Work. Studies of 10,421 farms in representative sections of 16 States bring out the importance of an extension worker employing teaching means and agencies which, over a period of years, will bring the extension worker into direct contact with the people he or she is endeavoring to serve.

Where members of the farm family had been in group contact with extension workers through meetings and result demonstrations, or in personal contact through farm and home visits, office calls, and the like, 91 per cent of the families involved reported changes made due to extension information as compared to but 41 per cent of the families in the no contact group. More than four times as many instances of the adoption of better practices were reported by the families in the contact group than by the no contact families.

It was also found that direct contact methods have been of greater importance in the spread of home economics extension information than in the case of agricultural information.

In the contact group, on 87 per cent of the farms, improved practices were adopted in agriculture as compared to 38 per cent in the no-contact group; while 39 per cent of the homes in the contact group reported the adoption of improved home economics practices as compared to only 8 per cent in the no-contact group.

There is naturally a close relationship between the means and agencies employed in extension teaching and the extent to which extension workers come in contact with their clientele. Data from the field studies mentioned above involving more than 30,000 instances of practices adopted, indicate that for every 100 practices adopted 58 per cent were credited to contact methods such as meetings, demonstrations, farm visits, and office calls; 21 per cent to non-contact methods such as bulletins, news articles, and circular letters; and 21 per cent to the indirect influence of all means and agencies.

The means and agencies which make possible contact between extension workers and the rural people serve both to disseminate information regarding improved practices and to build confidence in the extension workers. It is most logical that there should be a close relationship between confidence established, the extent to which rural people are informed regarding improved practices, and the success attending the teaching efforts of the extension worker, says Mr. Wilson.

Home Demonstration Work in Hawaii

HOME demonstration work in Hawaii is carried on with attendant difficulties which the extension worker in the States may not fully appreciate. According to Mrs. Gladys M. Wood, administrative assistant in Hawaii, at times the agent finds it necessary to have copies of recipes translated and mimeographed before a satisfactory distribution can be made.

Even ordinary ovens are scarce in Hawaiian country homes, but through the cooperation of the Kauai high school shop class 5-gallon kerosene cans have been neatly reconstructed into ovens and are being furnished the native women for 75 cents each. Nearly 100 women have ordered these ovens.

Some practical and attractive uses of inexpensive materials are being taught on the island. For instance, last September Mabel Green, Honolulu County home demonstration agent, secured 180 sugar sacks and 36 flour sacks for her sewing clubs. The following articles were made from the sacks: 20 curtains, 12 pillow covers, 2 laundry bags, 3 bedspreads, 3 dresser scarfs, 6 luncheon sets, 6 tablecloths, and 1 house dress.

Texas Holds a Ham and Bacon Show

Some of the hams, bacon, sausage, and other pork products exhibited

The hanging hams illustrate three types of country cured hams exhibited. Left, one put up in packer fashion; center, a very high type ham; right, a poorly prepared one—note excessive length and prominent pelvic bone

THE Texas Ham and Bacon Show at Lubbock, March 27 and 28, demonstrated two things from an extension viewpoint: The effectiveness of a single theme in capturing popular imagination and the value of such a show in fostering the live-at-home ideal.

Visitors from both town and country learned that both cotton and livestock were still on the plains and, after being served tasty meat dishes and hot coffee, realized that country people can vie with experts in putting up meat, reports W. H. Darrow, Texas extension editor.

In addition to livestock, the 400 exhibitors, living in 16 counties, showed over 700 entries of country-cured hams, bacon, picnic shoulders, Boston butts, canned scrapple, pork roast, sausage, lard, liver paste, and soap.

Objective of the Work

During the fall and winter months, pork killing, curing, and canning demonstrations had been given by Roy W. Snyder, meat specialist, E. M. Regenbrecht, swine specialist, and Zetha McInnis, home industries specialist, with the cooperation of Sterling Evans and Myrtle Murray, district agents. These demonstrations were presented on a live-at-home basis. Meat curing and canning during the first three months of 1931 exceeded all previous records. Families that had not put up meat for years once again did some canning and the meat products of hundreds of other families were improved by the new methods demonstrated.

At the show, farmers penciled old envelopes "to reckon up" the price of a hog sold in finished form and to determine the practicability of selling home cured and canned pork products on a local scale as a means of increasing the revenue from hogs and of adding to the per acre value of grain sorghum crops. Most of them decided that the processing approximately doubled the live-weight value of the animal, but, although a few farmers and their wives seemed ready to venture into such a home industry, the majority were impressed with the living-at-home phase.

Regional pride was roused by the white paper or cellophane wrapping given to meat and set off with circular stickers in yellow and black containing a map of Texas and branded "Texas Country Cured." These adornments were furnished by the commercial concerns and the Lubbock Chamber of Commerce which financed the show.

The cured meats were judged by K. F. Warner of the Bureau of Animal Industry, and the canned meat products and soap were judged by Mrs. Ola Powell Malcolm, of the Office of Cooperative Extension Work, both from Washington, D. C. The judging brought out that in addition to curing, the grades for meat were influenced by the type of swine and the finishing.

Virginia Camp for Farmers and Farm Women

IN THE September, 1930, issue of the REVIEW an editorial on camps raised some questions on the apparent lack of extension camps for farmers, although many such camps are conducted for women and boys and girls. In answer to this editorial, Sylvia Slocum, district home-demonstration agent in Virginia, and Mabel Massey, home-demonstration agent, James City County, Va., have written to the REVIEW reporting at least one extension supervised camp in which the men have a share.

They report that of the 275 people who attended the third annual Virginia adult camp at the Jamestown 4-H camp grounds, August 11–15, 1930, about 50 were men. These men had a special program of their own, in addition to attending the women's discussions in which they were interested. Bathing, horseshoe pitching, fishing, and the historic sights of Williamsburg, Yorktown, and Jamestown Island provided the recreational side of camp life for these men.

Growers' Marketing Organizations in South Carolina

W. W. LONG
Director, South Carolina Extension Service

IT IS generally admitted that the Extension Service of South Carolina played an important part in organizing in 1922 the tobacco growers of this State; this organization then becoming a part of the Tri-State Tobacco Association, the other two members being the North Carolina and the Virginia associations. For numerous reasons, useless to mention, this association was disappointing and finally went into the hands of a receiver. Naturally the tobacco growers lost confidence in the efficacy of a cooperative marketing association.

Organization Effected

Upon the passage of the Federal marketing act creating the Federal Farm Board, the extension service realized that if the tobacco growers were to receive any benefit from this legislation it was necessary for them to organize and thus place themselves in a position to cooperate with the Federal Farm Board. To this end, a general meeting was held at Florence, S. C., which was attended by 1,300 farmers and business men, and addressed by James C. Stone and Carl Williams, members of the Federal Farm Board. The meeting was thrown open for general discussion, after which a vote was taken by ballot to determine whether it was thought wise to attempt to organize the growers. Of the large number voting only four voted against organizing.

Immediately an active campaign of an educational character was begun, and no high-powered salesmanship was undertaken. Facts were placed before the farmer, and he was left to determine whether he would join. Five thousand farmers signed the contracts and one-fourth of the tonnage of the crop, based on the previous year's production, was pledged. A permanent organization was perfected. The directors elected by the members were entirely representative and were men of outstanding intelligence. The association has been handled in a most businesslike manner, resulting in general satisfaction and the outlook for a large increase in membership for the next crop is most encouraging.

I mentioned that the Extension Service of South Carolina played a part in organizing this association, I freely admit that this would have been impossible except for the fact that the growers realized that the Federal Government, through the Federal Farm Board, would make every effort not only to cooperate with the organization but would have parental supervision. In discussing the matter with the farmer this thought was emphasized—this is the first attempt of the Federal Government to establish a definite agricultural policy with all of its prestige back of it and a tremendous appropriation provided. Now, Mr. Farmer, if you do not propose to cooperate with your Government in trying to make this policy (established for your interest) a success, what do you expect your Government to do and what do you propose to do?

Assocation Reorganized

The cotton association was organized in 1922, the extension service being active in bringing about its organization. Unfortunately, it too was disappointing. Its membership and number of bales handled declined each year. Following the passage of the marketing act the board of trustees of Clemson Agricultural College, appreciating the great importance of this legislation to the agriculture of the State, had several conferences with directors of the association, resulting in a proposition to make a survey of the affairs of the association to be undertaken by the Extension Service of the United States Department of Agriculture and Clemson Agricultural College, the Federal Farm Board, and representatives of the cotton association.

A survey of an exhaustive character was made, and a reorganization of the association, largely based upon this survey, was accomplished. As a result of this reorganization a larger number of bales of cotton will be handled this season than at any time in the history of the organization. The increased interest in the cotton association was the result of the marketing act, the farmers believing that the Federal Farm Board would see that efficiency was enforced.

The officials of the cooperative organizations naturally have the success of this marketing act largely in their hands. If they can not demonstrate that this legislation will redound to the credit of the farmer in dollars and cents, then cooperative marketing will be questionable. The Extension Service of South Carolina is making every effort and working in close cooperation with the Federal Farm Board and the different commodity associations.

Minnesota Poultry Schools for Women

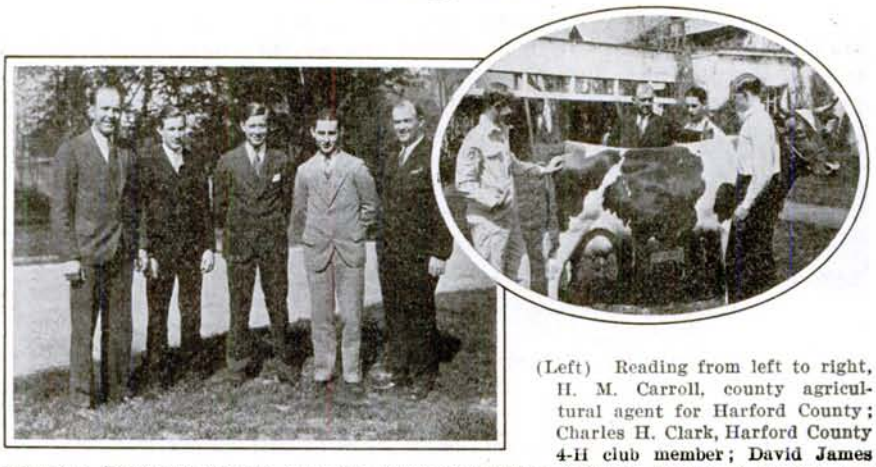
POULTRY and egg marketing schools for women have proved popular in Minnesota, especially in counties adjacent to the larger cities and towns where private outlets for the products are available, reports Cora E. Cooke, women's poultry specialist in that State. A series of schools held during the fall months was conducted by Miss Cooke. The local organization work was done by the county home demonstration agents, and the schools in 11 counties had an attendance of 590 members.

Eggs were candled and graded to show variations in quality, and emphasis was placed on the need for prompt marketing to prevent deterioration. Poultry dressing demonstrations were of special interest; these were illustrated by exhibits of dressed poultry and graded and packed eggs.

At each meeting the groups discussed the prevailing poultry and egg prices and the present status of the poultry business as a farm enterprise. It was noted that egg production was relatively low and that young stock put on the market was of unusually poor quality, largely due to low prices.

The discussion centered around the need for selling poultry and eggs on a graded basis as a means of inducing greater care on the part of producers. It was brought out that such care would encourage greater egg consumption and thus maintain a better price level.

Maryland Sends Judging Team to England



(Left) Reading from left to right, H. M. Carroll, county agricultural agent for Harford County; Charles H. Clark, Harford County 4-H club member; David James Johnston, Baltimore County 4-H club member; William Chilcoat, Baltimore County 4-H club member; and H. C. Barker, Maryland extension dairy specialist. (Right) Members of team receiving instruction on judging from Mr. Barker

BY MAKING the highest judging score at the 1930 National Dairy Exposition, the Maryland 4-H club dairy judging team won the right to represent the United States in the annual international dairy judging contest which will be held in England, during July. Maryland teams have represented the United States in this contest in three other years, winning the international contest in 1922 and 1923 but losing in 1926 to the English team.

The young farmers' clubs in England were started in 1921, the first one, a calf club, being sponsored by the United Dairies (Ltd.). The London newspaper, The Daily Mail, was one of the first promoters of clubs for boys and girls and was largely responsible for their establishment in England. At first a public-spirited individual supplied the money necessary for organizing a club which was returned later by the members. Since the importance of club work was realized, the National Farmers' Union, large industrial concerns, groups of farmers, or interested persons have been willing to lend the small amount needed to start a club, provided it was paid back at the end of the first year, when the club was supposed to become self-supporting. In 1924, the Ministry of Agriculture took over the supervision of club work and outlined a general policy for the management of clubs which could be changed to suit local conditions, but had no expense in this connection beyond the salary and expenses of the organizer appointed by the Government to assist with the development of the work.

At the close of 1928, a review of the state of club work showed that though progress had been made and the movement had become a national one, there were certain social features which made it desirable to transfer the supervision from the ministry to a voluntary body. The rural community councils, first organized in 1921, had already added the promotion of young farmers' clubs to their other services for the rural people in a number of counties, and their headquarters organization seemed best fitted for the development of the movement. Accordingly, at the ministry's request, the National Council of Social Service, the common council of the community councils, now established in 17 counties, agreed to undertake the supervision of club work in the future. The ministry arranged for a grant for five years, the amount contributed each year to become less and less, until the end of this period, when it was hoped the club movement would be self supporting. The Carnegie trustees, who had become interested in the work, also made a small donation. These two contributions together with subscription and affiliation fees have by no means been adequate for the work.

Early in 1929 the National Association of Young Farmers' Clubs was formed under the auspices of the national council, and since then a new stage of development has begun for the clubs with the aid of this body, the Ministry of Agriculture, and county educational and agricultural authorities. Though hardly a year has passed since the national association was formed, the clubs are on a more solid foundation and give promise of steady growth. The association has its headquarters at Bedford Square, London, and since March, 1929, has been publishing a paper, "The Young Farmers," which is proving a means of uniting the clubs and popularizing their work. The association has adopted a club badge, which is of oxidized silver, circular in shape, and bears the words, "Young Farmers' Club." On the badge are shown a young person plowing, the sun coming up in the distance, and five spikes of wheat.

Schools for County Fair Judges

Two schools for training county fair judges were held last year in Nebraska because the extension and college officials believed that there was a great need for standardization of the judging of products and livestock at county fairs and because they believed that extension specialists should not devote their time to judging work at county fairs, according to Elton Lux, Nebraska extension editor.

The first school was held for the judges of home-economics exhibits and the second school for the judges of agricultural exhibits. At these schools individuals other than extension workers received the benefit of the experience of the extension and college workers in the principles of judging at fairs and in dealing with county fair officials and exhibitors, as well as gaining practical experience and information on judging itself.

The Nebraska extension service furnished county fair officials with a list of the men and women who had attended these schools and who had been approved by the college faculty as competent judges. The county fair officials then made all their arrangements with the judges direct, although the extension service offered to help in any emergency cases. Mr. Lux reports that the counties of the State seem to be very well satisfied with these arrangements.

The American Dairy Science Association will hold its meeting this year at Davis, Calif., July 14–15. There will be a preconvention tour in California and a postconvention tour in Oregon and Washington.

Measuring Progress in Extension Work

J. C. TAYLOR
Director, Montana Extension Service

THE USUAL method of reporting extension activities is to indicate by narrative and statistical summary what has happened during a specified period of time. This system gives the statistical record from year to year but does not in any manner indicate what has happened in the way of changes or progress in establishing any phase of agricultural production within a designated area, except for the limited period covered by the report. In reporting the results of extension work, the county is the unit we ordinarily use, but seldom do we show what has actually happened to the agriculture of a county as a result of extension efforts over a period of years.

Records of Changes

That such measurement is possible has been demonstrated to some extent by a system that has been gradually evolved in keeping records of changes effected through extension methods in Montana. This has been done by starting with a known base of any particular phase of work and then keeping accurate records of progress made over a period of years. Such a system once established is easy to continue and has the decided advantage of indicating at all times the degree to which the spread of influence has occurred. Hence, such a system of measuring extension accomplishments seems to have a distinct advantage in that the exact status of any phase of project work can be determined upon the basis of the contribution made in agricultural development of any section we may wish to measure.

Pure Seed Produced

To illustrate, since 1919 an extensive pure-seed producing program has been under way in Montana, and plans have been gradually developed whereby a county with such a program now produces sufficient seed stocks of any grain variety to supply its needs. An examination of the records kept in a county over a period of years will illustrate how we may obtain an accurate check in the spread of influence of a particular project. Let us examine the records of a county where extension work was established in 1922. This will serve to illustrate how we may determine what improvement has been accomplished over a period of years where the cumulative effect is measured.

In this particular county grain growers were taking a heavy dockage in grain sales when the work started, because of the badly mixed varieties of grain produced, together with high smut content. For 6 years, during the time extension work has been in operation in this county, accurate records have been kept of the increased use of pure seed, which started with 1 registered grower with 10 acres of Marquis wheat in 1922.

Spread of Marquis wheat traced to registered seed

	1922	1923	1924	1925	1926	1927
Number of growers	1	10	39	110	215	305
Number of acres	10	200	1,170	5,500	20,000	31,000
Total bushels	150	3,000	23,400	72,000	180,000	360,000
Increased yield per acre over seed previously used (bushels)	3	3	5	4	2	3

In another county, where extension work has been under way less than three years, results secured in extending the use of registered seed are very similar. In 1928, 2 carloads of pure Marquis seed were shipped in and distributed to 100 farmers. In 1929, 150 farmers used seed from this source, seeding over 16,000 acres. Yields from this acreage averaged over 2 bushels more per acre than grain produced from ordinary seed. Many illustrations might be cited of similar records with grain production; but reports of other activities may be of more interest, for this system can be used in practically every phase of extension work.

The measurement of increased interest and cooperation on the part of local communities in supporting a county fair is well illustrated in the following report:

Community fairs

Community	Number of exhibitors					
	1925	1926	1927	1928	1929	1930
1	134	274	158	149	204	368
2	13	61	73	97	145	174
3	65	88	82	94	106	114
Total	304	776	955	1,015	1,526	1,955

The above table indicates the total exhibits from 15 communities over a 6-year period, but does not give the detailed record for each, because of lack of space. The growth of the county fair in this county has been in proportion to the community cooperation, and this past year 91 per cent of the farmers in the county displayed exhibits.

In another county an examination of the records of a livestock shipping association indicating the number of animals handled over a period of years also shows a close correlation to the production program under way. These records are based upon actual shipments through the association over a 7-year period, or from the time the association commenced to function.

Livestock shipped by years

	1924	1925	1926	1927	1928	1929	1930
Cattle	374	1,082	2,066	1,594	965	629	872
Hogs	858	1,432	1,604	1,969	2,396	2,821	3,504

A comparison of the records with the projects in livestock production programs in the county shows a very interesting correlation with development of the work. For instance, during the last four years, 1927 to 1930, inclusive, the emphasis in the extension program was placed upon hog production both with adults and juniors, which is well illustrated in the table by a sharp decrease in cattle shipped from 1927 on.

Dairy Herd Improvement

Likewise the records of a dairy herd improvement association tell an interesting story over a period of years and incidentally indicate what progress is being made in herd improvement.

Dairy herd-improvement association records

	Annual production per cow			
	1926	1927	1928	1929
	Pounds	*Pounds*	*Pounds*	*Pounds*
Milk	6,305	7,202	7,867	8,002
Butterfat	246.3	294.5	309.1	317.7

There has been an average of 264 cows in this association, which indicates an increased production of 1,697 pounds of milk and 71.4 pounds of butterfat per cow during the 4-year period.

Alfalfa Seed Production

In still another county the records of a seed marketing association again indicate what has been happening in the way of establishing this important cash crop.

Registered alfalfa seed sealed

	1927	1928	1929
Number of pounds	330,000	568,000	664,000
Average	950	2,633	2,780
Number of growers	43	55	44

The spread of influence of potato certification may be measured in the same way in any given area, as illustrated by the following county record.

Potato seed certification

	1925	1926	1927	1928	1929	1930
Acres planted with certified seed	3	3	51	165	150	108
Increased yield over common seed stock (in sacks)	75	100	1,275	2,300	2,250	3,740
Estimated increase due to certified seed	112½	200	1,275	1,725	5,625	3,740

From such a record it is easy to determine the increased returns to potato growers over this period of time as a result of using certified seed. In this particular instance the increased amount was $12,158 in favor of certified seed.

The following table gives a summary of rodent control work for a period of five years. The figures on amounts of poison used are based on actual sales records. Other figures are determined from data on file in the extension office.

Results of rodent control project

	1927	1928	1929	1930	Total
Farmers cooperating	125	200	250	285	860
Acres covered with poison bait	10,000	14,000	18,000	20,000	62,000
Pounds cyanogas used	3,165	7,000	10,000	5,000	25,165
Pounds poisoned oats used	5,645	3,000	5,000	11,067	24,712
Total cost of poison	$1,479	$1,555	$2,650	$2,383	$8,068
Estimated saving to crops protected	28,457	25,000	32,000	30,000	115,457

Such records are of permanent value to the State Extension Service but still more important to an extension agent. He can use such records in many ways. For instance, such material makes an excellent basis for news stories and in many instances can be used for feature press articles in both State and local papers. Still more important, perhaps, is the use of such records on selling extension results to boards of commissioners and business men. They can readily understand such summaries where less tangible records, such as we sometimes use, mean little or nothing. Of greatest importance is the value of such records in measuring the actual progress made in the development of any phase of agriculture in a county.

Ohio Grows Greenhouse Vegetables

OHIO growers own approximately 600 acres of greenhouse structures which have been erected at a cost of from $40,000 to $50,000 per acre, according to A. W. Marion, extension greenhouse specialist in Ohio. In order to survive competition from shipped-in produce, the Ohio greenhouse growers, with their tremendous overhead, must grow a large crop of high-quality produce and market it to the best possible advantage.

Of the five important factors for optimum plant growth—namely, soil fertility, water, heat, air, and light—the hothouse grower can control all but light, which can be controlled only partially. Since this is true, one of the big jobs of the extension worker is to teach the growers how to handle the other four factors to offset the effect of either intense or insufficient light. The extension worker also calls the grower's attention to better varieties; tells him how he can control insects and diseases; and assists in the selection of fertilizers which leave little or no residues. The extension worker also helps with the marketing of the crop by suggesting better grading and better packages and assisting in the organizing of cooperative associations. In fact, he assists with any problem regarding the forcing of vegetables.

The most outstanding results of the greenhouse extension projects carried on in Ohio last year were in the feeding of nitrogen to tomatoes and cucumbers. In the case of tomatoes, the nitrogen was applied each week or 10 days after the third cluster had set and sulphate of ammonia was used at the rate of 300 pounds per acre per application and watered in immediately. As much as 3,000 pounds or more of nitrogen per acre was used during the season.

On cucumbers the applications were the same except that they were not started until after the first good picking. In one case urea, at the rate of 125 pounds per application, was used in the place of sulphate of ammonia.

These feeding demonstrations were held in 11 counties and some of the results were as follows: A Ross County grower increased the yield of greenhouse tomatoes 3,680 pounds per acre by feeding sulphate of ammonia and following the extension service recommendations. In Hamilton County one farmer had an increase of 6 tons of greenhouse tomatoes due to systematic feeding of sulphate of ammonia. A grower in Lucas County increased his returns $500 from one application of 300 pounds of sulphate of ammonia on 1 acre of greenhouse tomatoes. Another Hamilton County man increased his yield of greenhouse cucumbers 1,000 dozen per acre by feeding sulphate of ammonia. The most outstanding increase on cucumbers was in Ashtabula County where by using urea as a nitrogen carrier the yield was increased at the rate of 4,050 dozen per acre more than that of the unfed check.

An outstanding example of what can be done by better management of greenhouse crops comes from a range of greenhouses in Lucas County. One of the owners told Mr. Marion that, since they had installed tile sterilization, fed their cucumber and tomato crops with nitrogen, and carefully followed the other improved practices recommended, they had increased the sales from their 13 acres of greenhouses $60,000 in one year.

Extension Service Review

Issued monthly by the EXTENSION SERVICE of the United States Department of Agriculture Washington, D. C.

The Extension Service Review is published in the interests of workers and cooperators of the Department of Agriculture engaged in extension activities. It contains official statements and other information necessary to the performance of their duties and is issued free to them by law. Others may obtain copies of the Review from the Superintendent of Documents, Government Printing Office, Washington, D. C., 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, Extension Work*
C. B. SMITH, *Chief, Office of Cooperative Extension Work*
J. W. HISCOX, *Chief, Office of Exhibits*
RAYMOND EVANS, *Chief, Office of Motion Pictures*

REUBEN BRIGHAM, *Editor*

JUNE, 1931

Whose Job?

Whose job is it to take extension's message to the farmer and his family? It is, in the final analysis, the job of the county extension agent. It is through the man or woman placed as an extension agent in the county that extension must render its service to that county. To the extent to which this man or woman has strength, intelligence, and ability to understand and sympathize with farm problems, to that extent will the extension service be successful in making farming as a business in that county more profitable and its farm life more attractive and satisfying. The better trained this man or woman is and the better paid, to that degree will extension work in the county be strong. No matter how well planned the program for extension development in the State may be, no matter how carefully the subject matter or the teaching of this subject matter is organized by State extension specialists, if the extension agent in the county is not capable of giving life and form to the proposed program, extension work will go haltingly in that county.

For the work to succeed, the agent must believe in the program. He must see how the subject matter fits into the local situation. He must be as capable of using the teaching methods proposed as a master workman is capable of handling his tools. He must know intimately the views and way of living of his people. He must be respected and accepted by them. He must sympathize with their hopes and ambitions. Then, and then only, can he hope to accomplish permanent improvement. Then, and then only, will extension make a real contribution to the farming and farm life of that county.

What are the real problems of the extension organization to-day? First, to provide proper and adequate training for the men and women who seek to qualify themselves for extension work. Second, to employ men and women for county work well trained, with a sound background of practical experience, with a sympathetic attitude toward farm problems, and at a salary that will command a high caliber of ability and influence. Third, to develop for the use of these extension agents an ample fund of scientific information that will meet progressively the changing situations and requirements of a county's agriculture. Here in the county the extension organization needs the best training, ability, and appreciation of farm problems that its financial resources can command. The success of extension work in any county must continue to depend in a large measure on the caliber of the county extension agent and the standing and authority he has with his people.

Develop Research

In his discussion in this issue of the REVIEW of extension relationships in the agricultural college, Director M. S. McDowell, of Pennsylvania, places particular emphasis on the opportunities for mutual helpfulness open to research and extension agencies. The extension worker, he points out, can aid materially in strengthening the research program of the institution. He can develop among farmers, business men, and others with whom he works an intelligent appreciation of the dependence of successful extension work and agricultural progress on the scientific solution of the problems of production and marketing. He can show that the extension service continues to be of practical aid only when the results of investigations into farm problems produce facts on which improved practices can be based. He can explain that along with the maintenance of extension work and the flow of helpful information to the farm, equal provision must be made for the conduct of research and development of facts that can be extended.

Then, too, through close contact with the research staff, extension workers can give the investigator the first-hand information regarding field problems and situations that should result in the direction of research along lines calculated to be of practical service in enabling the extension worker to assist farmers in meeting the problems immediately before them.

Through association with the research staff, the extension worker gains a better understanding of some of the difficulties and problems in conducting research and of the course such work must take. With proper coordination, the research and extension agencies of an institution become a powerful machine for the solution of farm problems and the advancement of agricultural progress. Without such coordination, much effort will be wasted, progress will be delayed, and the institution eventually will fail in its function as an agency for giving constructive aid to the agriculture of the State.

Measuring Progress

What has happened to the agriculture of a county as a result of extension effort over a period of years is seldom given in the annual report of the county extension agent. Director J. C. Taylor of Montana, makes this preliminary assertion in discussing the measurement of progress in extension work in this issue of the REVIEW. He then places before us a number of examples of results obtained in different counties in that State.

Director Taylor gives a variety of measurements of progress to choose from. All have to do with some kind of increase or growth due to extension effort. Here they are: The production of an improved variety of grain, the number of exhibits at the county fair, the shipments of a livestock marketing association, the production per cow in a dairy herd-improvement association, the output of a seed marketing association, and the number of acres on which rodent control was practiced.

With these results before us, what are we to conclude? Where increased production of a commodity is reported can we assume that more buyers were attracted and that prices were improved? Can we assume, also, that these results meant an increase in the net income of the farmer? Are we reasonably sure that these efforts have improved living conditions and increased the satisfaction to be found in living on the farms in these counties? Do we know from the results reported what has happened to the agriculture of the county as a result of extension effort? What are our answers to these questions? How shall extension progress be measured?

Extension Relationships in the Agricultural College

M. S. McDOWELL
Director, Pennsylvania Extension Service

THAT industry and invention have made tremendous progress in recent years is a fact patent to all.

The last two or three decades have brought progress which was not dreamed of at the beginning of the present century. The automobile, the radio, and many other developments have profoundly affected our lives. This rapid progress has come as a result of painstaking research and the application of the principles discovered. Without continuous and persistent search for new facts and principles progress must slacken.

Agriculture, too, has profited from the results of a search for knowledge which have been applied to the farm, the farm home, and the rural community; although the application here is often more difficult. A growing fund of basic facts is just as essential to the progress of agriculture and the farm home as it is to industry and to other lines of endeavor. Without research and the application of its results, agriculture will lag. A retarded agriculture affects the whole foundation of our national life. This applies to production, to distribution, and to marketing, as well as to those factors which relate to the health, the social, and the community life of our rural people.

Functions of College

The discovery and application of new facts and principles, the teaching of all available information to resident students, and the carrying of helpful information to those whose operations and lives are directly affected, but who can not come to the institution—these are the functions of the agricultural college. This has sometimes been expressed by saying that the work of the agricultural college is built upon a tripod; teaching, research, and extension representing the legs of the tripod.

The agricultural college was founded originally for the teaching of students. It soon became evident, however, that satisfactory teaching was not possible without a background of definite and authentic information. The experiment stations were established to meet this need for accurate knowledge.

After a few decades of agricultural research a fund of information was accumulated which had value not only for the teaching of students who came to the college but also for the individual farmer. It was only through the application of these principles upon the individual farm that agriculture as a business could be made more efficient and more profitable.

Fundamentally, then, the extension service is the channel through which information developed by the United States Department of Agriculture, the State experiment stations, and other agencies is distributed to farmers and home makers throughout the country.

Importance of Research

Just at this time there is a general recognition of the importance of and insistent demand for research, resident teaching, and extension in the field of agricultural economics. Each of these three factors is of vital importance and each has a definite relation to the others. Students can not be taught, nor can agriculture as a business be made more profitable, without the results of research. The agricultural college can not fulfill its obligations unless available information is carried to the farmers. Neither research nor extension can be maintained unless students who are capable of assuming leadership are being taught.

The extension specialists, the county agents, the home economics workers, need to be regarded as constituting an integral part of the activities of the agricultural college just as much as do the research workers. The leaders and workers in each field should feel at liberty to plan and develop such activities as will meet the needs of the situation. There should be the closest cooperation but not domination of one by the other.

Responsibility of Agent

Responsibility develops incentive and usually brings superior results. Teaching, research, and extension need the most careful thought and planning. The extension worker, whether specialist, county agent, or home economics worker, should be given the same opportunity for advanced study as is granted the research worker and teacher. Nor will the best interest of one branch of the work be served if the workers in that field are subordinate and, therefore, on the lookout for advancement to higher ranks and salaries in one of the other two branches of work in the agricultural college. This does not mean that there should not be interchange of activities. Good results may follow interchange but this does not affect responsibility within each field. Only with a proper understanding and the elimination of jealousy, if it exists, can the best results for all concerned be obtained.

While research must constitute the basis upon which extension activity rests, the research worker may be greatly benefited through contact with extension in the field and thus secure more direct and accurate knowledge of conditions. Meeting with farmers and obtaining their reactions is also helpful to the research worker.

With his need for continuous contact with research, the extension worker can at the same time be very helpful in bringing to the experiment station problems which are pressing for solution. He can throw light upon the relation of these problems to farm operations as a whole.

Support for Research

The extension worker may well devote some energy to making clear to his clientele the difference between extension and research. It is true that, since extension reaches people in a direct way, there may sometimes be observed a tendency to regard the extension work as the only phase of work to which active support is given. Extension workers should help in correcting this erroneous view and in securing the necessary support for other phases of the work of the agricultural college.

On the other hand, the research worker often needs to recognize that only through the maintenance of a strong and effective extension service may support be secured for research.

Because of small units working under a wide range of conditions, inability to employ scientifically trained personnel, supply laboratories and equipment, and other factors, it is impossible for the farmer to conduct research work. In the interest of the people as a whole, however, it is vital that such work be done. The only way it can be accomplished is with public funds and under public supervision.

Since agricultural research can be conducted only at public expense, the obligation of carrying information to rural

Continued at bottom of page 90

A scene from the 1-act play, The Florist, presented by a 4-H club in Marathon County

4-H Club Plays in Wisconsin

THE 4-H clubs in Wisconsin staged their third annual home-talent tournament during the winter, reports Verne Varney, assistant State club leader. According to the plan adopted in the beginning any 4-H club, or two clubs if the membership of each club is less than 10, may put on a 1-act play, and any county with at least three play groups may enter the State tournament.

In 1926 junior groups were preparing special feature programs, particularly novel in nature, which were competitive and held in connection with the adult drama tournaments. The 4-H club leaders became interested in the 1-act play for their clubs for many reasons: (1) It was a wonderful activity for the clubs during the winter months, bridging the period from achievement to spring enrollment in our State, (2) it afforded a new experience not otherwise found in 4-H club work, (3) it provided exceptional socializing opportunities, and (4) it afforded an opportunity to raise money for worthy club objectives.

The extension specialist in rural sociology and the rural sociology department of the State college of agriculture assisted in the county-wide drama institutes. The aim was to have 4-H clubs enjoy this amateur program which was directed by amateur leaders with the suggestions given by professional directors.

The first year 9 counties entered with 45 plays staged; 3 districts were formed, and the winning play of each district competed for State honors in Madison during farm and home week in February. Last year 12 counties participated, and the winning county play groups attended the State club week in Madison in June, engaging in elimination and final contests to determine the ranking plays.

Care has been taken to recommend 1-act plays suitable for rural young folk. These plays were loaned by the extension division for reading purposes. A greater variety of plays distinctly written for the teen age rural people is needed.

Early Ohios and Rhode Island Reds proved to be a good play for a Marinette County group two years ago, and The Florist Shop put on by a club in Marathon County was among those the past year. These two play groups were the State winners. More counties than last year have indicated their active interest in the drama work.

Extension Relationships in the Agricultural College

Continued from page 89

communities is one which the agricultural college can not escape.

The work of the agricultural college may be compared to a water-supply system. A pure dependable water supply or system is essential to the life of any community. The first requisite is a spring or a source which will supply a continuous and ample amount of uncontaminated water. A spring may serve as a satisfactory supply of water to those who may be able to come to it directly. Those who can obtain water in this way are limited in number.

In order to supply this life-giving liquid, mains and water lines must be built so that the supply may be made instantly available over wide areas. Each household must be supplied with a tap through which water may be had at any time.

Research in agriculture and home economics represents the spring or reservoir. Those who may obtain water directly from the spring or source are represented by the resident students. The mains and pipe lines are represented by the extension specialists, and the taps through which the supply reaches large numbers of individuals are represented by the county agents and the home-demonstration agents.

The system is developed at public expense to serve everyone. Certain parts of the water-supply system may be more costly than others but no part can be omitted or sacrificed without seriously affecting the satisfactory working of the system as a whole. Each is serving its purpose best only when all parts are supported and operated in such a way as to serve the best interests of community life.

Outlook Work in Washington

THE following facts reported by W. D. Staats, Washington extension editor, indicate how well the farmers in that State have applied the outlook information which has been given to them by the extension service: (1) Poultry flocks have been culled heavily—in fact the average number of birds in a flock has dropped from 606 in 1928 and 1929 to 579 in 1930 and the average annual egg production per hen has increased from 170 in 1929 to 175 in 1930. (2) The low prices of canner cows and the records of the dairy herd-improvement associations evidence the culling of dairy cows. (3) A 10 per cent increase in the pig crop is expected this year to make up for a State deficiency. (4) As an example of agricultural adjustments in wheat areas, four county cooperative grain organizations have adopted wheat acreage reduction programs. (5) There is a general intensification of the movement to lower the production costs of all agricultural commodities, to eliminate undesirable varieties of apples, and to better adjust and develop side lines.

Preparing the Outlook

The organization of this outlook work for 1931 began with the Western States Outlook Conference at Salt Lake City, Utah, in December, 1930. Before R. M. Turner, economist in farm management, and Robert Cowan, economist in marketing, went to Salt Lake City as representatives of the State of Washington, Director Balmer obtained for presentation to the conference a detailed statement from the department heads in the college of agriculture as to the present status and outlook for each field.

After Mr. Turner and Mr. Cowan returned from the conference a round-table meeting of the college of agriculture faculty and the extension specialist was held. Here all the outlook information was analyzed and gradually built up into an outlook applicable to Washington agriculture with a definite outlook for each agricultural commodity of the State and a localized outlook which was a consensus of county, State, sectional, and national agricultural facts and trends.

Then the various commodity outlooks were presented to the county agents at the annual extension conference, January 5–9, and the agents were asked to check the facts with their local outlook information. After minor changes, modifications, and the final correlation, the information was ready for distribution to the farmers. Methods for the dissemination of this material were presented to the agents by H. B. Carroll, jr., Whatcom County agricultural agent, who has done some outstanding work in this field.

Mediums for Dissemination

In Washington they have found six mediums satisfactory for reaching the farmers. The newspapers and farm journals offer the most economic way of bringing the outlook to the greatest number of farmers and have contained both special and short, authentic, to-the-point articles with discussions on such subjects as prices, economic trends, production costs and adjustments. Monthly pamphlets or mimeographed reports have been issued giving a summary of the short-time outlooks combined with the long-time outlooks. Personal contact at commodity meetings, farm organization meetings, farm visits, and farm management tours has been found to be highly effective, especially if the talks contain specific facts which are well analyzed and locally applied. Charts and graphs, if they are not too complicated, have been helpful to present the facts behind a message. It has been found that if the information is properly presented to the small group, it will be carried to the scattered individuals of the community.

The radio is being used to reach a constantly enlarging field with outlook material and market reports. Lastly, where better facilities are lacking, the circular letter has proved valuable, especially for follow-up material.

Why Use the Outlook?

Notwithstanding the fact that the forces of nature can not be controlled, the outlook service furnishes the farmer with information as to trends whereby greater stability can be attained through placing more emphasis where it is indicated that returns may be favorable and less emphasis where reduced returns are in evidence. The intelligent farmer needs economic facts and an understanding of the major trends of the enterprises in which he is interested, Mr. Staats says. With this understanding and the application of the knowledge, the farmer is prepared to build a stable and balanced farming business which can adjust itself to periods of depression and enhance returns in normal and favorable periods.

NATIONAL 4-H CLUB RADIO PROGRAM

Saturday, July 4

The series of musical compositions entitled "Music from Many Lands" was concluded with the national 4-H radio program broadcast on June 6, which featured music from Pan America. The next series of related compositions selected for the national 4-H music achievement test will begin with the program for December 5, 1931. Announcement of the theme selected for this series will be made later. During the program to be broadcast on Saturday, July 4, the United States Marine Band will play patriotic airs of certain of the countries which provided the music for the series just concluded. The interesting points about these compositions will be discussed by R. A. Turner, field agent of the Office of Cooperative Extension Work.

England	God Save the King.
Italy	Marcia Reale.
France	La Marseillaise.
Germany	Deutschland Über Alles.
Canada	The Maple Leaf Forever.
Hawaii	Aloha Oe.

Medley of patriotic airs of Pan American countries concluding with the Star-Spangled Banner.

Wyoming Women's Pageants

Pageants portraying woman's part in the development of Wyoming were presented at each of the five recreation camps which were held for farm women in that State under the direction of the Extension Service in 1930.

The basic material for these pageants was prepared by Verna Johannesen, Wyoming State home demonstration leader, in cooperation with the English department at the University of Wyoming, but the women at the camps worked out the scenes. Miss Johannesen reports that these pageants enabled the women to exercise their originality, provided entertainment, and taught the women some of the history of their State.

The nine episodes begin with Sacajawea, the Indian girl who acted as a guide for Lewis and Clarke. After showing the life of the early settlers and depicting the enfranchisement of the women as voters, jurors, and governors, the final episode centers around the home maker of to-day and the part she takes in building the community as an officer of an extension service home makers' club.

Illinois Farmers Value Accounts

MANY Illinois farmers have said that the simple farm-account project of the extension service is worth more than the $15 which they pay as annual dues to the county farm bureau. In fact, the farm accounts of large groups of farmers who use this service indicate that these farmers are led to improve their annual net incomes by about $700 a year. Individual cases have run as high as $2,000 a year (based on an average for a 3-year period before and a 3-year period after reorganizing the business).

The accounting service as conducted in Illinois includes: (1) The furnishing of a simple farm-account book, (2) helping the individual to start his accounts, (3) checking the account for completeness and accuracy at the close of the year, (4) analyzing the account and setting up comparative standards of efficiency in all phases of the business, and (5) visiting the farmer to present him with an annual report of his business, and to discuss with him the most significant features of this report.

Accounts Guide Farmers

Accounting reports have little value if considered only as history, but they have great value when used as a guide to future operations. Fifteen years of experience in this project have shown that most Illinois farmers cooperating in it face the facts frankly and make a genuine effort to increase their efficiency when they learn definitely that they are relatively inefficient in some particular phase of the business by improving or eliminating this phase. This usually has resulted in more improvement in net earnings than increasing efficiency in the most successful parts of the business, which often represent hobbies of the individual.

The advantage of cooperative account keeping is that it enables farmers to set up practical standards of efficiency under the actual conditions found in a given type of farming area. The individual can keep accounts independently and know the results of each year's operations. Knowing only his own business, however, he can not tell whether he is more or less efficient than others in any particular activity. To know that others are more efficient is a great incentive to study and effort on the part of any ambitious farm operator. As it pools the experience of many farmers the accounting service helps also by showing how the more efficient farmers gain their efficiency. This is a fair and profitable exchange, since experience shows that very few farmers are highly efficient in all of their activities. The exchange can be made only through some cooperative centralizing agency such as the organized accounting project.

Need for Cooperative Accounting

The growing complexity of the farm operator's job is increasing the need for cooperative accounting. Such changes as the greater use of mechanical equipment, as well as money and credit, the increasing hazards from insects and diseases, the progressive depletion of virgin soil fertility, and the rapid shifting of market and price conditions, all tend to increase the number of decisions which the farm manager must make. Suitable accounting systems are the best guide in making many of these decisions and the best check as to whether or not they have been made correctly. Recent studies have shown that the difference in earnings between the more efficient and the less efficient farmers is increasing. This also emphasizes the growing need for suitable guiding accounts.

Improving the Quality of Dairy Products

IN 1930 4-H quality work for improving dairy products was carried on in four Oklahoma counties, according to John W. Boehr, Oklahoma extension dairyman.

The beginning of this work can be traced back to a visit to Oklahoma in October, 1929, by J. H. McClain, extension dairyman of the Federal Department of Agriculture. On this visit Mr. McClain supplied the workers in Oklahoma with outlines for the work which were prepared in the Bureau of Dairy Industry.

During the winter meeting of county agents four agents expressed willingness to carry on this work in 1930. Outlines were sent, and letters of instruction and supplementary instructions were prepared and supplied to the agents.

In Okmulgee County two visits were made, and a large 4-H club near Henryetta carried out a good demonstration. The work was explained, demonstrations were given in sedimentation test, methylene blue test, cream grading, and scoring of milk. Over a hundred club members carried on work at home in improvement of dairy sanitation. Seven cooling tanks were constructed and used and a barn was equipped with concrete floor. The community was awakened to the fact that care and cleanliness are most necessary to obtain quality milk. Also, quality milk is used in much greater quantities in the home, as compared with ordinary farm milk. The parents became interested, and during a visit to the 4-H club meeting 17 of the parents came over muddy roads to hear the talks and see the demonstrations.

Girls Give Demonstration

In Stephens County a different process was carried out. Demonstration teams, consisting of club girls, were trained by the home demonstration agent to give a 20-minute team demonstration along this line. The demonstration included the fermentation test (Wisconsin), sedimentation test, and methylene blue test, and illustrated the washing of the cow's udder before milking. The best teams represented the county at the State dairy show and won first place among 14 county teams. Later the dairy quality demonstration was publicly given at three large county fairs where more than a thousand people saw it. At the State dairy association meeting this same team demonstrated and did a fine piece of work. Finally, the team, at the National Dairy Show at St. Louis, performed in such an excellent manner that second national award was given to the demonstration.

Vermont Postgraduate 4-H Clubs

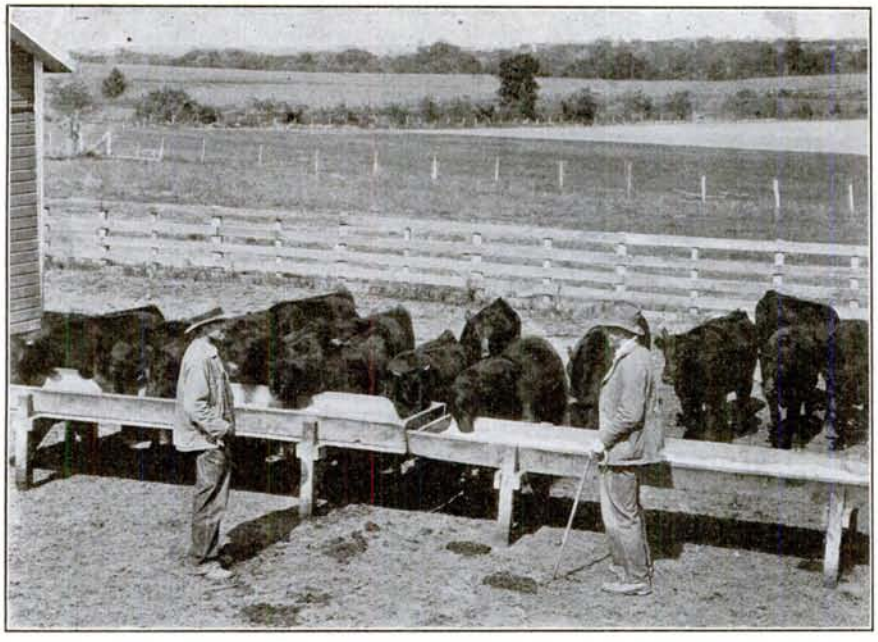
Postgraduate 4-H clubs are now organized in four Vermont counties for club members who have left their regular clubs, according to Martha E. Leighton, Vermont assistant State club leader. The object of these clubs is to continue the interest of the older boys and girls in club work and to teach them to assist with the regular clubs, whose members are younger.

Miss Leighton reports that these clubs aid the county extension forces in such activities as round-ups, fairs, camps, and achievement meetings.

The first of these older members' clubs was organized about a year ago in Chittenden County by Miss Leighton for a group of girls. The postgraduate club in Addison County is also for girls, but the clubs in Bennington and Windham Counties are for young farmers. The members of these clubs carry on more individual and advanced projects, such as the study of production and marketing, college budgeting, and social etiquette.

Missouri Beef Herds Utilize Roughage

APPROXIMATELY 1,400 Missouri farmers, following explicitly the teachings of the agricultural extension service last year, maintained beef-cow herds to utilize cheap farm roughage and fed grain to the suckling calves so that the changing market demand for lighter, earlier finished beef could be met. This movement was a part of the extension work in animal husbandry carried on by the Missouri College of Agriculture during the last seven years to meet the emergency resulting from the World War, according to H. M. Garlock, Missouri animal-husbandry specialist.



Some of the Missouri beef calves

The present extension beef-cattle program in Missouri was undertaken at a time when concentrated effort was necessary to maintain the number of cattle on Missouri farms. It was in 1922 and 1923 when the grasslands that had been plowed in response to the war-time urge to produce grain were becoming eroded and rapidly losing their fertility. Farm prices for cattle were extremely low, and feeders who had been buying cattle to finish had lost heavily. The low-price level and losses had caused many farmers and their financial advisers to conclude that beef cattle, and especially beef cows, were unprofitable, and a heavy liquidation was under way. The emergency consisted of an urgent need for cattle to utilize pasture and rough feeds, and for market animals of lighter weight to meet changing demands.

The first step in this program was to establish the place of the beef-cow herd on Missouri farms. This was accomplished through result demonstrations that provided a record of costs of maintaining the cow herd and the value of the calf crop. These demonstration herds showed that a beef cow could be maintained satisfactorily on pasture, stalkfeeds, fodder, and other low-grade roughages at a cost lower than the market value of her calf.

As soon as farmers began to realize that a beef cow can be kept on the farm for the calf she raises, the second step in the program, grain-feeding suckling calves, was undertaken. Results of cooperative experiments conducted by the Missouri Experiment Station, the United States Department of Agriculture, and the Sni-a-Bar Farms showed that the feeding of grain to suckling calves would make them of satisfactory weights and finish them for immediate slaughter when they were 8 to 10 months old. These grain-fattened calves were approximately 100 pounds heavier and worth $2 to $3 a hundred pounds more than similar ones that received no grain.

Demonstrations on feeding grain to suckling calves were included on farms where records were being obtained on costs of maintaining beef cows. Meetings were held on the farms when the calves were ready for market, and farmers were shown that January, February, and March calves could be furnished for the October, November, and December market with 15 to 20 bushels of grain. The demonstrations also showed that the early grain-fed calves, after paying for their grain, netted their owners from $10 to $20 a head more than similar calves in the community that were not grain fed.

The program has been continued largely on a demonstration basis supplemented with some general meetings. Special emphasis is still being placed on the demonstration meeting when the calves are ready for market, as this offers an opportunity to teach methods of feeding and market requirements of grain-fat calves.

The spread of the adoption of the cow-and-calf system of beef production is shown by the following statistics: After the introduction of the practice in three demonstrations in 1924 it was adopted by 63 farmers in 1925, by 106 in 1926, by 245 in 1927, by 295 in 1928, by 815 in 1929, and by an estimated total of 1,400 in 1930. During these seven years the average cost of maintaining a beef cow for one year on these Missouri farms has varied from $19.10 to $23.78.

The essentials of the Missouri beef-herd program are: Maintain good cows, and cull irregular and poor breeders. Use only good purebred bulls. Use a maximum of roughage and grass in maintaining cows. Use precautionary measures to prevent disease, such as abortion, blackleg, and tuberculosis. In sections of medium corn production feed calves grain while nursing, and market them at 8 to 10 months of age. In heavy corn producing sections fatten calves and market them as fat calves or yearlings.

Making Better Club Officers

In order to make the girls' 4-H club organization in Lake County, Ind., more effective, Elizabeth D. Barnard, county home demonstration agent, makes the presidents and secretaries of the clubs feel the importance of their positions. She sends out instructions which list the things they are to do, tells them how to conduct a business meeting, and shows them how to write up the minutes and keep the records.

Miss Barnard also holds meetings for all the presidents, secretaries, and local leaders of the 4-H clubs in her county. She reports that these county-wide meetings unite the county work as a whole and tend to make the club organization more effective. Out of the first county-wide meeting developed a monthly 4-H club paper for Lake County.

Civic Clubs Aid Negro Pig-Club Work

In 1928 when Alexander Hurse (who is now State agent in negro club work for Georgia) was local county agricultural agent in Pierce and Ware Counties, Ga., he interested the local civic organizations in a 4-H pig club program which has for its goals the improvement of the quality and an increase in the number of hogs raised on the negro farms in those counties.

The Kiwanis Club, the Lions Club, the chamber of commerce, and the Waycross Negro Business League agreed to purchase and sell 47 purebred pigs to the negro 4-H pig club members at cost. Each boy signed an agreement to (1) build a hog house; (2) provide adequate pasture and grow ample feed for his pig; and (3) pay for his pig one year from the date he received it.

Every one of the 47 boys, Mr. Hurse says, met all the conditions of this agreement. Eleven of them raised enough money from the sale of the pigs and the service of their boars to pay for their pigs. Other members have sold 27 pigs at $10 each for breeding purposes to the negro club boys in Dougherty and Laurens Counties.

In 1928 Mr. Hurse found that a great deal of pork was consumed in the counties, and that the possibilities for the cheap production of hogs was not being taken advantage of extensively. Now, he reports that over 7,000 pounds of the boys' pork has been used for home supplies.

A carload of these pigs and 60 pieces of meat were exhibited at the Southeastern Fair and at the Southeast Georgia Fair in 1930, and the boys won $440 in prize money at fairs in 1929 and 1930.

As a result of these 47 demonstrations, many boys have been stimulated to become active members of the pig clubs and adult farmers have been induced to change their methods of swine production. Also, landlords, business men, and bankers are now cooperating with the extension service in this swine improvement program by assisting negro farmers to purchase purebred gilts and boars for breeding purposes.

The specific goal set up for the five years' work is to place at least three purebred boars in every negro community in the counties and to supplant the native razorback with high-grade swine on negro farms. The cooperation of the civic organization, the returns which the active demonstrators are receiving, and the increasing interest on the part of business men and negro farmers make this goal attainable, Hurse says.

Thomas Monroe Campbell

T. M. Campbell Receives Harmon Award

Thomas Monroe Campbell, field agent for the Office of Cooperative Extension Work, was awarded the William E. Harmon award for distinguished service among negroes in the field of farming and rural life during 1930. The award, which consists of a gold medal and an honorarium of $400 in cash, was formally presented to Professor Campbell at a special service in the chapel at Tuskegee Institute, Alabama, on February 8, by Joseph O. Thompson, field representative of the Federal Farm Board, on behalf of W. Burke Harmon, president of the Harmon Foundation.

In writing to Professor Campbell, Mr. Harmon said: "There is no doubt that in helping the farmer to a better understanding of his own problems you are making a great contribution to American civilization."

The Harmon Foundation (Inc.), 140 Nassau Street, New York City, made similar presentations for outstanding work with negroes during 1930 in the fields of music, literature, social science, education, business and industry, and religious service.

Professor Campbell graduated from Tuskegee Institute about 25 years ago and in 1906 was employed by the United States Department of Agriculture as agricultural collaborator to demonstrate extension work to the negro farmers living near Tuskegee Institute. For years he had charge of the famous Jesup wagon exhibition of diversified farming products, from which developed the present movable school. His territory was later extended to cover the State of Alabama, and then to include his present field—the coordination of the work of the negro extension agents in Alabama, Florida, Georgia, Louisiana, Mississippi, Oklahoma, Tennessee, and Texas.

Utah Uses Survey Data

Extension programs in Utah are now being formulated to meet the conditions which were revealed by the home economics surveys and economic conferences held there last spring, reports Wilford D. Porter, Utah extension editor. The two outstanding observations made by the local workers during the surveys and conferences were, first, that $2,500 is a reasonable maximum farm income for providing a wholesome balance of home conveniences, food, clothing, education, and recreation (this figure includes farm privileges); and second, that too many of the Utah farm families have an antipathy toward farming, which seems to be stimulated more by the mother than by the father. Little complaint was made by the farm families whose yearly incomes averaged from $1,500 to $2,500, but those who had less than $1,500 frequently expressed discontent regarding farm life in general.

Content of New Programs

Believing that if agriculture is to endure as a major industry the farm families must believe in their work and be happy and contented with life, the extension home economists and Rena B. Maycock, State home demonstration leader, are assisting the farm families in obtaining their desired standards of living. Since the farm itself is the source of income, farm surveys are taken concurrently with the home surveys in order that both the home maker and the farmer may see the real situation and appreciate each other's position. The home economics extension program is further combating the adverse attitude toward farming by such projects as kitchen-improvement contests, which result in the installation of water systems, electricity, and other conveniences, and the better utilization of the home makers' time so that recreation and intellectual pursuits may be enjoyed by the farm women as well as the city women.

More than 6,000,000 tons of limestone was spread by 60,000 Illinois farmers over 2,000,000 acres of acid land last year, reports C. M. Linsley, extension soils specialist in Illinois. This lime reached about one-tenth of all the cropped land in the State and returned $7.50 in more efficient crop yields for every $1 in lime.

Maine Uses Line Drawings

THE OXFORD COUNTY FARM BUREAU NEWS

Oxford Homes & Families

EXTENSION workers in Maine have recently made considerable use of line drawings to illustrate extension bulletins and the home pages in county farm-bureau periodicals, according to Glenn K. Rule, extension editor.

Concerning the use of such drawings, Mr. Rule says:

Our home demonstration agents have one page in the farm bureau news devoted to the interest of the home program in the county. Until about a year ago most of these pages were designated as "The Home Demonstration Department." It occurred to some of the agents that perhaps this type of heading was a bit formal, stiff, and uninteresting, and consequently many of them searched for more distinctive and appealing headings which would be appropriate, but at the same time overcome the objections to "Home Demonstration Department." "About the Home," "Home Echoes," "Knox-Lincoln Homes," "Home Page," "Fireside Notes," "Oxford Homes and Families," were among those that were selected. Club agents have also substituted such headings as "4-H Club Notes" for the more formal "4-H Club Department."

Along with the improved headings for the pages many of the agents are using small, inconspicuous line drawings to add interest and attractiveness. Most of the drawings are suggestive of the home, exterior views, fireplace scenes, or perhaps a glimpse of the flower garden are portrayed. Other drawings are suggestive of significant features in the county. For instance, the venerable Portland Lighthouse was used as being symbolic of Cumberland County. None of these small designs is intended to illustrate any particular line of work being carried on.

This year five counties have published bulletins to forward the farm and home organization project. Thumb-nail designs measuring ⅞ by 1⅛ inches have been used to illustrate the more important subdivisions of the bulletins. Here again these designs are intended to add interest and attractiveness to the publication. If, however, the designs serve in keeping the bulletins on the library tables of farm homes rather than being thrown in the wastebasket, their use will be justified. The thumb-nail sketches are available and appropriate for various types of publications, announcements, and other printed matter, thus justifying the cost of having cuts made.

After the extension agents determined definitely what they wished in the way of illustrations, rough designs were sketched and sent to the Office of Cooperative Extension Work of the United States Department of Agriculture. Here the art unit drew the finished designs in the proper proportions. After the completed drawings were returned to Maine, the various interested counties had line cuts made. The illustrations shown above indicate how some of the designs—both thumb-nail sketches and page headings—were used.

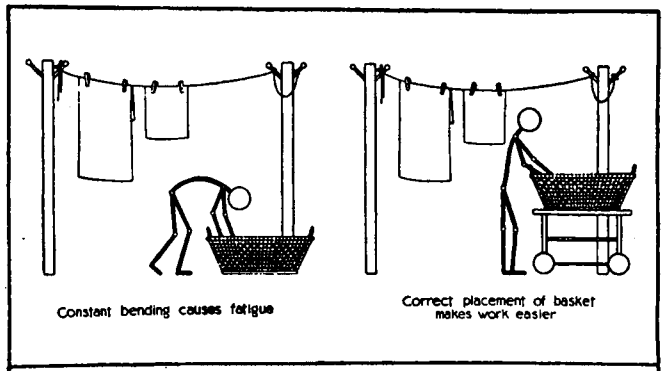
Key Neighbors

BELIEVING that local 4-H club programs will be more useful and effective if they are planned, actively participated in, and led by the reputable men and women in each neighborhood, the county club agents in eastern Rhode Island select the people who are interested in rural social and economic conditions for young people to act as "key neighbors." Carl B. Garey, club agent in Newport County, R. I., reports that these "key neighbors" aid extension work by telling the club agents about local deficiencies which club work can remedy; by naming, supporting, and securing worthy local leaders for the 4-H clubs; by encouraging the cooperation and support of the local people; by securing a higher grade of newspaper publicity for 4-H club work; by advising the club agents of local idiosyncracies; by securing the local grange hall or parish house for group gatherings; and by providing a substantial background and responsibility for club work, especially if frequently visited and properly credited for their work by the club agents.

Posture and Personal Efficiency Featured in New Series of Charts

MANY devices are presented to us these days for checking our personal efficiency. A home-maker's personal efficiency check sheet includes two important items—physical and mental well-being. Physical well-being includes good nutrition for health, fatigue elimination, fresh air, good light, and right posture.

Right posture calls attention to how the home maker does her housework; how she sits or stands when preparing meals, ironing, washing, or sewing. Her posture when climbing steps or when visiting with the neighbors has a bearing upon her personal efficiency.



POSTURE WHEN HANGING LAUNDRY

At the request of Mary A. Rokahr, home management extension specialist of the department, a new series of four charts, featuring good and bad posture, has recently been made available by the Office of Cooperative Extension Work. These charts are reproductions of charts that have been successfully used in educational activities in Germany. They are entitled as follows: "Comfort while laundering through correct posture" (3123–D); "Posture when hanging laundry" (3122–D); "Posture for ironing" (3120–D); and "Posture when preparing vegetables" (3121–D). New charts will be added to the good and bad posture series from time to time. They are 8 by 10 inches in dimension, and rotaprinted copies may be procured without cost by home-economics specialists and home-demonstration workers. They may also be purchased as photographic prints, size 8 by 10 inches, at 9 cents each, or as bromide enlargements 16 by 20 inches, mounted on cloth, at $2 each. Larger sizes also can be obtained at proportionately higher prices, which will be furnished upon request. Purchase orders for these charts should be sent to the Office of Cooperative Extension Work, United States Department of Agriculture, Washington, D. C.

The charts were obtained through the courtesy of the Reichskuratorium fur Wirtschaftlichtkeit and the Technisch-Wissenschaftliche Lehrmittelzentrale, Berlin, Germany, and translated by the Office of Cooperative Extension Work.

New Film Strips Announced

Seventeen new film strips have recently been made available to extension workers by the Office of Cooperative Extension Work. These are available for purchase at the prices listed. Extension workers desiring to purchase film strips should forward their formal order to the Consolidated Film Industries (Inc.), 1776 Broadway, New York City, and at the same time submit a request for authorization to purchase the film strips to the Office of Cooperative Extension Work. *Both the order and the request for authorization are required.* A catalogue of film strips and authorization blanks will be supplied upon request.

Boys' and Girls' Club Work

4-H club songs. Series 233. 51 frames. Illustrates four songs which are often used in boys' and girls' 4-H club work. Price 44¢ each.

Farm Animals

Judging beef cattle. Series 145. 43 frames. This series supplements Farmers' Bulletin 1068, Judging Beef Cattle. Price 35¢ each.

Preparing beef cattle for show or sale: Series 146. 42 frames. This series supplements Farmers' Bulletin 1135, The Beef Calf, its Growth and Development. Price 35¢ each.

The cooperative bull association. Series 163. 36 frames. Illustrates the importance of using only high-class purebred bulls. Price 35¢ each.

Breeds of dairy cattle. Series 255. 47 frames. Illustrates the characteristics of the reorganized breeds and presents outstanding individuals of each. Price 35¢ each.

Judging draft horses. Series 132. 59 frames. Illustrates the principal points to be observed in the judging of draft horses. Price 44¢ each.

Care of horses' feet. Series 162. 41 frames. Supplements Farmers' Bulletin 1535, Farm horseshoeing. Illustrates practical methods of trimming and caring for the horses' feet. Price 35¢ each.

Breaking the farm colt. Series 195. 24 frames. Supplements Farmers' Bulletin 1368, Breaking and Training the Colts. Illustrates acceptable methods for the breaking of colts for ordinary purposes. Price 35¢ each.

Care of the laying flock. Series 239. 26 frames. Illustrates the essentials of housing, feeding, and care of a small laying flock. Price 35¢ each.

Breeds of horses. Series 43. 52 frames. Supplements Farmers' Bulletins 619, Breeds of Draft Horses, and 952, Breeds of Light Horses. Illustrates the principal breeds of horses. Price 44¢ each.

Farm Crops

Important cultivated grasses. Series 149. 30 frames. Supplements Farmers' Bulletin 1254, Important Cultivated Grasses. Price, 35¢ each.

Increase wheat profits by preventing smut. Series 265. 46 frames. Illustrates symptoms of stinking smut of wheat, emphasizes the losses in yield and market value, gives results of a survey in the spring wheat States. Price, 35¢ each.

Forestry

Chestnut blight. Series 199. 42 frames. Supplements Farmers' Bulletin 1641. Illustrates the importance of prompt utilization of chestnut suitable for poles and lumber. Price, 35¢ each.

Insects

Transferring bees to modern hives. Series 167. 49 frames. Supplements Farmers' Bulletin 961. Illustrates practical methods of transferring bees from box hives and log "gums" into movable-frame hives. Price, 44¢ each.

Handling bees for successful beekeeping. Series 172. 38 frames. Supplements Farmers' Bulletin 447, Bees. Illustrates various important steps necessary in handling bees successfully. Price, 35¢ each.

Marketing

Standardization of baskets for fruits and vegetables. Series 143. 30 frames. Supplements Farmers' Bulletin 1434, Standard Baskets for Fruits and Vegetables. Illustrates the importance of standard containers. Price, 35¢ each.

The marketing of eggs in the United States. Series 271. 42 frames. Supplements Farmers' Bulletin 1378, Marketing Eggs, and Circular 73, The Cold Storage of Eggs and Poultry. Illustrates the various steps of the marketing of eggs in the United States. 35¢ each.

EXTENSION RESULTS ARE IMPORTANT

VISUAL MATERIAL strengthens and vitalizes the extension message. Extension workers recognize that next to actual experience, such as one acquires in the demonstration, there is no more effective, convincing, and economical teaching aid than visual material. It brings results in the wider adoption of improved practices.

POSTERS, charts, photographs, cartoons, illustrated circular letters, diagrams, graphs, film strips, lantern slides, and layouts for window displays are a few of the various types of visual material coming into greater use.

THE Office of Cooperative Extension Work through its division of visual instruction and editorial work is at the disposal of State extension divisions who wish help in the preparation of illustrative material. Requests should be forwarded through the State director of extension to the

OFFICE OF COOPERATIVE EXTENSION WORK
EXTENSION SERVICE
UNITED STATES DEPARTMENT OF AGRICULTURE
WASHINGTON, D. C.

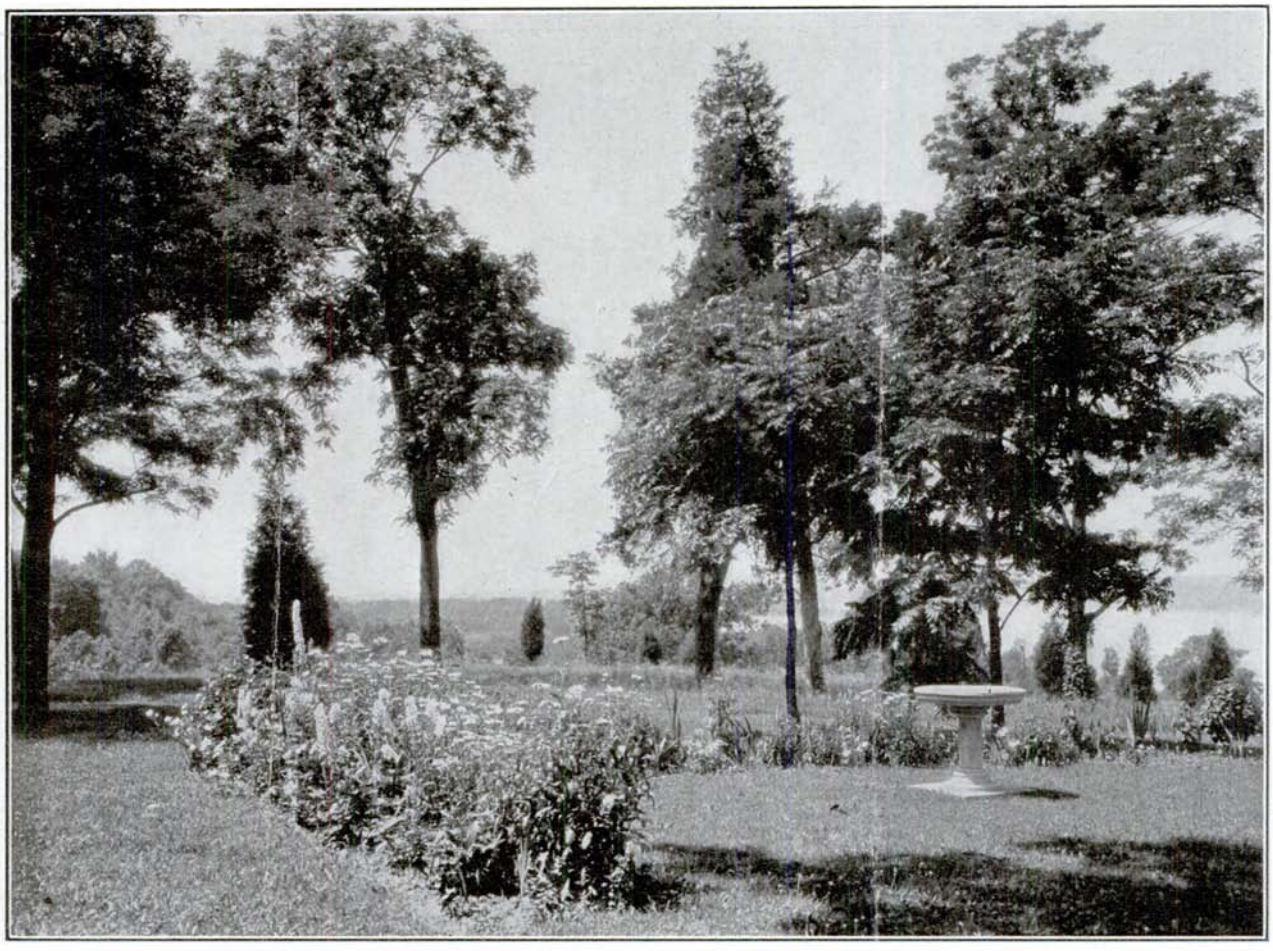
WE are agreed that the use of leisure is to restore and re-create the general health and well-being of the body which may have been lessened or destroyed. It is equally true that the health and well-being of the mind needs restoration and re-creation. If the mind and soul is in good health, one can face most of the realities of life and enjoy doing his best with them.

EDWARD L. THORNDIKE

U. S. GOVERNMENT PRINTING OFFICE: 1931

Extension Service Review

VOL. 2, NO. 7 JULY, 1931



ATTRACTIVE SURROUNDINGS MAKE FOR CONTENTMENT

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 104 FOR PRICES

Contents

In This Issue

WHAT is the outstanding problem of the extension worker? It is to teach effectively, answers B. W. Ellis of Connecticut, talking on well-planned extension programs. Extension work he thinks is something more than a series of farm visits, meetings, and demonstrations. It should lead to greater satisfaction in conducting the business of farming, to better standards of living, and to the development of individuals. How shall we reach these objectives? Have a well-planned program and develop the ability to plan and conduct your teaching so that a large number of your people will adopt the practices that will help solve their problems is the prescription Director Ellis offers.

COOPERATIVE grain producers are now selling their wheat direct to the consuming markets of the world. To what extent is this benefiting them? Do they retain for themselves in this way the profits of the entire marketing operation? "Sure," says W. L. Stahl as he tells of the Farmers' National Grain Corporation and the service it is giving to wheat growers who are members of the local cooperatives with which the corporation is affiliated.

THE desired standard of living should determine the use of the land. That is what Madge J. Reese says in her review of three recent farm home economics conferences in the Western States. The farm woman who has gone through a county economic conference, Miss Reese points out, knows that she needs to do certain things, knows what her limitations are, and so fortified can work with her husband intelligently in providing for the needs of the home and the education, health, and proper development of her children.

A SAUERKRAUT club in Utah, coffee and frog raising clubs in Hawaii, and pheasant growing in New York are among the new and novel things of the 4-H world this month. Utah's sauerkraut club located in Morgan County is a sure-enough sound economic demonstration. The members by growing 23.2 tons of cabbage per acre bettered the average production of the county by 6.6 tons.

SIX specialists in Arkansas pooled their thoughts and efforts in putting over a highly successful forest-fire prevention campaign. They don't just talk about cooperating in Arkansas. They do it.

On the Calendar

THE Western States Extension Conference meets at Logan, Utah, July 21-25. The subjects for the conference are agronomy extension including soils, a review of the past five years' work, and what has been done in carrying out the Western States farm crops extension program, and 4-H club work.

THE Western States will hold an Agricultural Outlook and Economic Conference at Salt Lake City, Utah, July 27-30. The conference will consider outlook material with special reference to range livestock, dairying, poultry, wheat, feed crops, and general business situation.

Four-State 4-H Club Leaders Conference (Ohio, Indiana, Illinois, and Michigan) Angola, Ind., July 16-19.

Maine Annual Extension Conference, July 8-10.

Arkansas Annual Extension Conference, August 8-11.

Wisconsin 4-H Club Week, July 8-12.

South Carolina 4-H Club Training School, July 13-18.

Massachusetts 4-H Club Camp, July 20-31.

Virginia 4-H Club Short Course, July 20-25.

Mississippi 4-H Club Camp, July 20-August 8.

Connecticut Older 4-H Club Members' Conference, July 26-August 1.

Tennessee 4-H Club Camp, July 27-August 1.

Texas 4-H Club Short Course, July 27-August 1.

Oklahoma 4-H Club Round-Up, July 28-31.

Missouri 4-H Club Round-Up, August 3-7.

North Carolina 4-H Club Short Course, August 3-8.

West Virginia Farm Women's Camp, August 3-8.

Arkansas 4-H Club Encampment, August 4-11.

Maryland 4-H Club Short Course, August 6-11.

CERTIFICATE.—By direction of the Secretary of Agriculture, the matter contained herein is published as administrative information and is required for the proper transaction of the public business.

Extension Service Review

VOL. 2 WASHINGTON, D. C., JULY, 1931 NO. 7

What the Federal Farm Board Has Done

JAMES C. STONE
Chairman, Federal Farm Board

WITH the Federal Farm Board now entering its third year, I have been asked to tell readers of the REVIEW something of what the board has done and is trying to do to help American agriculture.

Broadly speaking, its activities divide themselves into two parts—those that have to do with the long-time program for the permanent betterment of agriculture and temporary measures, such as the wheat and cotton stabilization operations, undertaken to deal with an emergency created largely by the business depression.

Aim of Long-Time Program

The long-time program seeks to bring about the development of cooperative organization among farmers to the degree where they will be in position to adjust production to the probable market demand and to merchandise their products in such a way as to reflect back to the grower the price paid by the consumer; in other words, give the producer more of the consumer's dollar. We regard this part of our work as much more important than the emergency stabilization operations, although the latter were of great benefit to farmers and the country as a whole in meeting a serious situation.

There is one thing in regard to the Farm Board's part in the development of cooperative marketing that needs constant emphasis. It is this—the Farm Board is helping farmers to build a cooperative marketing system which they themselves will own and operate in their own interest. The board is not building a marketing system nor will it operate marketing associations when they are organized. The public seems to be confused on this point, for repeatedly we see reference in the press and elsewhere to "Farm Board cooperative" or "Farm Board agency," and so forth. There is no such thing as a Farm Board cooperative; no cooperative is an agent of the Farm Board. Every cooperative being assisted by the board is farmer-owned and controlled in accordance with the provisions of the Agricultural Marketing Act and the Capper-Volstead Act. The board's duty and purpose is to help develop cooperatives on a sound financial basis with sound operating policies.

Cooperative marketing has made substantial progress in the past two years.

James C. Stone, chairman, Federal Farm Board

Figures are not available to prove statistically just what has been accomplished. However, we do know that about six times more wool was marketed cooperatively in 1930 than ever before; that the amount of cotton handled by the cooperatives in that year was nearly doubled, and that between three and four times as much grain moved cooperatively into the terminal markets as in any previous year. Data collected by our division of cooperative marketing shows an increase of nearly 70 per cent in membership of some of the cotton cooperatives; of around 64 per cent in the large scale wool associations; 54 per cent in the large-scale egg and poultry organizations; and better than 29 per cent in 48 of the large associations marketing dairy products. Based on available information, it is estimated that the average gain of membership in the large-scale associations is approximately 30 per cent.

The records show that there are fewer than 500 of the large-scale cooperatives and some 11,500 local associations, either independent organizations or units of federations. Reports from 3,194 of these local associations indicate an average gain in membership of a little better than 6 per cent. Thus the records show pretty conclusively that cooperative marketing has made real growth since the passage of the Agricultural Marketing Act. To my mind, however, the increase in number of farmers participating and the volume of commodities handled is no more important than another gain cooperative marketing has made in the past two years. I refer to the support that has come from educational institutions, national farm-membership organizations and broad-gauge business men, and the public generally.

In the development of the national cooperative program laid down by Congress in the Agricultural Marketing Act the Farm Board has centered its efforts largely on helping existing cooperatives to unify their sales activities on national or regional lines, depending on the character of the commodity handled, local associations to strengthen their set-up and producers to organize in the areas not now served by cooperatives.

Sales Agencies Organized

Thus far cooperatives, with the assistance of the board, have set up eight national sales agencies, including grain, wool and mohair, cotton, beans, livestock, pecans, sugar beets, and fruits and vegetables.

Financial assistance extended to cooperatives by the Farm Board so far has amounted to $240,510,638, of which $119,040,958 has been repaid, or nearly one-half of the amount borrowed. These

62201—31

loans have been made to 106 associations, many of which are national or regional marketing agencies with their membership composed of hundreds of local cooperative units. The purpose of this financial aid has been to strengthen these associations; to enable them to render more efficient service to their members; to coordinate their activities with those of other associations handling the same commodity, and in many cases, to assist in the setting up of a national sales agency for the commodity.

Adjusting Production

Adjustment of production to probable marketing requirements is regarded by the Farm Board as fundamental. No matter how good the marketing system, it is ineffective when there is a surplus far in excess of the consumer demand. One of the duties imposed upon the Farm Board by Congress is to study the overproduction of agricultural commodities and advise growers as to the prevention of such overproduction, the theory being that it is better not to produce a surplus than to produce one and then try to control it.

Land Utilization

The board is charged by Congress with the duty of studying land utilization. This is being done in cooperation with the Department of Agriculture and other interested agencies. In the not distant future it is hoped to have some recommendations looking to a definite program for taking marginal and submarginal lands out of agricultural production. Such a program participated in jointly by Federal and State Governments should go a long way in helping organized farmers to prevent overproduction.

The cooperative movement has two obstacles to overcome and protect itself against. Perhaps the more serious is that within the ranks of agriculture—apathy and indifference on the part of many farmers, who do not understand what the program means to them, and the limited number of so-called "farm leaders" who are more concerned about their own jobs than they are about getting something done for the benefit of agriculture as a whole. Then there is the opposition coming from some of those who are engaged in handling farm products. This opposition is directing its fire largely against the Farm Board with such charges as "Government in business," "price fixing," and "setting aside the law of supply and demand," all designed to stir up public resentment against what is being done.

I trust that extension workers will point out to farmers that they must not let the real purpose of the opposition be camouflaged by such tactics. That real purpose is against farmers organizing their own marketing system. Its object is to kill cooperative marketing.

Organized agriculture will have to make itself heard if it wishes to protect what it has gained. A most important work to be done is that of informing unorganized farmers and the public generally about the cooperative program. We look with confidence to the extension service in every State to give us strong support in this effort.

Looking to the future, more attention, I feel, should be paid to the farm boys and girls. In their 4-H clubs they should be encouraged to study the principles of cooperative marketing and to organize junior cooperative marketing associations, thereby gaining practical experience. It will be worth while to have these junior associations represented at meetings of the board of directors of the parent organizations, so they can see how it is done.

I believe, too, that the influence of farm women in support of the program will be a most important factor once they realize what its success is going to mean to farm home life.

Cooperative marketing is either right or it's wrong. If it doesn't produce better results for the farmer than the system he now has it won't succeed, and shouldn't. I think it will if only the farmers themselves know what to expect from it and what not to expect from it, and if, when they join a cooperative, they join it because they believe in it and have the firm determination of supporting the organization with all their strength and power.

Studying the Home Maker and the Home

AS A PART of the home-management project in Minnesota last year the home maker and the home were studied from a humanistic viewpoint, reports Mary M. Miller, home-management specialist in Minnesota.

At designated meetings each woman brought a list of qualifications for the home maker. One of these said, in part:

The chief characteristic of a true home maker is the ability to create a home from the materials at hand. She can with a few pieces of common furniture, a little cretonne, a packing box or two, paint, and a great deal of ingenuity create a home of beauty. Its attractiveness lies not so much in what meets the eye, but in the atmosphere with which a home maker imbues her home.

Other women had their qualifications centered around patience; an understanding heart; a sense of true values; love of her home, her work, and those around her; cheerfulness; and good health.

When the women had given their written qualifications, other qualifications as outlined in the project material were discussed, such as mental and physical alertness, proper estimate of her profession, a balanced sense of proportion, knowledge of values concerning the household activities, executive ability, civic-mindedness, and a progressive attitude toward home making.

Then the group members analyzed themselves as home makers according to a score card which included personal traits such as appearances, health, voice, disposition, and punctuality, and specific attributes such as tact, cooperative spirit, fair-mindedness, sympathetic understanding, progressiveness, and community consciousness.

After studying the home maker the women scored their homes under six headings: The house, the grounds, the family health record and health habits, managerial aspects, family relationships, and the social training and development of the family.

Many of the women used these score cards not only at the meetings, but at their homes as well, and some of them had their husbands and children use the score cards in an effort to make the home as successful and satisfying as possible.

As a result of this work, the women now report that they regard home making as a real profession; that they realize that all home makers share the same general troubles and their work is no harder than that of others; that they have a better understanding of the responsibilities and duties of a home maker; that they plan their work so as to have more opportunities for regular recreation and self-development; that their husbands and children are more cooperative, and that they find enjoyment in doing things to improve the home.

Cooperative Grain Marketing

W. L. STAHL
Vice President, Farmers National Grain Corporation

Through the Federal Farm Board we have asked the several national farmers' commodity organizations to present to county extension agents a concise, clear-cut statement of the service they are prepared to render to growers who are members of local cooperative marketing associations that have affiliated with the national organization. The first of this series of articles by W. L. Stahl, of the Farmers' National Grain Corporation, appears on this page.—Editor.

THE FARMERS' National Grain Corporation, the national cooperative grain sales agency cooperating with the Federal Farm Board, is approaching the end of its first full marketing season and the beginning of a new crop year. With its second annual meeting a matter of record, and the reports of its first fiscal year available for scrutiny, all who are interested in national cooperative grain marketing may, we believe, find considerable satisfaction in what has been accomplished. These reports show major development in every phase of the corporation's affairs, and provide for the county agricultural agent the concrete information he desires to pass along to the inquiring farmer who looks to him for facts.

Grain Purchased

In the nine months from June 1, 1930, to February 28, 1931, the latter date marking the end of the first fiscal year, the Farmers' National Grain Corporation purchased 111,832,019 bushels of grain and earned net profits of $666,266.84.

Directors of the corporation, mindful first of the importance of establishing this great farmers' business institution on a sound financial basis, voted to set aside in the corporation's reserve account 50 per cent of the total earnings. They also declared a 6 per cent dividend on the outstanding stock of the corporation and voted to distribute the remainder in patronage dividends to stockholders in paid-up capital stock.

These figures, of course, represent only the most tangible benefits that have come out of a year of national and international cooperative grain marketing. But important as they are, they may be regarded as insignificant compared with the vast, but more difficult to measure, benefits that have come to grain producers generally as the result of the competitive influence of their own organization bidding in every market, for any quantity of grain, at the highest average price. Nor do they compare, viewed in the broader aspect, with other outstanding results that may be enumerated as follows:

1. During its first fiscal year the Farmers' National Grain Corporation had become the largest grain merchandising organization in the United States.

C. E. Huff, president Farmers' National Grain Corporation

2. It had carried its services to every grain-producing area and made contact with buyers on every important market in the United States and in all major importing countries.

3. It had become the first and the only grain merchandising organization in the United States operating on a national and international scale, placing the grain producers in the markets in their own right and giving them, for the first time, bargaining power comparable to that of the organized buyers with whom they must do business.

4. It had established substantial credit with the leading financial institutions of the country.

5. It had, for the first time, opened a way for complete coordination of cooperative effort and as the result had witnessed the most important progress in the development of cooperative grain marketing that ever had taken place previously in the United States.

To the grain producers of the United States these reports carry a message of special interest. They mark the beginning of a new era in cooperative grain marketing, the climax of years of effort on the part of farmers and farmers' organizations to develop their own marketing agency. They definitely establish not only the farmer's right to market his own products, but his ability to set up his own marketing agency and see to it that this agency is efficiently managed.

Commenting on the developments that have taken place during the last year in the field of cooperative grain marketing, C. E. Huff, president of the Farmers National Grain Corporation, in his annual report said:

At the outset our members were largely unacquainted, dissimilar, competitive. It was the position of the Farmers National that there was room and need for further experimentation in marketing method; need for closer acquaintance; need for the cementing together which comes from work in a joint enterprise. The result of this policy has been that nearly all of the work done in the field of cooperative marketing in years past is conserved through our stockholder organizations for the future, and has become the firm basis upon which our present plans and future prospects rest.

Consolidations have occurred, notably in the spring wheat area, where three of our stockholder members have been strengthened into a single group. There has occurred a broadening in program on the part of many of our stockholders, and a greater inclusiveness and flexibility is to be found in them than at any time heretofore. There have been internal changes, which have not only strengthened our cooperatives, but which have brought them into a closer similarity. New organizations, sound in type and effectively administered, have come into being and into relationship with the Farmers National.

George S. Milnor, general manager, in his annual report, pointed out that the first and only cooperatively owned grain marketing organization to operate on a national and international basis now is a matter of fact. During the first year of its operations, he said, the Farmers'

Continued on bottom of page 100

Controlling Loose Smuts in Indiana

Farmers treating seed in galvanized iron watering troughs

COMMUNITY treating of wheat and barley by the hot water method with the development of smut-free areas has been found to be the only satisfactory way for the control of the loose smut diseases of these cereals in Indiana, reports C. T. Gregory, Indiana extension pathologist.

Community Treating

The early method of treating seed with two or more barrels and a kettle of hot water to maintain the temperature of the water soon became too antiquated because it was too slow to treat sufficient quantities of seed. To meet this situation, central treating stations, using a revolving cylinder of fine-meshed hardware cloth to submerge the grain in a tank of properly heated water, were established. Where this equipment proved too expensive, large galvanized iron watering troughs, in which the sacks of seed could be soaked were located near a supply of steam, such as a creamery, an elevator, a laundry, or a threshing engine. This latter apparatus has proved to be the most satisfactory.

Farmers utilizing the community treating service were furnished with a schedule showing what they were to do. They were expected to clean their seed, put it in burlap sacks, ½ bushel of dry wheat in a bushel sack, and soak it in cold water from 4 to 8 hours before bringing it to the treating station. They were told when to start soaking, when to bring the seed for treatment, and when they could expect to leave for home. They were also advised to have a clean floor ready for quickly drying the seed after treatment.

At the station the grain was dipped into the water maintained at a temperature of 129° F. to 132° F. The large volume of water obviated the necessity of preheating the sacks of grain. It was necessary to agitate rapidly for about two minutes, after which it was only necessary to suspend the wheat in the water. For barley 15 minutes at 126° F. to 129° F. was used. Following the treatment seed was either spread out immediately or dipped in cold water and spread out later. A charge of 10 to 15 cents a bushel was made for the treatment.

Smut-free Areas

Experience in this work since 1918 has shown that the hot-water seed treatment alone can not be relied upon to control the loose smuts. It has been found that fields of wheat which have been freed of smut by seed treatment have become seriously reinfested by smut spores blowing in from neighboring or distant fields. Therefore, the smut-free area plan has been adopted. This involves the cooperation of all farmers in a community in getting rid of smut. Such an arrangement has worked especially well in naturally isolated areas, such as valleys.

In Clinton County, Ind., such an area was built around a threshing ring covering about 25 square miles. By a contract, the farmers agreed to use clean seed which would be furnished them in exchange for their own wheat, and any farmer in the ring whose wheat was not free from smut agreed to have his grain threshed after the clean fields had been threshed. Each of these men agreed to treat enough seed wheat to plant one field to serve as a source of seed each year until all the smut had been eliminated. They also arranged to have a seed field in the center of the area for the special benefit of members on outlying farms in avoiding the danger of smut blowing in from outside infested fields.

The Farm Board: Its General Policies and Work in Helping Agriculture, by James C. Stone, chairman (Circular No. 3), was issued in March, 1931, and may be obtained free of charge by writing to the Director of Information, Federal Farm Board, Washington, D. C.

Cooperative Grain Marketing

Continued from page 99

National Grain Corporation has carried its services to farmers in every grain-producing area and made contact with buyers on every important market in the United States and in all major importing countries. Branch agencies extend from coast to coast and from the spring wheat region to the Gulf of Mexico. During its first year of operation the corporation has acquired, through purchase or lease, a total of approximately 20,000,000 bushels of storage space, including facilities at both terminal and subterminal points.

Export business has been moved from the Atlantic seaboard, the Gulf and the Pacific coast, grain in satisfactory volume having been sold to Norway, Belgium, Switzerland, France, Germany, Holland, United Kingdom, Greece, Denmark, Turkey, China, and Japan. In this connection, Mr. Milnor pointed out that grain purchased from farmers is handled, stored, sold, and delivered to both domestic and world markets through marketing machinery owned or controlled by the grain producers themselves.

"This achievement," Mr. Milnor said, "gives us considerable satisfaction, as it may be truthfully said that cooperative producers are now selling their wheat direct to the consuming markets of the world and are retaining for themselves the profits of the entire operations."

Well-Planned Extension Programs

BENJAMIN W. ELLIS
Director, Connecticut Extension Service

SUCCESS in extension work depends in a large measure upon securing the action of a number of people in adopting recommended practices which lead to greater satisfaction in conducting the business of farming, better standards of living, and the development of individuals.

What to teach and how to teach it are two outstanding problems in the extension field, but I think we have learned through experience that "the greatest of these" is how.

Our teaching problem is not one of merely passing out information. It requires a knowledge of the science of teaching, of selling, of the principles of psychology and the details of sociology in order to reach a successful solution of the problem associated with human relationships which occupies so important a place in extension teaching.

See Fundamental Problems

It is not difficult for the present-day extension representative to keep busy making farm visits, conducting demonstrations, and attending meetings. The agent or specialist who would leave an imprint upon the agriculture or home life of the county or State has a much larger task. As a leader he must see the fundamental problems which retard agricultural improvement. He needs a well-planned program which gives an answer to the larger problem and he must possess the ability to so plan and conduct his teaching that a large number of people will adopt the practices which give a solution to the problem.

The extension worker must realize that the number he can teach through individual contact is limited, no matter how satisfactory this type of teaching may be. He must appreciate that many learn just as he has through agencies other than the spoken word.

The well-planned program contains a statement of the problem, a practical economical solution in terms of practices which may be adopted with ease and profit, and the teaching agencies and methods to be used in developing the five stages of learning—attention, interest, desire, action, satisfaction.

There is no short cut through which to reach a correct decision as to the problem to be attacked. The important point is to secure information about the conditions and problems which the farmer has to face and which may influence his movement to action. The mail survey, the farm-to-farm survey, and census returns have been used to good advantage.

As a basis for Connecticut's "Purebred sire" program, county surveys showed that towns raising the most young stock had the smallest percentage of purebred sires. One town was raising 10 heifers from a grade sire to one from a purebred. In one group of 72 farms less than 1 sire in 5 was capable of improving to any extent the quality of young stock raised.

We must make sure that certain conditions will not deter the spread of influence of a project. It is useless to devote much energy to interesting farmers to use certified alfalfa seed or improved seed potatoes unless this better seed is available in quantities to meet the demand.

Developing a program takes time. It is detail work, but it offers an opportunity for the best thought. We frequently take the attitude that we just don't have time for this type of study. It is much easier to go out and make farm visits, as it is easier for a farmer to do chores or other work around the farm than it is to keep a farm account book or dairy cost record.

One of our most successful programs grew out of a conference attended by a specialist, an agricultural agent, a county agent leader, and a representative from the Washington office.

Determine Basic Problem

This group met for the purpose of determining the basic problem facing Connecticut poultrymen and of deciding upon the practice which would give the solution, together with the development of a plan for teaching this practice. They had before them the report of a county poultry committee which stated that the disease question was the big problem confronting the poultry industry.

As a result of the day's work it was decided that disease was the real problem to be tackled; that a few simple preventive measures offered the best solution; that the extension program should be a "Grow healthy chicks" program.

The program contained a definite teaching plan developed on the second day of the conference which included a slogan contest, news stories, and an enrollment card, "Grow healthy chicks" leaflets, meetings, and farm visits. The program was later presented to county poultry committees for consideration, revision, and adoption. This program has been continued for five years.

To be successful, any program must be carried on until a high percentage of those who should be interested have accepted the recommended practices. This means consistent follow-up by the specialist and agricultural agent. The annual mortality in extension projects has been too great.

Measure Results

Well-planned programs provide real opportunity for measuring results which are so much needed in extension work. Through the use of enrollment cards we know that 1,000 poultrymen who brood more than 1,000,000 chicks were reached effectively for three years, and we are confident that many more have adopted one or more "Grow healthy chicks" practices through the many teaching methods employed. A summary of three years' enrollment figures on more than 500,000 chicks each year shows a reduction of approximately 10 per cent in disease losses over the usual loss.

During this same period, egg production per bird in our "Home egg laying" contest increased to an average of 154 eggs. The average for the previous six years was 142 eggs.

In thinking of results we must not overlook the human side of our program. The ultimate aim beyond better crops, better livestock, and better marketing is the development of men, women, and children, and the provision of opportunity for them to develop themselves. The well-planned program will prove a most valuable aid in attaining this goal.

Letters, similar to those awarded to athletic teams, were awarded to fourteen 4-H club members at the Blue Earth High School of Faribault County, Minn., this year as recognition of outstanding 4-H club work. These letters are identical with those given for such activities as football and basket ball except that a small 4-H is placed on the bottom of the "B."

The high school of Bloomington, Minn., which recognizes 4-H club work in this manner also, makes scholarship as well as 4-H club work a requisite for such honors.

County Farm Home Economic Conferences Held in Western States

THE HOLDING of farm home economic conferences in individual counties is a development in extension work in the Western States that promises to stimulate and direct the activities of farm women in the building of a more satisfying rural life. This type of conference more than any other appears to bring about thinking and frank discussion of their problems by farm women because in such a conference they have an active part in its planning and in working out the solutions to their problems.

The results obtained at three such conferences are reported by Madge J. Reese, field agent, Office of Cooperative Extension Work, who assisted in conducting them. The location and attendance of these three conferences were as follows: Pinal County, Ariz., 86; Jackson County, Oreg., 104; and Snohomish County, Wash., 126.

Commenting on the conferences, Miss Reese says:

This type of conference offers an excellent opportunity for the farm women to take the lead in discussion and decision in lieu of the too frequent method of being talked to. It is true that the extension workers aid in the shaping up of the discussion questions and also contribute to the discussions when it seems opportune, but the burden of carrying the conference through rests with the women themselves.

Prior to each conference from 30 to 60 women participated in two or three preliminary committee meetings. Here they get a certain amount of good training in leadership, in conference methods, and a fine insight into the program of extension work in the county. This experience develops more capable leadership in the communities represented and stimulates a renewed interest in home demonstration activities.

The informal survey and the data obtained are not an attempt at research but simply a means for securing information regarding farm home conditions which can serve as a basis on which to shape the guide questions for discussions. The informal survey is a fair basis for immediate action. One hundred per cent accuracy is not expected in such surveys but most of the information can be considered accurate enough for the purpose intended and is the only systematic local information of the kind available. The data indicate certain needs and trends to the extension agents and specialists who make a careful study and analysis of the compilation of the survey returns.

While county extension agents prior to holding such a conference already know the needs and wants of the farm homes in a general way, they are very much enlightened by the opinions, suggestions, and recommendations made by the farm women in the committee meetings and in the conference. The suggestions and recommendations are given careful considerat on by the extension workers and the county councils in the planning of the next year's county home demonstration program and those of several following years.

These conferences, in every county where they have been held, have attracted wide public interest and rather complete accounts of them have been carried in local papers.

Prior to the holding of these more recent conferences, Miss Reese, in an address before the Association of Land-Grant Colleges and Universities at its annual meeting last November in discussing this type of conference, said:

Farm women or men and women in county and district conferences are setting up standards in the light of their own experience and the available data. In the 12 States or more where county economic conferences have been held, the total required budget for family living has varied from $1,190 to $1,733. The criticism might arise that the setting up of such a budget, in some cases, is determining how to spend an amount of money which many farm families do not have to spend on living in that particular county. No harm comes from the question raised, as it is the farm women themselves who make up the budget. The women are not unhappy because they can not adopt the budget immediately as their standard, but like to hold it up as a goal toward which to work and attain.

After a minimum budget for a desirable standard of living for a given area is set up, it is only a matter of good business that the extension economists and agricultural extension agents study the farms of the area and be able to suggest an organization of the farms which will yield, within a given period of time at least, the income sufficient for the desired standard of living. This is almost the same as saying that the desired standard of living should determine the use of the land. Why should it not?

It is sound, practical, and important that objective standards of living should be associated with the present objectives of extension programs in farm management and agricultural production within a given area and type of farming. Along with increased incomes for family living, also, ways and means of enriching rural community life must be found.

Women attending the first session of the farm home economic conference in Snohomish County, Wash.

Central States Conference Discusses Reaching More People Effectively

REACHING more farm people with extension projects and increasing the effectiveness of extension contacts with farm people furnished the central theme of discussion at the Central States Extension Conference held at Lincoln, Nebr., April 28–30, 1931. Outstanding results of the discussions follow:

Our hope for reaching larger numbers of boys and girls lies largely in the enlistment of greater numbers of local leaders and giving such leaders better training. The introduction of vocational guidance features into club work as rapidly as possible was urged. A caution was sounded that care must be used lest too much time be devoted to the excellent few.

The need was recognized of increased effort to reach women outside the organized-project group through such means as circular letters, news articles, and general meetings, and for increasing the number of members in project groups through definite efforts on the part of the staff and of members of organized groups. Setting goals for numbers of women to be reached per county was urged.

More careful selection and training of agricultural agents, more effective result demonstrations, and easier methods of obtaining necessary information and materials were listed as the outstanding needs in reaching more farmers in counties.

The present economic situation in relation to extension work was discussed. The directors of extension agreed that if present economic conditions continue relatively more consideration must be given to those projects which have to do with the individual family enterprises rather than those of a community or commodity aspect; farm accounting for the purpose of studying how greater economics in production can be accomplished; household management, including accounting and home improvement; and projects enabling a greater amount of the living of the farm to be produced thereon, such as vegetable gardening and food preservation. This will include also such projects as farm machinery and other general equipment repair projects.

The need of a comprehensive economic analysis for each county at least every five years was indicated, as was the fact that decreased margins of profit have stimulated renewed interest among farm people in economic information and other concrete facts which have a bearing on reduced costs and increased profits.

Means of assisting rural home makers in relation to the economic situation were listed. The following resolution was proposed:

Home life must not be impaired during this period of economic depression. This period offers to the home demonstration staff an opportunity to assist rural home makers in making the best use of income and in making available those things which are not dependent on income but which bring satisfactions to individual and family life.

Determining the objectives of program, delegation of responsibilities, and evaluation and interpretation of results were selected as the major jobs of supervision by the home demonstration group.

"A specialist in human relationships" was the definition of a supervisor as agreed upon by the members of the agricultural section who also urged that supervisors should assist agricultural agents by means of constructive suggestions and inspiration, and should use improved teaching methods as a way of teaching others how to teach.

Club supervisors were urged to recognize that new social and economic problems are confronting the boy and girl on the farm and that a conscious effort should be made through our programs and projects to show them profitable practices and opportunities for a happier farm life.

Additional subjects discussed by the several groups include methods of interesting older boys and girls, effective year-round publicity plans, agricultural adjustment conferences as a basis of program planning, State and county plans of work, adequate teaching load for agents in counties, and local leadership in agriculture and home economics for adult and 4-H club projects.

The consensus of opinion among the directors of extension was that if the extension service is supported by representative local organizations of those whom it serves extension workers need have no fear of the effect of a period of depression such as now exists, regardless of the time it continues, provided those organizations effectively express their needs, and assume responsibility for the cooperative plan whereby they may have available to them information pertaining to their own problems.

California's Home Demonstration Goal

ABOUT 1920 the home demonstration workers in California set as their goal to be attained by 1930 the adoption of some worth-while home economics practice in 50 per cent of the farm homes in the States. According to the 1920 census there were 71,848 farms in the 27 counties having home demonstration agents, so the goal was set to reach 35,924 homes.

Each year records were kept of the homes adopting recommended practices for the first time and at the end of 1930 the agents had reported reaching a grand total of 37,826 homes, or over 1,900 more than the goal.

Finding this achievement stimulating, the home demonstration agents have set as their new goal to have, by 1940, additional practices adopted in 50 per cent of the farm homes in the counties having home demonstration agents.

Boy-scout troops in New Hampshire counties have organized themselves into 4-H clubs so that they may win their merit badges in scouting while gaining prizes, profits, and practice in practical 4-H projects in agriculture, according to C. B. Wadleigh, New Hampshire State club leader.

This movement in New Hampshire was started by a troop of boy scouts in Laconia under the leadership of William Smith, the father of Robert Smith, the 4-H boy who exhibited the best pen of chickens at the Belknap County, N. H., 4-H fair last fall. This club was named the Mohawk Boy Scout 4-H Club.

A special 4-H club edition of the Olympia (Wash.) News has been published annually for four years. This year all 16 pages of the paper were devoted exclusively to 4-H club news, except for the advertisements and less than a page of general news items.

Extension Service Review

Issued monthly by the EXTENSION SERVICE of the United States Department of Agriculture Washington, D. C.

The Extension Service Review is published in the interests of workers and cooperators of the Department of Agriculture engaged in extension activities. It contains official statements and other information necessary to the performance of their duties and is issued free to them by law. Others may obtain copies of the Review from the Superintendent of Documents, Government Printing Office, Washington, D. C., 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, Extension Work*
C. B. SMITH, *Chief, Office of Cooperative Extension Work*
J. W. HISCOX, *Chief, Office of Exhibits*
RAYMOND EVANS, *Chief, Office of Motion Pictures*

REUBEN BRIGHAM, *Editor*

JULY, 1931

A Further Task

The burden of drought-relief effort in so far as the department has been concerned has rested very largely on county extension agents. When regular crops failed they encouraged actively the growing of emergency food and feed crops. When even emergency crops could not be grown they did what they could to bring their people in touch with assistance given by the various relief agencies in the field. They cooperated with the railroads in making the reduced rates on feedstuffs of substantial aid to farmers. They helped with the organization of county and community seed-loan committees and saw to it that every farmer who could use this financial aid to advantage obtained it. In every county in the drought area the extension agents met the practical requirements of a most difficult situation and contributed in no little degree to maintaining the morale and a hopeful outlook on the part of their people.

In a recent letter sent by him to all county extension agents in the drought area, Secretary Hyde pays a high and deserved tribute to the contribution these agents have made. At the same time he points out a further task that he asks them to impose upon themselves. He says:

In the handling of seed-loan applications you have made contact with farmers who have not previously shown much, if any, interest in extension work. We should take advantage of these contacts and try to influence the farm practices of seed-loan borrowers so as to assist them in increasing their incomes, thus lessening their need for emergency assistance in the future. This will in large measure reward you for the heavy burden of extra work which the seed loan has imposed upon you.

Know Them

The chief reason for placing a county extension agent in a county as the representative of the extension service is to personify the service to the people of that county. The department and the State agricultural college cease to be far-away governmental institutions to the farm family when its members become acquainted with the man or woman through whom these institutions seek to serve them. Through them the extension service establishes what we choose to call direct contact between itself and the farm family. Through the man or woman who represents them these institutions become an intimate part of the county's rural life and agriculture and household names in every home.

In the June issue of the REVIEW, M. C. Wilson, of the Washington office, brought out some interesting facts regarding the importance of direct contact in obtaining results in extension work. Studies made on more than 10,000 farms showed that of the families with whom extension agents had made direct contact through visits to the farm or at meetings, 91 per cent had reported making changes due to receiving extension information. Against this high percentage of action on the part of the direct contact group the studies showed that in the case of the families that had not had direct contact with extension agents only 41 per cent had made any change or improvement in methods or equipment as a result of extension information received. These facts, as Mr. Wilson pointed out, indicate the importance of the county extension agent employing those means and agencies that will bring him into direct contact with the people he is endeavoring to serve.

Know your people. Have them know you. Programs, organization, and teaching plans are of little avail unless expressed actively and through the personality of an agent, respected, sought after, and beloved by his people. The agent who knows his people and is known by them is the one who over a period of years will write progress into his county's rural life and agriculture. He is the agent who after a reasonable length of service is Bill or John to his demonstrators and community leaders. He is the agent who is always being urged to drop in for a meal, and when he comes is welcomed like one of the family. No local fair, tour, church or school supper, barbeque, oyster roast, or other community event where the people of the county gather together is reckoned quite complete without him.

And, when we think of the home demonstration agent in terms of one who knows her people and is known by them, she is the agent who gets an affectionate greeting from her hostess and the local leader when she arrives for the meeting of the local home demonstration club. She is the agent who is consulted wherever she goes about Mary's dress, the baby's teeth, the curtains for the spare bedroom, or the new porch furniture. When she leaves flowers from the garden she helped bring into being or maybe a precious plant or two stored up against her coming are given her with the fullest confidence in her understanding and appreciation.

Know your people. Have your people know you. It's the foundation of extension success.

More Brains

Farming is a business that needs more brains applied to it. Ignorance is no remedy for a surplus. These are conclusions reached by Director B. H. Crocheron, of California, in his timely discussion in this issue of the REVIEW of whether increased efficiency is responsible for the present demoralizing surpluses of farm products. Does the effort to get more pounds of butterfat per cow, more eggs per hen, or more peaches per acre make the farm situation better or worse? Is the efficient farmer the surplus producer? Has extension effort to bring about lower production costs and more efficient farming only served to intensify the difficulties of our agricultural situation? These are the questions Director Crocheron raises and answers. Increased efficiency, he admits, may create a surplus if it ends with the ability to grow more. But efficiency, to his mind, implies proper planting plans, the adjustment of production to consumption, and the maintenance of an effective marketing system.

In brief, what we need in farming is more brains and more use of them. As Director Crocheron points out, it is the so-called marginal farmer who is the producer of the surplus. It is the man who on a hunch plants heavily without plan or reason who creates the surplus and breaks the market. He is the one who upsets every constructive effort to put agriculture on a sound economic basis. Without him it might well be that there would be no "farm problem."

Did Efficiency Create the Surplus?

B. H. CROCHERON
Director, California Extension Service

FOR the last five years we have had people rise up to remark that this business of getting more pounds of butterfat per cow, more eggs per hen, more peaches per acre, is only making things go from bad to worse; that increased efficiency has created the surplus, and that the Agricultural extension service, by bringing increased efficiency, has brought a surplus.

In that there is an implied compliment. The argument admits that the extension service knows how to improve the efficiency of farming and that its efforts have so resulted. But we pass by the compliment. Let's look at the criticism.

Does increased efficiency necessarily mean the creation of a surplus? Is the efficient man the real surplus producer? We think not. We believe the "marginal man" produces the surplus; that if there were only efficient producers they would manifest their brains and ability, not only by economical production but also by studying probable price trends and adjusting their production to prospective demand. It's the ignorant, inefficient producer who goes "hog wild" and plants over all creation, thus creating the surplus. Brains, ability, information—these three never injured any industry. The trouble with farming is that it hasn't enough of them. As one man recently said, "My ignorant neighbor is a menace to me."

Let's look at a few facts to justify our assertion. Here are actual figures from real farms. The farms contrasted are both in the same community, keeping records by the same method on the same industry in the same year. Let's look them over. The incomes of all these men are about the same; they are about enough to maintain a farm family on American standards.

Poultry—Sonoma County, 1930

	Poultryman A	Poultryman B
Flock income*—dolls	2,670	2,695
Eggs per hen per year—no	127	147
Net income per hen—dolls	0.89	1.40
Hens—no	3,000	1,925
Total eggs marketed—doz	32,000	23,000
Surplus eggs arising from poorer hens—doz	9,000	

Dairying—Imperial County, 1930

	Dairyman A	Dairyman B
Farm income*—dolls	2,490	2,500
Butterfat per cow—lbs	215	300
Net income per cow—dolls	80	129
Cows—no	31	20
Butterfat sold—lbs	6,665	6,000
Surplus butterfat arising from poorer cows—lbs	665	

Peaches—Sutter County, 1930

	Grower A	Grower B
Orchard income*—dolls	1,987	2,444
Yield per acre—tons	13.8	16.6
Acres—no	77	28
Total No. 1 peaches marketed—tons	1,063	465
Surplus arising from poorer orchard—tons	598	

* Gross net income less all cash expenses and depreciation.

If you have looked at those figures you have seen that because Poultryman A was less efficient he produced 9,000 dozen more eggs than did Poultryman B, and yet their incomes were the same. Dairyman A had to put 665 more pounds of butterfat on the market to make the same income as his more efficient neighbor, B. Peach Grower A had to market 598 more tons of peaches on an overloaded market to keep his family going, and yet his income was $457 less than Grower B.

Increased efficiency may create a surplus if it ends with the ability to grow more. However, efficiency not only concerns production. It implies proper planting plans, the adjustment of production to consumption, and the maintenance of an effective marketing system.

The remedy for the surplus is not ignorance, such as our critics imply. One man proposed, as a remedy for the peach surplus, that no one should be allowed to produce more than 7 tons per acre. Another man proposed that no one should be allowed to produce less than 10 tons per acre. The latter suggestion is more nearly correct as a solution of the farm problem.

Discussion of His Problems Aids the Editor

The agricultural college editor occupies a strategic position in the field of agricultural education. His activities in improving the quality and increasing the quantity of constructive information widens the influence of the institution and strengthens greatly its efforts to convey promptly to the farmer and home maker facts which enable them to better their economic and social position in life. The editor must be alert to the advancement made in the technique of his profession. He must keep abreast of progress made in utilizing the bulletin, the house organ, the newspaper and farm journal, the circular letter, poster, photograph, chart, motion picture, film strip, and other informational media. His duties also demand that he teach extension workers how to utilize these media to the best advantage. The frank discussions of problems at the annual conferences of the Association of Agricultural College Editors are instructive and stimulating. The contacts made are invaluable. Administrative officers will recognize the advantages accruing to the institution and to the farm population of the State through participation of the college editor in the annual conference. It is hoped that each institution will give serious consideration to sending its editor to the next annual meeting of the association, to be held at Corvallis, Oreg., August 11 to 14, 1931.

C. W. WARBURTON,
Director of Extension Work.

The editors of the seven papers in Grant County, Ind., have organized themselves into the Grant County Press Club for the purpose of more effectively backing the agricultural extension program in that county.

Believing that the future growth and development of the county seat (a city of about 35,000) and the other towns of the county depend largely on the farmers being successful, the editors formed this organization last winter after a discussion of newspapers and their relation to agricultural improvement by T. R. Johnston, extension editor in Indiana. The extension service there is helping the editors to coordinate their information on approved extension projects.

Forest Fires Campaign

Six specialists in Arkansas cooperated effectively in preparing informational stories to be used in a campaign against forest fires which was conducted just prior to the 1930 fall forest-fire season, reports Charles A. Gillett, extension forester in Arkansas.

A survey had disclosed that the four chief reasons for voluntarily burning the woods were (1) to green up the grass in the spring; (2) to kill the boll weevil; (3) to get rid of the cattle ticks; and (4) to smoke and run game animals out of the woods where they could be killed. Accordingly, seven stories were prepared and sent to all weekly newspapers of the State so they would run for seven successive weeks.

The first of the series was a general story on forest fires and introduced the other six stories. Then the agronomist told of the damage which forest fires do to pastures. The State veterinarian showed proof that forest fires do not destroy ticks. The entomologist prepared a paper on the control of the boll weevil and brought out the fact that burning the woods would not kill out the boll weevil. A soil scientist pointed out the damage which forest fires caused to the soil. The game and fish commissioner discussed the effect that forest fires have on fish and game. In the final story of the series the extension forester showed the damage to mature timber which forest fires cause.

Stories Used Extensively

A check-up of the 70 newspapers filed in the State extension office showed that 45 of them had used the complete series of stories and that others had used individual stories.

Commenting on the effect of this work, Mr. Gillett says:

Too frequently does the specialist look upon only his phases of work without properly adjusting them to the farm enterprise. In many cases this seriously handicaps him in the proper execution of his work and may also result in an unbalanced farm program. Coordination of work by specialists is essential if extension teaching is to do the greatest good for the greatest number.

The effectiveness of a county agent's news story is illustrated by the decision of the manager of a large Florida lumber company to establish pasture grasses and go into the beef-cattle business on his cut-over lands "because of a story on the subject in a Taylor County paper by County Agent R. S. Dennis."

J. H. McClain, late Federal dairy extension specialist

J. H. McClain

J. H. McClain, extension dairyman in the Southern States for the Bureau of Dairy Industry and the Office of Cooperative Extension Work, died on May 18 at his home at Campobello, S. C., after a long illness.

Mr. McClain was born at Wellford, S. C., October 10, 1883. He was graduated from Clemson Agricultural College with the B. S. degree in 1906, and took further dairy training at Cornell University in 1907–8.

In 1907 he entered the Department of Agriculture to do dairy development work in the South, with headquarters at the experiment station of the University of Georgia. In 1911 his headquarters were transferred to Washington, and in 1919 he went on leave without pay to take Holstein-Friesian cattle from this country to France for the French high commission. When he returned to the department he was given supervision of the bureau's dairy introduction work in the Southern States, and on July 1, 1925, he was placed in charge of the dairy-production introduction work of the newly formed Bureau of Dairy Industry. From June, 1929, until his death, he was subject-matter extension specialist in dairy production for the 12 Southern States.

In commenting on Mr. McClain's work, A. B. Graham, in charge of the subject-matter specialists of the Office of Cooperative Extension Work, says:

He had traveled back and forth through the South until he thoroughly and intimately knew the people and the problems of every section. In his work he made a host of friends who respected his opinions and called upon him for advice. Among these were presidents and deans of colleges and other leaders in the South's agriculture, journalists, and men of affairs not directly engaged in agriculture. As a speaker on the problems of Southern agriculture he was exceptionally interesting, convincing, and effective, being much in demand to speak at meetings throughout the South.

Mr. McClain is survived by his widow and a son, who is assistant county agricultural agent in Lubbock County, Tex.

Maple Sirup Meetings

To promote the production and packing of a higher quality of maple sirup, nine maple sirup meetings were held during the first week of February in New Hampshire by the extension service with the cooperation of the State department of agriculture and the various county farm bureaus, according to K. E. Barraclough, extension forester in that State. This series of meetings is one instance of the movement for better grading and packing of farm produce which is being supported by the farmers and the extension service in New England.

At these meetings a practical Vermont sugar maker discussed the production and packing of maple sirup. The Vermont grades for maple sirup and the value of using the New England label to identify the grades were explained by the deputy commissioner of agriculture, and the extension forester talked on the care of the sugar orchard.

All the producers present indicated that they would like to have the commissioner of agriculture establish voluntary standard grades on the basis of color for New Hampshire maple sirup and sugar similar to those already established in Vermont. Under these grades the sirup must be free from foreign material, must be of a density of 36° Baumé hydrometer reading, and must weigh 11 pounds to the gallon. Fancy sirup must not be darker than No. 5, Grade A not darker than No. 7, and Grade B not darker than No. 9, according to the United States color standards.

These meetings were held because the extension forester found that the farmers were interested in improving the methods of making New Hampshire sirup and sugar and in grading their sirup according to the grades already established in Vermont.

The total value of this industry in New Hampshire is about $450,000 a year, or about one-sixth of the total value of production in New England, Mr. Barraclough reports.

Alabama Women Make Clothing from Sacks

SACKS were made into more than 15,000 garments and household articles at an average cost of 23 cents each by the rural women in 28 counties of Alabama last year, reports Dorothy Dean, Alabama extension specialist in clothing and handicrafts.

In writing about a cotton sack fashion show which was held in her county, Lavada Curtis, Dale County home demonstration agent, says:

The fashion show was termed the "economy show" by many. Twenty-one women and children wore dresses of sacks and to music they gracefully strolled across the stage. As each one appeared, the announcer gave the kind of sacks used for the dress, the number of sacks used, and the cost of the dress. The highest priced dress was 45 cents. In addition to the fashion show, 206 garments and household articles were on display.

Concerning her work with sacks, one of the outstanding club women says:

I have a collection of 41 pieces of clothing and household articles with an actual outlay of $1.30, which was for thread, dye, and buttons. If I had bought all of this material new it would have cost $21.25, and those nice sacks would never have been anything but ordinary sacks. I made all of these things at a saving of $19.95, and used someth ng that would have been thrown away, which means a great deal to me when cash is so scarce and hard to get.

(Above) A collection of 41 pieces of clothing and household articles made from sacks at a total cost of $1.30

(Left) An ensemble, pocketbook, and hat made from sacks at a cost of 40 cents for buttons and thread

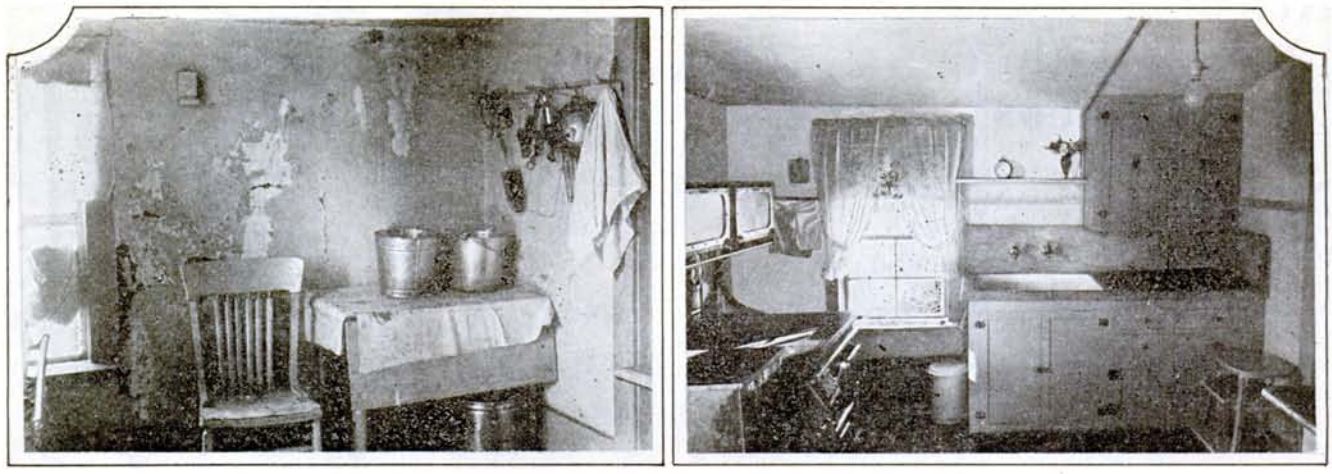
Texas Holds Grain Grading Schools

THREE grain-grading schools were held in Texas in February to aid in the more efficient administration of the United States grain standards and to bring about a more general and uniform application of the Federal standards, and consequently more efficient and economical marketing. These meetings were held in Sequin, New Braunfels, and Pearsall. They were organized by the San Antonio Grain and Hay Exchange, and were conducted in cooperation with the extension division of the Texas Agricultural and Mechanical College, grain merchants, millers, county farm agents, local chambers of commerce, and the educational committee of Federal grain supervision.

A large quantity of corn of high numerical grade is produced in the territory around San Antonio. It is harvested with a low moisture content, but much of this corn is graded mixed because of lemon yellow kernels in the white corn, and is therefore frequently discounted in the terminal markets as much as 5 cents per bushel. This entirely preventable factor was stressed by the extension agronomist and the Federal marketing specialists. As a result of these meetings numerous letters have been received from the officials of the organizations cooperating in this work saying that these schools aided greatly in convincing the producers of the economic loss caused by preventable factors which reduce the value and price of their grain.

These schools were conducted in accordance with the plans and policy of the grain division of the Bureau of Agricultural Economics for making the Federal grain standards effective at county points, and thus assuring to producers of grain of good and superior quality the premiums and prices which this grain brings in the terminal markets.

Instruction concerning the Federal grain grades was given by E. L. Morris, division supervisor. C. W. Griffin, district supervisor, discussed the supervision of grading at the Texas markets and the market demand for high-grade grain. Supervisor J. R. Holmes and Chief Inspector J. F. Shanley, of the San Antonio Grain and Hay Exchange, demonstrated moisture testing, dockage, test weight per bushel, and other grading factors. The department's motion-picture film illustrating the harvesting, inspection, and grading of grain was also shown. R. R. Reppert, Texas extension entomologist, talked on insect control in stored grain, and E. A. Miller, extension agronomist, on corn production.



A kitchen in Uintah County before and after improvement

Room Improvement in Utah

MANY houses in Utah have become homes as the result of the room-improvement work conducted by Mrs. Effie S. Barrows, home management specialist, and the home demonstration agents in that State.

Of primary interest to Utah housewives is the kitchen. The illustrations above partially tell a story of changes made in one of the 447 kitchens improved through the Utah Extension Service in 1930.

Kitchen improvement is not new in Utah. Successful campaigns have been conducted for the past six years with rather limited numbers, but during the past spring the work was done more extensively than in any previous year.

Refinishing Linoleum

A popular part of kitchen-improvement work is the refinishing of old linoleum. One floor which looked like a miniature stairway because of the successive repairs of odd pieces of linoleum held in place by large brass upholstering tacks, became a complete smooth, modern floor covering. After the patches were taken off, the edges of worn spots were lined up by ruler and pencil and straight, clean edges were cut; waterproof cement was applied to the back of the linoleum around the holes and the edges were pressed tightly to the floor. Pieces were cut from linoleum scraps to exactly fit the holes. These were given a coat of water-proof cement on the under surface, fitted in the holes, and the patches and edges were weighted down until all were dry. After about 24 hours, the floor was thoroughly scrubbed and allowed to dry another 24 hours. After the floor was carefully dusted a coat of good quick drying floor enamel was applied. This was allowed to dry for 24 hours, and then the floor was stippled with paint of several tones used elsewhere in the room. A large piece of crumpled newspaper was used for stippling and blending the colors on the floor. After another drying period, the whole floor was dusted and coated with a thin covering of quick drying floor varnish. A second coat of varnish applied after the first had dried completed the job. After a family of five had used this kitchen for a year, the floor still looked like new.

Old Furniture Used

When looking over what was available to improve homes, many beautiful pieces of furniture were found. These have added to the comfort or beauty of kitchens or have given commonplace bedrooms a distinctive and attractive atmosphere.

In improving living rooms old rugs of poor coloring and design and canton flannel were dyed. In one home a rug with quantities of misused orange was made to tie charmingly into the room by replacing old bright blue drapes with dull, low-value, red-orange canton flannel hangings. Occasional other repeats of orange of different values and intensities produced a pleasing unit of the room that was previously a mass of unrelated furnishings. The home maker, taking advantage of a sale, bought 28 yards of a good quality of flannel at 15 cents a yard. This being less expensive than any lining material available, a double amount was purchased and used for both drapes and lining. Weighted tape was placed at the bottom of the drapes which hung in soft, velvety folds.

This home was included in a tour of improved homes. The living room that had been visited previously was fitted with drapes made of material that cost $4.75 a yard, yet every guest declared the canton flannel drapes, which cost $4.20 for 28 yards, were far lovelier than the high-priced drapes in the other home.

Following a session on room improvement, one woman requested help in furnishing her newly remodeled home. Mrs. Barrows and the home demonstration agent, after listening to her appeal, asked permission to look over the furnishings on hand. The house had many antiques that could spell distinction in even a house of wealth. Tables, chairs, stands, and all types of lovely accessories were available.

Rugs Dyed

The new oak floors, which had been laid in the dining and living rooms needed something to harmonize better than the two crudely colored floral wreath rugs which had been used for some time. These rugs were dyed a low-value of a dominant hue in the wall covering. At a cost of $4.60 the rugs were transformed from garish garlands into velvety, brownish-rose coverings. Full-length draperies of green canton flannel, with French pleated headings, harmonized with the patterned wall paper and the dyed rugs. These draperies completed a pleasing background for the refinished antique furniture.

Exquisite India covers, two colored hardanger pieces of ancient origin, quaint sofa pillows from old covers which had never been used before, a few bits of valued pottery, and a huge patchwork spread thrown carefully over a rather worn leatherette sofa, helped to make the rooms attractive. As most of the furnishings used were already available in the home only a small amount of money was spent.

Four Years of Hog Feeding Demonstrations

HOG FEEDING demonstration results in South Carolina during the past four years have shown a decrease in the amount of corn and protein supplement necessary to produce 100 pounds of gain, an increase in the quality and market value per pound of the hogs sold, and a reestablishment of confidence in the swine industry in the State, reports J. R. Hawkins, South Carolina livestock specialist. The work also has demonstrated that hog feeding provides a good market for corn and other feed produced under a diversified farming program, and has thereby helped to establish a more stable and profitable system of farming in South Carolina.

Carrying on the Work

In South Carolina, the demonstrator is made thoroughly familiar with the rations to be used, the system of management to be followed, and the accounting record which he is to keep.

The hogs are weighed when they are started on feed. At the end of 30 days of feeding, they are again weighed in order to check up on results. Under this method Mr. Hawkins reports that farmers can be depended on to carry the demonstrations to completion and when the hogs are finished and sold they receive final evidence of the financial success of the venture.

Frequent visits from the county agent and the specialist have the effect of making the demonstrator feel that his work is important and enable the agents to detect and correct any mistakes in feeding or management before serious injury is done. Both of these factors contribute to successful completions.

The following table gives the history of this project:

South Carolina hog feeding demonstrations [1]

	1927	1928	1929	1930
Number of demonstrators	44	127	104	72
Number of hogs	414	2,193	1,474	1,521
Pounds gained per hog	43.3	65.5	80.0	96.6
Bushels of corn per 100 pounds gained	6.09	5.9	5.7	5.32
Pounds of protein supplement per 100 pounds gained	31.6	21.6	23.5	25.8

[1] These figures do not include ton-litter demonstrations.

Mr. Hawkins reports that it seems preferable to have a farmer carry on a succession of demonstrations rather than to repeat any one kind of demonstration. For example, a farmer might first conduct a feeding demonstration in dry lot using a self-feeder containing corn and a protein supplement, and then the next season raise a ton litter, or "hog down" corn and green soybeans, or feed a lot on pasture. By locating demonstrations with new men each season, the extension service reaches an increasingly large circle of farmers and keeps continually before the public the fundamental facts of hog production.

The chief advantage of a feeding demonstration, according to Mr. Hawkins, is that it opens an approach to the problems of successful and economic hog production through making apparent the advantages and value of better breeding stock, sanitation, balanced rations, cheap and abundant feeds, forage crops, and timely production and marketing.

Strengthening 4-H Leadership

THE TRAINING, encouragement, and recognition of volunteer local 4-H club leaders are given special attention by the extension service in South Dakota because it is believed that the strength of club work depends upon the effectiveness of the local leaders, says H. M. Jones, State club leader.

South Dakota has found that leaders can be trained successfully by the conference method if the leaders themselves feel the need for such conferences and realize their value. Usually the leaders are not asked to attend more than three conferences a year. In 1930 conferences reaching 44 counties, or two-thirds of the State, were attended by 1,299 people, although there were only 1,277 leaders listed on the State records.

The conference method has not been found to be as successful with the boys' leaders as with the girls' leaders because farm projects represent a wider diversification and make it extremely difficult to hold good conferences when the leaders of more than one project are included. To meet this situation, district subject-matter conferences are held. For example, at four district dairy conferences last year an entire day was spent with demonstrations and discussions by 32 leaders (about one-half of the active dairy leaders of the State) and 131 older members and visitors.

Recreational work, which can be used in the local clubs, is always given at the leaders' conferences because of the interest that it stimulates. Conferences are held in connection with club camps, the State fair, and the junior short course.

At the last short course the 51 leaders attending formed a State organization which helps in planning the program for future conferences and affords the leaders an opportunity to exchange ideas. The first official act of this leaders' association was to establish a student loan fund for 4-H club members wishing to continue their courses in agriculture and home economics. This suggestion came from the leaders and they are backing it up with substantial contributions.

Adequate recognition has been found to be advisable through such channels as awarding leadership service pins and mentioning any meritorious work in the newspapers.

A Sauerkraut Club

Although there are many calf, dairy, pig, sheep, sewing, crop, and pony clubs among 4-H clubs, Morgan County, Utah, has the only sauerkraut club known to exist in that State, according to Wilford D. Porter, Utah extension editor.

The report of this club's activities during 1930, as submitted by C. R. Richards, Morgan County agricultural agent, shows that each of the five boys comprising the club grew one-half acre of cabbage. When the cabbage was sold to the kraut factory the boys sold an average of 14.9 tons of cabbage and received a gross return of $119.20. After the cost of production was subtracted, each boy received a net profit of $80.65 or an average of $161.30 per acre.

Figures presented by the kraut factory for 160 acres of cabbage in that county show that the average production was 23.2 tons of cabbage per acre. Therefore the boys averaged 6.6 tons per acre better than the county average.

The New York conservation department is to furnish selected 4-H club members with 45 pheasant eggs each and then buy for liberation all healthy birds which are reared to seven weeks of age for $1 apiece.

Home Furnishing Demonstrations

FIVE homes were selected as demonstrations in the house furnishing project in Allegany County, N. Y., last year, and all the home demonstration women of the county cooperated in making improvements in those five homes. Of course, all material used in the homes was paid for by the owners, but this was a small item. This work was carried on under the direction of Florence Wright, New York State housing specialist, and Janet L. Cameron, at that time county home demonstration agent in Allegany County.

Tour of the Homes

As a culmination of this work, a tour was arranged last fall and 200 people in 63 automobiles were orderly and quickly routed to the five demonstration homes. Two deputy sheriffs who accompanied the tour all day, directed the traffic.

Each person on the tour was given a schedule of the day's activities which listed the points to look for in each room. These included such changes as the woodwork painted cream color to make the rooms lighter, woodwork rubbed down from a shiny to a dull finish, lighter and more cheerful wall paper, rugs dyed, white bedspreads and covers dyed to harmonize with attractive color schemes, pictures hung lower to become a part of the furniture grouping, table lamps made from old oil lamps, interesting shades made from inexpensive paper, easy chairs remade with springs and hair from old automobile seats, old chairs refinished to bring out the loveliness of the natural wood, and furniture regrouped to make several reading centers instead of one.

In noting these differences, one visitor said:

What impresses me most is that the beauty, simplicity, and restfulness so apparent in the changed rooms is due largely to fewer "things" and a more pleasing arrangement rather than to the spending of money. I believe that with thought and study I can produce a similar effect in my own home.

Pictorial Record of the Work

One of the special features of this project was the visual record which was made of the rooms before and after improvement. At the time of the tour photographs taken before the changes were made were on display in every demonstration home so that the visitors could make definite comparisons.

Such visual records provide the specialists and the county agents with a means of presenting to the women, through photographs, lantern slides, film strips, or posters, definite illustrations of what can be done along these lines and stimulate similar effort in communities where the work is new.

Marmalade Marketing Association

A HOME demonstration marmalade marketing association to sell grapefruit marmalade still has its seven original members in Hildalgo County, Tex.

Mrs. L. J. Hartzell, corresponding secretary of the association, said in a talk about the organization:

Our State, county, and district home demonstration agents, being in many homes, see the necessity for women to earn money that they may improve their homes, so they began to bring before club women the subject of standardizing some product and placing it on the market. They emphasized the fact that Tennessee and Arkansas women were placing products on the market and that Texas women were not doing so. We also have some women who want money of their own to spend just as they please. So the three things for which we are workings, are the spirit of contest, necessity, and ambition.

The organization was started four years ago and grapefruit marmalade was chosen as a product against which there would be little competition. Officers were elected and charter members paid an initiation fee of 50 cents. The women met at a home to perfect the recipe to be followed, and samples of containers which had been ordered were discussed and decided on. Some funds to start the project were raised. After the jars were received each member made a certain amount of marmalade, which was pooled and packed at the town of McAllen.

To sell the product the women decided on a marmalade day. Two or three clubs in each town were assigned to sell marmalade, served on hot biscuits. Local newspapers carried accounts of the venture. A considerable amount of marmalade was sold, but the greatest benefit received was the advertising.

The members then called on all merchants in various towns for orders and placed the marmalade in from one to three stores in each town.

More containers had to be ordered and funds raised for the continuation of the project. At this point many members dropped out, but seven members continued and were assessed $5 each. A label was selected. The secretary wrote to firms outside the county and the Missouri Pacific Railroad Co. placed an order for marmalade in a special jar; accordingly boxes were purchased for packing and shipping.

Orders did not come as fast as the women had hoped and the marmalade on hand darkened, so they canned peel and juice separately and finished the product as needed. The marmalade on hand was not uniform in color and appearance so the women finished making all of it at one home under uniform conditions. A slicer and thermometer were added to the association's equipment.

Mrs. Hartzell says:

Our work is now reduced to a system. Our equipment invoices at all times at about $150, and consists of a stove, dies, labels, placards, containers and caps of different sizes, sugar, copyright, and packing cases. Our dividends have amounted to $58 each. Not much, you say, but the biggest thing in this undertaking was not the money, but the fact that we accomplished what we set out to do. We standardized and placed grapefruit marmalade on the market. We have placed our product with four railroads. We intend to stick by this project.

The Bright Star 4-H Club in Miller County, Ark., reports 263 members enrolled, 120 boys and 143 girls. W. J. Jernigan, Arkansas State club leader, attributes the size of this club to the cooperation of teachers, the help of the county school superintendent, the size of the consolidated school district, the parents' approval of the 4-H club movement, and the enthusiasm of the members themselves.

National 4-H Club Radio Program

Saturday, August 1

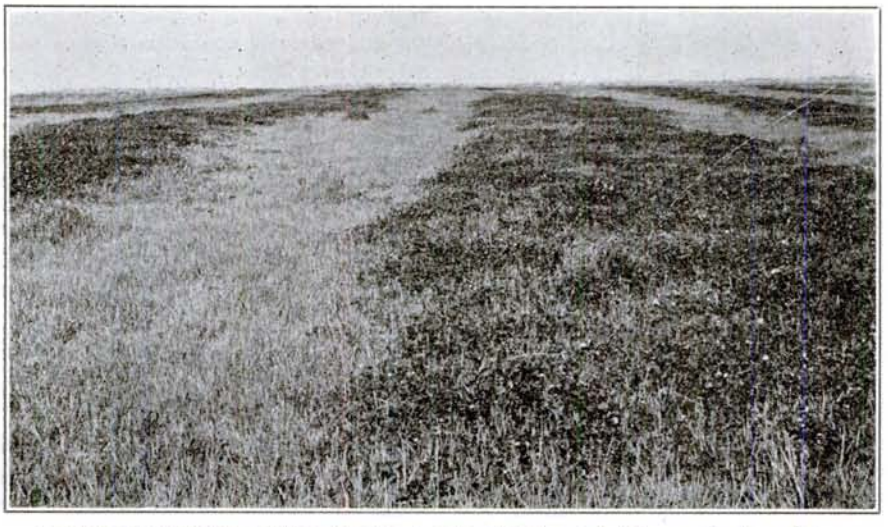
A STUDY OF THE FORMS OF MUSICAL COMPOSITIONS

An Overture.	From William Tell.	*Rossini.*
A Reverie.	Traumerel	*Schumann.*
An Intermezzo	From Cavalleria Rusticana.	*Mascagni.*
A Nocturne.	Nocturne in E Flat.	*Chopin.*
A Melody.	Melody in F	*Rubinstein.*
A Ballet.	Flower Waltz from Naila.	*Delibes.*
A March.	Semper Fidelis	*Sousa.*

Legumes for Mountain Pastures and Hay Crops

COLORADO'S mountain ranchers are being interested in growing their own protein for feeding to livestock as a result of the efforts of extension service workers for the Colorado Agricultural College. Consequently, in a few years it will not be necessary for ranchmen to ship in such large amounts of protein concentrates as they are now purchasing, according to I. G. Kinghorn, publicity editor in Colorado.

Demonstrations are being conducted in several counties of the State by T. G. Stewart, extension agronomist, to show the importance of producing protein on the ranch in the form of alsike clover, field or canning peas, and yellow-blossomed sweet clover. The pea and alsike-clover demonstrations are followed closely by feeding tests to show conclusively the fattening value of these legumes.



An alsike clover demonstration showing a strip of alsike seeded in a native hay pasture

Alsike Clover

Alsike-clover seeding demonstrations are being conducted at elevations ranging from 7,600 feet above sea level on the Baca Grant ranch to 9,200 feet on the Cahill ranch.

"Alsike is ideally fitted for high altitude use because of its hardiness, and because it produces great amounts of seed pods close to the ground, where they are not cut by mowers but may be scattered in raking," says Mr. Stewart. "As a result of this characteristic, alsike reseeds itself rapidly.

Results obtained to date may be summarized as follows:

Calves wintered on native hay mixed with alsike clover, which had been seeded in the native hay meadows, produced the cheapest net gains in a wintering and subsequent summering demonstration in Jackson County. Other methods of wintering tested included the feeding of native hay alone, and native hay supplemented with cottonseed cake.

Alsike clover seeded on 200 acres of native hay meadow on the Baca Grant ranch in Saguache County last spring increased the hay tonnage by 14 tons last fall, although ordinarily little or no increase in either quality or quantity is expected the first season. There are 8,000 acres of native hay on this old Spanish-grant ranch, and it is planned to broadcast alsike clover over this entire acreage.

Peas

In addition to the alsike-clover project, variety tests of field and canning peas are being conducted in Teller, Routt, and Costilla Counties at elevations ranging from 7,200 to 8,700 feet above sea level. Field demonstrations of canning peas are also in progress in Garfield and Routt Counties for the purpose of creating local seed supplies.

In many sections it is planned to substitute canning peas for field peas because canning peas yield more grain and a larger tonnage of hay, and because, at unusually high altitudes, they mature considerably earlier than field varieties. It requires about six months for field peas to mature, and only about four months for canning peas to mature, Mr. Stewart points out. Canning peas also are preferred by livestock because of their high sugar content.

The project of seeding yellow-blossomed sweet clover in depleted high-altitude ranges in cooperation with the United States Forest Service has been started recently and will be expanded in the near feature. It is also planned to seed the clover in the sagebrush and native grasses on the public domain to improve the range for grazing livestock in the summer time.

Nine hundred and seventy-five acres were seeded to sweet clover for pasture on 38 different farms in Huerfano County alone during 1929, according to J. L. Shields, county extension agent.

Hawaii's Coffee and Frog Raising Clubs

Hawaii has five coffee-raising clubs with 55 members and one frog-raising club with 11 members, reports J. Hazel Zimmerman, acting assistant director of home economics in Hawaii.

After studying the markets in Honolulu, marketing specialists decided that 6,000 pairs of frog legs a week could be sold at 20 cents a pair, and to take advantage of this cash market, the extension service sponsored the frog-raising club. A few years ago the agricultural experiment station imported frogs into Hawaii to feed on certain insects, so this club is fighting insect pests while making money.

4–H Clubs to Manage Fair

The 4-H clubs of Whatcom County, Wash., will manage the county fair entirely this year. The directors of the fair association decided that it would be unwise to undertake the usual style of harvest celebration with horse races and other expensive attractions; but unanimously accepted the proposal of Harry B. Carroll, county agricultural agent, that the fair be managed by the 4-H clubs.

It has been decided that the livestock and agricultural exhibits will be limited to Whatcom County; that there will be no admission fees; and that production and utility will be emphasized, rather than show-ring qualifications. All other matters, including the dates of the fair and the kind of exhibition to be given, will be handled by the 600 club members.

New Motion Pictures Show How U. S. Forests Serve Man

HOW FORESTS serve the people of the United States is shown in a series of new 1-reel motion-picture films just released by the Office of Motion Pictures for the United States Forest Service. The films are entitled: "Forest Fires—Or Game?" "Forests and Streams," "Unburned Woodlands," and "How Forests Serve."

Ceaseless activities of nature, rippling streams, trout flashing in the sunlight, wild game caught by the camera as they were fleeing, panic stricken, before advancing flames, give these forest-land reels dramatic interest. In varied ways, economic as well as recreational, the forests are shown to serve mankind, provided man does his part.

Forests and Streams

Natural reservoirs, the forests with their cooling shade and sponge-like layers of leaves and humus, are shown in the film Forests and Streams, regulating streamflow, saving clear water and releasing it in springs, rivulets, and creeks long after the dry season has begun. To protect and preserve the water supply it is necessary to protect the forests.

The Southern Appalachians are the locale for many glimpses of sparkling waters and scenes showing enjoyment by campers and fishermen. Relationship between enduring values and the spongy floor of the forest are graphically shown by photographs of leaf cups filled to the brim with rain water and saturated soils supporting luxuriant vegetation and feeding trout streams, city reservoirs, and hydroelectric plants.

Unburned Woodlands

Unburned Woodlands, 1 reel, contrasts the advantages of unburned woodlands with the disadvantages of burned woodlands. Scenes show that unburned woodlands are conservers of water, sources of employment for labor, the home of game and other wild life, and places of recreation, and that burned woodlands benefit no one. This film is of special interest to conservationists, campers, and nature lovers and will prove an interesting addition to any program for which a film of general interest is desired.

Forest Fires - Or Game?

This film shows that bird and animal friends prefer green forests and that forest fires and destructive logging methods kill or drive out wild life by destroying their homes and make restocking necessary.

The wily bass and mountain trout, timid quail and grouse, the elusive wild turkey, wild duck, moose and elk, and comical bear cubs are featured players. Scenes at a Federal fish hatchery of fish eggs hatching in troughs, becoming fry, then fingerlings, and when large enough being shipped to depleted streams and the closing of these streams until the fish grow large enough to furnish sport for fishermen, show steps the Government is taking to maintain the supply of game fish.

The fish and game scenes include some unusual nature photography and should prove of special interest to nature lovers, members of hiking clubs, and of the Izaak Walton League. This film will give variety to any program.

How Forests Serve

In How Forests Serve, 1 reel, a few of the many ways in which protected forests serve mankind are summarized. It is pointed out that forests provide work in the woods, at portable mills, at big mills, in shipment, at factories and in building, and that national forests serve in a special way, one-fourth of the revenue from sales of national forest timber being used for roads and schools in the counties from which the timber comes.

Because of their similarity, these films are recommended for different rather than for the same program. Since the number of prints of these films is inadequate to meet all demands, extension workers who want them for special occasions should make application for bookings well in advance of the dates on which the films will be needed. They are loaned free, except for transportation charges to and from Washington.

Department Films Shown in Holland

Two new films of the department, one on seed testing and one showing how seeds germinate, are to be shown at the sixth congress of the International Seed Testing Association which meets at Wageningen, Holland, July 13–18.

Dr. E. H. Toole, of the division of seed investigations, Bureau of Plant Industry, under whose direction the films were made, will represent the United States Department of Agriculture at this international congress, having sailed May 27. He will also visit England, Scotland, Sweden, Denmark, Germany, Switzerland, and France.

How Seeds Germinate, one reel, contains some remarkable screen studies of the actual germination of seed made by the department's time lapse machine, built by the late Howard Greene, of the technical staff of the Office of Motion Pictures. These screen studies of plant growth show, in a few moments, growth over a period of from three days to a week. The tiny seeds are greatly magnified, nine completely filling the screen, in one scene, where one picture or "frame" was taken at 5-minute intervals for an entire week.

Testing Seeds in Soil, one reel, shows in detail a new method of testing seeds in soil used at the department's seed laboratories and contrasts the newer method with the older one of testing seeds in blotters. Imported seeds before being admitted into the United States are given both the purity and germination tests. How the germination tests are made are shown in this new 1-reel film which will be shown in Holland in July and will be ready for distribution in this country in the near future.

Child-Feeding Charts

Eight child-feeding charts have just been issued by the Bureau of Home Economics as an aid for child study and parent education groups, home demonstration agents, teachers of child nutrition, pediatricians, visiting nurses, child welfare clinics, and other social service workers.

By attractive black and white illustrations and brief legends in popular language, the eight charts show successively: Factors that contribute to good nutrition; signs of good nutrition; training the baby to like a variety of flavors; suitable eating equipment for children; the importance of self-help in good food habits; how to adapt the same food ingredients of a meal to children of different ages; a day's meals for a 3-year-old; and daily food requirements for every child.

These child-feeding charts may be purchased from the Superintendent of Documents, Government Printing Office, Washington, D. C., for 25 cents for the set of eight.

WHAT ABOUT THE FARM BOARD?

TO what extent can the Farm Board bring about better prices and better times for the farmer?

—— · ——

WILL the Board lend funds to local cooperatives who for good reasons are not lined up with regional or national cooperatives?

—— · ——

WILL the Board aid in marketing surplus crops this year?

—— · ——

WHAT does the Board intend to do with the wheat it has stored?

—— · ——

WILL the Board finance a campaign to increase cotton consumption?

THESE are but a few of the many questions that have been puzzling extension workers. The Federal Farm Board extends an invitation to all the extension agents to submit questions concerning plans, activities, policies, and progress of the Board that they or farmers in their counties wish to have answered.

HUNDREDS of the letters, sending questions, have already been answered. All questions will receive careful consideration and replies will be made as rapidly as conditions permit.

—— · ——

WRITE FOR THE PUBLICATIONS LISTED. THEY WILL BE SUPPLIED WITHOUT COST

Available Publications

Circ. 1. Federal Farm Board Questions and Answers
Circ. 2. Grow Less—Get More
Circ. 3. The Farm Board. Its General Policies and Work in Helping Agriculture
Bul. 2. Practical Experiences in Feeding Wheat
Bul. 3. Farmers Build Their Marketing Machinery
Bul. 4. Outlook for American Cotton
Bul. 5. Grain—Guide for Organizing Local Cooperative Marketing Associations
First Annual Report of the Federal Farm Board for Year Ended June 30, 1930
Agricultural Marketing Act
Capper-Volstead Act
Cooperative Marketing Act

Send letters submitting questions or requesting bulletins to

Frank Ridgway, Director of Information
FEDERAL FARM BOARD
Washington, D. C.

IT IS SO EASY TO make the beautiful and the useful work together that I wonder that they are ever divorced. A handsome lawn, fine hedges, a clean and shaded highway, a shrubbery giving glimpses of continuous bloom raise the market value of the property.

E. P. POWELL

U. S. GOVERNMENT PRINTING OFFICE: 1931

Extension Service Review

VOL. 2, NO. 8 AUGUST, 1931

THE ROADSIDE STAND OFFERS A PROFITABLE MARKET FOR MUCH FARM PRODUCE

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 120 FOR PRICES

In This Issue

Do annual conferences give sufficient information, inspiration, and guidance to extension workers attending them to justify the time and money invested? How would you organize such a conference to get the most out of it? Should all of the specialists be on the program each year? To what extent should county extension agents be scheduled to take part in discussions? How much use should be made of speakers outside of the extension organization? T. B. Symons of Maryland gives some interesting answers to these questions in what he has to say on organizing the annual extension conference.

Virginia had in 1929, 4,329 rural women in organized home demonstration clubs. In 1930, she had 7,149 so enrolled. How was it done? Maude Wallace credits this showing largely to leader training methods that Virginia has adopted. And, also, does this system enable the home demonstration forces of Virginia to serve more homes and deliver a better program? We'll let Miss Wallace tell you.

Minnesota blazes the way in developing home partnerships between older boys and girls and their parents that will yield a substantial income to the boy or girl. Older boys and girls who undertook such enterprises in Martin and Redwood Counties averaged in 1929 incomes of $500 and $688, respectively, from their enterprises in these two counties.

How many organized livestock producers are there in the United States? What service is being given to them from a national standpoint? How are they informed of market conditions and of the assistance available to them? You'll find your answers in J. D. Harper's discussion of the National Livestock Marketing Association and what it is prepared to do for livestock producers.

Texas believes in terracing. To develop, in each community, a sufficient number of trained local men to lay off all terraces needed is the program on which M. R. Bentley, extension agricultural engineer, in cooperation with county extension agents, county commissioners, and local committees of farmers, agricultural teachers, bankers, and business men, is making remarkable progress.

Sedgwick County, Kans., prepares for hot weather by holding a 2-day refrigeration meeting at which refrigerators and their operation are discussed and demonstrations in making frozen desserts and beverages are given. Happy Kansas!

Contents

On the Calendar

Educational exhibits of the United States Department of Agriculture have been arranged for eight State and interstate fairs during August by the Office of Exhibits. Each display involves a carload of exhibits on the agricultural subjects most important to the regions served by the fairs.

Kankakee Interstate Fair, Kankakee, Ill., August 15–21.

Montana State Fair, Helena, Mont., August 17–22.

Ionia Free Fair, Ionia, Mich., August 17–22.

Missouri State Fair, Sedalia, Mo., August 22–29.

Illinois State Fair, Springfield, Ill., August 22–29.

Upper Peninsula State Fair, Escanaba, Mich., August 24–29.

Wisconsin State Fair, Milwaukee, Wis., August 29–September 4.

Ohio State Fair, Columbus, Ohio, August 31–September 5.

Extension Events

West Virginia Farmers' Camp, August 9–12.

Pennsylvania Leadership 4-H Club Training School, August 10–12.

Nevada's Ninth Annual Junior Farm Bureau Camp, August 10–15.

Louisiana Farmers' and Farm Women's Week, August 11–13.

Pennsylvania 4-H Club Week, August 12–15.

West Virginia Boys' 4-H Club Camp, August 12–22.

Vermont Annual Farm and Home Conference, August 13 and 14.

Louisiana 4-H Club Short Course, August 19–21.

Alabama Conference of County Home Demonstration Agents, September 1–4.

Connecticut State 4-H Club Fair, September 2–4.

Michigan State 4-H Club Forestry Camp, September 6–12.

American Country Life Association Conference, Ithaca, N. Y., August 10–17.

Certificate.—By direction of the Secretary of Agriculture, the matter contained herein is published as administrative information and is required for the proper transaction of the public business.

Extension Service Review

VOL. 2 WASHINGTON, D. C., AUGUST, 1931 NO. 8

Serving Farmers' Cooperative Organizations

C. B. SMITH,

Chief, Office of Cooperative Extension Work U. S. Department of Agriculture

WE STILL continue to have many inquiries regarding what service extension agents can give farmers' cooperative organizations whether they are engaged in the cooperative sale of farm products or in the cooperative purchase of supplies. It should be said at the outset that the department is firmly committed to the policy of encouraging farmers to organize for the cooperative marketing of farm products and other proper economic purposes, and of aiding and assisting existing approved marketing associations to function effectively and successfully. It believes that efficient organizations of this character are vital to the prosperity of agriculture as an industry.

Extension Cooperation

Federal cooperative extension employees are expected, therefore, to support the principles of cooperation, instruct farmers regarding its advantages and possibilities, their responsibility as members, and in every way work for the development and successful conduct of farmers' cooperative marketing organizations. Extension officials who fail to realize the place of cooperation in agriculture, or who fail to work for the development of sound, substantial farmers' organizations are not meeting their full obligations to the farmers or to the department. It is believed that extension agents working with cooperative farmers' organizations are rendering service to farmers generally, whether members of cooperative organizations or not. We believe they can also conserve time and funds, make greater progress, and secure more lasting results when they can work chiefly with or through such organizations, rather than with individual farmers in dealing with marketing problems.

Perhaps the position of the department has never been better stated than by Secretary Houston only a few months after the States Relations Service was inaugurated in 1914. Secretary Houston said, in reply to a protest in regard to the activities of county agents:

67310—31

The farmer's business education must now be on a par with his education in production. This requires organization. Many middlemen are a necessity in exchange, but the department takes the broad ground that the farmer should pay the middleman for services and for services only. In the event that he can serve himself more cheaply than the middleman is serving him, if he can install his own business machinery, arrange to pay cash, or furnish his own credit, he should do so. The middleman must consent to meet him on this thoroughly sound basis or lose the farmer's trade.

I trust that I have made clear the position of the department in reference to all of its work of assisting the farmer. In no case is any actual business whatever transacted for him individually or collectively. Whenever and wherever farmers through machinery of their own are developing greater agricultural or business efficiency, we shall use the means of education at our disposal with perfect freedom in bringing the methods of such organizations or communities to the attention of others. In the carrying out of this policy we endeavor at all times and in all matters to act in perfect fairness to all interests concerned, whether producer, middleman, or consumer.

Understanding Reached

Again, in our relationship with farm bureaus, representatives of the department and of the American Farm Bureau Federation, as far back as 1923, incorporated the following statement in a memorandum of understanding, which was mutually agreed to:

Since these county extension agents are part of a public service as defined in the Smith-Lever Act and receive some part of their salary from public funds, they are to perform service for the benefit of all the farming people of the county whether members of the farm bureaus or not, and are to confine their activities to such as are appropriate for public officials to perform under the terms of the Smith-Lever Act. The county agents will aid the farming people in a broad way with reference to problems of production, marketing, and formation of farm bureaus and other cooperative organizations, but will not themselves organize farm bureaus or similar organizations, conduct membership campaigns, solicit memberships, receive dues, handle farm bureau funds, edit and manage the farm bureau publications, manage the business of the farm bureau, engage in commercial activities, or take part in other farm bureau activities which are outside their duties as extension agents.

The main theory to remember in extension work is that county extension agents are essentially teachers. As a good teacher, the extension agent does not do for the farmer what the farmer can do for himself. When the agent solicits membership for a farmers' organization, acts as secretary, handles the farmer's funds, writes the farmer's letters, makes the farmer's decision, he takes away from the farmer the opportunity to learn to do these things for himself and leaves the farmer in the end no richer in knowledge and ability than when he began.

Agents Are Teachers

The duties of extension employees under the Smith-Lever Act are clearly limited to "giving instruction" and "imparting information" on subjects relating to agriculture and home economics. It should, likewise, be "useful and practical" information. Their work is educational, and it is clear that it covers the entire field of agricultural production and marketing and rural life.

Extension agents, therefore, may as freely give instruction or impart information regarding cooperative marketing, cooperative purchasing, rural credits, taxation, or any other subject directly affecting agriculture as on crop or animal production, or subjects relating to the development of better homes, communities, or social conditions. Economic information, calculated to aid the farmer to produce more economically or to secure better prices for his products, is clearly both "useful and practical" and on "subjects relating to agriculture."

A few of the specific ways in which extension employees may assist in furthering and strengthening the cooperative movement are as follows:

1. Advise and assist farmers in developing the type of marketing or other organization best suited to their situation.

2. Take part in meetings held to discuss economic production, cooperative marketing, or other pertinent subject.
3. Assist in conducting educational campaigns and meetings in relation to cooperative marketing, or in acquainting farmers with the market demand for their products.
4. Assist in arranging for and in conducting demonstrations in packing, processing, or grading of farmers' products handled by marketing organizations.
5. Assist in conducting livestock grading demonstrations, marketing tours, and in the promotion and conduct of cooperative marketing schools.
6. Confer and advise with directors and officials of farmers' organizations as to policies, and make available to such organizations helpful information that will contribute to the success of their work.
7. Know the facts regarding the operations of cooperative organizations and the results obtained.
8. Assist in keeping farmers who are members of cooperative organizations informed and interested.

To avoid misconception or misrepresentation on the part of anyone as to the official status of county agents it is advisable, wherever possible, that they have their offices in a public building, such as the court house, post office, or a Federal building. They should not have the offices located with those of farm organizations, and especially at places where the actual business conducted by such organizations for and with farmers is transacted.

In these and many other ways strictly in line with the educational nature of their duties, extension employees have a practically unlimited field for valuable service to farm organizations, individual farmers, and to the industry they serve. Extension officials should keep in mind, of course, at all times the educational character of their work and their position as public representatives of the State agricultural college and of the United States Department of Agriculture.

Home Partnerships for Older Boys and Girls

THE older farm boy and girl problem is being met satisfactorily in Minnesota through establishing home partnerships in which the parent and the boy or girl each contributes something toward a piece of work and each shares in the profits. At the close of the second year 75 per cent of the home partnerships were still active and the cooperating families voted the plan a success. Many said that it had built a finer family relationship, according to W. D. Stegner, district club agent in Minnesota.

What the Partnership Is

The regular 4-H project work is not of sufficient economic importance to hold the interest of the older boys and girls and of the young men and women. The variations in the ages of the 10-year-old and the 21-year-old members are too wide. Therefore, the problem in Minnesota is to give the older boys and girls on the farms work that will prepare them for actual farm proprietorship and home making, Mr. Stegner says.

The partnerships are arranged primarily for the group of young people above 4-H club age who are staying at home on the farm.

Three years ago Mr. Stegner started this partnership plan in Martin and Redwood Counties, where the county extension agents emphasized advanced projects for older young people. All the homes where conditions were favorable to such an effort were personally canvassed, each home being treated as an individual case. The situation was thoroughly discussed to find some farm activity on which the parents and children could work together so that there would be a substantial income for the boy or girl. All phases of the proposed partnership were analyzed with the parent and the son or daughter and then regular written contracts were drawn up and signed by both parties.

The enterprises which are being carried vary considerably and include feeding steers, growing brood sows, raising poultry, producing from 5 to 10 acres of sweet corn for sale to a cannery, and farming as much as 80 acres of rented land. Many of the girls favored poultry work.

In the livestock projects, usually the senior members furnish the feed and the boys or girls care for the animals. Sometimes the parents give the boys the use of machinery and horses to work rented land and in return the sons assist with work on the home farm.

All the boys keep farm accounts for their special enterprises, and in 1930, 25 boys kept accounts for the entire farm. The average age of the young people was 22.4 years. Before carrying this partnership enterprise, 59 per cent of them had been 4-H club members for an average of 3.4 years each.

During 1929 the average income for each participating member was $688.20 in Redwood County and $500.83 in Martin County.

Now, four counties have this partnership plan as a special feature of the extension program, and other counties have requested the work. In addition, the agents in some counties organized individual partnerships in their counties.

Terracing Given for Older Boys at Georgia Camp

REALIZING that the older boys at the State 4-H club camp need some advanced training so that the camp activities will grow and develop with them, O. E. Hughes, extension agricultural engineer in Georgia, as well as other extension specialists, offer the older boys advanced and intensive work in one subject for the entire week they are attending the camp. A week's work is enough to render definite assistance and training that will be practical and beneficial for actual farming and money making, says Mr. Hughes.

The terracing school section meets every morning at the camp for a 3-hour session, and, at the end of the week, the boys who satisfactorily complete the course are given certificates of merit. The fact that in 1930 only 64 of the 92 boys enrolled were awarded certificates indicates that it really is a certificate of merit. The terracing work reached 51 counties in 1930.

Mr. Hughes has received letters from 29 of the boys who took the work in 1930. They report that they have terraced, during their first year after the training, a total of 3,715 acres of land—1,629 acres on their home farms and 2,086 acres on other farms. This is an average of 128 acres for each boy reporting. Thirteen of the boys have received a total of $161 as compensation for their work.

One boy terraced 925 acres of land. Another boy, at $2 a day, received $40 for terracing 130 acres on his home farm and 200 acres on two neighboring farms.

Leader Training Meetings

MAUDE E. WALLACE
State Home Demonstration Agent, Virginia Extension Service

PERHAPS the most outstanding achievement of home demonstration work in Virginia in 1930 was the increase in number of people reached. In 1929 there were 4,329 women in organized groups while in 1930 we find 7,149 women, an increase of 65 per cent.

These results in growth of work may be attributed to several causes. The one cause which I shall discuss here is the use of the specialists for leader training. One of the main objectives in our program is to help the rural people to help themselves. How better can this be done than by developing and using leaders?

Two local leaders demonstrate to their fellow club members

After the programs are planned in the fall for the coming year we find what is the major subject selected by a county for the women and for the girls. The specialist in that particular line is then scheduled for that county and it is planned that she go to the county, if possible, every two months for the period covering the major project. For example, if the women are majoring in some phase of food work, the food specialist is scheduled to meet the women leaders in food every two months. Two women from each club are selected or elected as food leaders. These meet the specialist and agent at the county seat or central point at regular intervals. The same plan is followed in girls' work except that we have just asked for one woman leader from each girls' club. Later we hope to be able to have two leaders represent each girls' club and share the responsibilities. In this one day the specialist gives the demonstration and subject matter for the next two meetings, in the morning for the first meeting and in the afternoon for the second.

If the specialist has not too many counties majoring in her subject she can reach each county every two months. If she is not able to do this, the county home demonstration agent conducts the leader training meetings which the specialist does not reach. This may be a real advantage because we do not want the local people to feel the county agent is not able to do her part. But, if the agent is weak in any particular line she may be materially strengthened by this type of specialists' help.

What are the advantages of this plan? First, to the people, for they seem to feel they are getting a better program delivered to them. Second, the leaders are given good training which develops them, and at the same time the work may reach more people, since by the use of leaders the agent is free to do work in other sections, perhaps hitherto unreached. Third, the specialist becomes definitely interested in a certain number of counties each year; she concentrates her efforts on these counties and carries them through to a point of completion. Our specialists feel their time is more profitably spent than before leader-training meetings were used. Fourth, the agent herself receives more help from the specialist and more help from better trained helpers. Therefore she can deliver a better program to the county. That is the object in view. It is hoped as the value of this method becomes apparent that the agent will use the same method for spreading information in all minor lines as has been outlined for the major line.

We have three types of leaders. The first class, those who can help in the physical success of the meeting; that is, get the meeting place, see about notices, and the like; the second class, those who can help the agent, perhaps give the demonstration while the agent gives the theory; and the third class, where the leader conducts the meeting and the agent may be busy elsewhere. Of course, even in this class the agent assigns particular meetings to the leader covering the subjects in which she knows her to be capable.

In 1930 in Virginia there were 1,008 leaders trained to help the agents in adult work and 763 leaders trained to assist in the girls' work.

The home demonstration agent in Fairfax County reports in her adult work that three leader training meetings were held and following these the leaders gave entirely or helped with 41 demonstrations, while in the 4-H club work, 4 leader-training meetings were held. From this training there were 22 food leaders who gave 92 demonstrations in the agent's absense, held 109 meetings, and assisted with 326 meetings during the year.

We never wish to, nor do we expect to, grow to the place where the agent becomes merely a director of leader activities; but we are convinced that with the number of women and girls in an average county an agent must use leaders in order to reach even a fair percentage of these homes.

Georgia's Plan for Farm Prosperity

GEORGIA was given a higher rating for its banker-farmer work in 1930 than any other State, except Oregon, which received the same score—a perfect rating of 1,000, according to the Bulletin of the Agricultural Commission of the American Bankers' Association for May, 1931.

The Georgia Bankers' Association, through its agricultural committee, is promoting farm-financing methods which it hopes will make the farm self-sustaining as to food and feed crops, according to J. Phil Campbell, director of Georgia Extension Service. The plan that is being used has enlisted the cooperation of the local bankers, the county extension agents, and the local editors.

This movement started with a resolution which the association adopted in June, 1930, and which stated that the promotion of farm-financing methods for the development of a safe farming system would be one major activity of the present administration of the association and that the final goal of this work would be the creation of an active agricultural board in each county which will have such assistance on sound business principles from the member bankers as shall be required to develop a safe and sane farming program.

The chairman of the Georgia Bankers' Association agricultural committee and the director of the Georgia Extension Service have divided the State into four administrative districts. Each district has an extension supervising agent for county agricultural agents' work and a supervising agent for home demonstration work, as well as a chairman for the agricultural work of the bankers' association. These three cooperate in developing an agricultural program for the district. These supervisors have divided their districts into four sections with an average of 10 counties to each section and with a chairman for each section to work with the county extension agents and local bankers in carrying out the details of the proposed plan. As far as possible the sections are outlined so as to include counties of a similar agricultural trend.

The Adopted Plan

Each of these 16 sectional chairmen has held meetings of the bankers, county extension agents, and local editors in his section and adopted, for the most part, the following plan:

1. That the farm operations be planned and based upon a more uniform and general production of food and feed to supply to the greatest possible degree the needs of the families and farm animals on every farm unit.

2. That the remaining acres be devoted to such staple market crops and livestock as are suitable for the section and which will afford a satisfactory division of time and the maximum number of profitable days of labor.

3. That every bank require every farmer to make a statement showing the condition of his financial affairs and the results of his farm operations for one or more years.

4. That the bankers, the business men, the farmers, the editor of the county paper, and the county extension agents coordinate their efforts and form a real county agricultural board for determining what are the strong and weak points of their county farming systems of production and marketing.

5. That a sane, safe, practical, and comprehensive county agricultural program, outlining problems and solutions in relation to every line of major crop and livestock production and marketing, be worked out and presented to every section of the county in a practical and businesslike way.

6. That the urban people be encouraged to consume as much of the local home-grown products as possible.

7. That cotton be used in greater quantities for clothing and that everything possible, including sugar, coffee, flour, cement, fertilizer, and other commodities be packed in cotton bags in order to increase the use of the cotton of the State.

8. That the farmers of Georgia be urged that the acreage in cotton be limited to not more than 10 acres per plow and preferably not more than 5 to 7 acres per plow, and that cotton be planted only on land that will produce not less than one-half bale per acre.

9. That a broad diversified agricultural program be adopted.

Director Campbell says that if all the credit agencies in Georgia will adopt this plan, the State will stop importing food and feedstuffs for consumption on the farms. He believes that farmers will not prosper until the cash crop becomes a surplus instead of being used for the payment of home consumed supplies.

Multiple Hitches in Michigan

WORK with horses has served as the first effective contact with many farmers who had not been reached appreciably by extension work before, reports Leon H. Robbins, Calhoun County, Mich., agricultural agent. Horse breaking, foot trimming, colt care, and multiple-hitch demonstrations were well attended and did much to popularize the work of the county agent and to convince the people that his work is, first of all, practical. The demonstrations were completed in a short time and there was nothing that could not be seen. Mr. Robbins reports that he has heard farmers say, "By golly, there must be something to this county-agent work. There is no fake about the way that fellow handles those horses."

In a multiple-hitch plowing contest which Mr. Robbins conducted, he reports that over 3,500 people saw furrows evenly turned at the rate of an acre per horse per day under rules which required all plowing to be done 7 inches deep and prohibited the teamster from whipping the horses or receiving any help in hitching, unhitching, driving, or operating the plow. In this contest 4-horse, 5-horse, and 6-horse teams competed.

H. H. Barnum, Ingham County, Mich., agricultural agent, reports that he has strengthened his demonstrations in multiple hitch work by making follow-up visits to persons particularly interested. While a man may become convinced of the desirability of using multiple hitches and may take home a sheet telling him how to hook up his teams, he is likely to think it is too complex an undertaking and not attempt it, unless he has some personal assistance. Although two men said that they were not interested in this work, Mr. Barnum induced them to allow him to hook their teams tandem and then let them handle the lines. In both cases they were won over to the idea and eagerly accepted his offer to help them make eveners.

Mr. Barnum reports that his experience has shown that such personal work is justified because if a man starts to use the hitch, he becomes a booster for it in his locality and helps others to make and use this equipment.

The National Live Stock Marketing Association

J. D. HARPER
Manager, National Live Stock Publishing Association

NO ONE in educational work knows more fully than do agricultural extension workers the value of organization in developing improved practices among farm people. There have been so many demonstrations with important agricultural projects that every agent in county or State work will readily appreciate the value of organized livestock producers in extending improved marketing practices to livestock producers in every State in the Union in line with our Federal agricultural policy.

The National Live Stock Marketing Association is the organization that started operations almost a year ago to carry out a program in conformity with the agricultural marketing act and approved by the Federal Farm Board. It is to-day represented by stockholder members which consist of incorporated selling agencies, most of which are experienced organizations with nearly 10 years of operating experience back of them. These agencies are all Capper-Volstead cooperative marketing associations or corporations.

Serves Growers

The national association is for the service of livestock growers everywhere. Its facilities are available to approximately 300,000 organized producers scattered throughout the United States who have already been cooperating in the building of an organization which they own and control and through which they can better serve themselves.

The results which can be obtained through this organization remain largely in the hands of leaders chosen by the farmers, with the assistance of county and State workers who through years of contact are in touch with the marketing needs and are capable of assisting in a marketing program which is fundamentally and essentially an educational enterprise. In order to better cooperate in this enterprise it is well to know briefly the set-up of the national organization.

First, as stated, it is a Capper-Volstead organization and therefore owned and controlled entirely by livestock producers. The terminal cooperative organizations are the principal stockholders, although the national association has regional members and one other type, represented by the National Order Buying Co.

The terminal associations are those which have been operating for considerable time as commission agencies on the principal markets. They sell as every other commission agency sells, to the highest bidder. Savings which accrue from reduced operating overhead on commissions collected are either put into extended services or returned to the members on a patronage basis at the end of the year.

In addition to the terminal associations there has developed State, or regional, organizations which are serving territories not bounded by the trade territory of a given market. This type of organization is represented by the Iowa Live Stock Marketing Corporation.

The National Order Buying Co., above referred to, is another type of member agency which is serving in a national way in the marketing of livestock which has not been going to terminal markets but has been marketed direct to the packers.

The national organization, itself, has two subsidiary corporations which are assisting in carrying out the national program. One is the National Live Stock Publishing Association, which is charged with the responsibility of the informational program conducted from the national office. The principal medium of contact is the National Live Stock Producer, the official publication of the association. This publication carries regularly each month the news and information of interest to the membership directly. More than 200,000 copies are sent each month to the livestock producers who are patrons of the 20 member agencies of the national. The publishing association is also making contact with the member stockholders and is assisting with the educational program of each directly or indirectly.

The second subsidiary is the National Feeder and Finance Corporation through which loans are made to livestock producers. The National Feeder and Finance Corporation operates through regional credit corporations and they, in turn, discount their loans through the Federal intermediate credit banks. Approximately $6,000,000 have been loaned to livestock producers through the services of this corporation at a uniform rate of 6 per cent. The corporation is now in a position to render a complete loan service anywhere in the United States.

Charles A. Ewing, president National Live Stock Marketing Association

Authorized capital stock of the National Live Stock Marketing Association is 5,000 shares of preferred at $100 and 50,000 shares of common at $10, making a total of $1,000,000 authorized stock. Preferred stock in the national is limited to dividends at the rate of 5 per cent per annum, based on par value. Common stock bears no dividend, but net earnings of the association, after payment of dividends of preferred stock and after setting aside reservations for working capital, are to be refunded to stockholders and patrons on a patronage basis.

4-H Club Marketing Day

About 500 4-H club members in Lane County, Oreg., participated in a marketing day which included visits in Eugene, the county seat, to the producers public market, a creamery, warehouses, banks, the local telephone and telegraph plant, a retail store, gas plant, a woolen mill, and the newspaper plant. To accommodate the large number of people, they were divided into five groups and were given schedules to follow.

At the luncheon silver cups were awarded for the two best essays on marketing and certificates of merit or appreciation were given to all the other contestants by the local chamber of commerce.

Organizing an Annual Extension Conference

T. B. SYMONS
Director, Maryland Extension Service

HOW to organize an annual extension conference to get the most out of it is a problem to which extension workers have given a great deal of thought, and yet I am convinced that a complete and satisfactory solution has not been found, or at least it has not been put into general practice. I do not for one moment profess to be able to devise a plan that will fully accomplish the purpose, but I am glad to offer some ideas and suggestions, with the hope that they may stimulate thought and discussion and in the end result in the general improvement of extension conferences.

It is not my intention to be mercenary in this discussion, but I suggest that it is well for all, both those who plan conferences and those who attend them, to bear in mind that such a conference represents a very substantial and tangible expenditure of public funds. There is, therefore, a duty on the part of extension workers to obtain the greatest profit from this expenditure.

Analyze Objectives

Sometimes we hear the expression that we have too many conferences and return from them without feeling that we have received sufficient help, inspiration, or information to justify the time devoted to the conference. It seems to me that such a feeling is an indictment of the conference, or the individual who expressed such a feeling, or possibly of both. It behooves all administrative officials, therefore, to analyze carefully the objectives of proposed conferences of extension workers and to plan the programs so that each and every individual in attendance may derive the maximum benefit from the exchange of ideas and views, as well as inspiration from meeting with coworkers.

Certainly no extension worker questions that it is desirable and beneficial for him to mingle and exchange ideas with fellow workers. Seldom does an individual attend any conference, even if he is not entirely in sympathy with its purpose, or with the principles involved and methods suggested, that he does not receive an inspiration to do better work is his own field. We may be powerful in our individual thought and action, and yet we must be willing to subject our ideas and methods of procedure to critical examination of our associates engaged in similar work elsewhere. It is to serve these ends that district, State, regional, and national conferences are set up.

My subject refers particularly to State extension conferences and my comments are made with that type of conference in mind.

Assuming that it is desirable and beneficial for all those engaged in extension work in a State to come together once each year for a conference, the important consideration is the nature and arrangement of the program. In that connection there are three suggestions I would advance:

1. That the program be formulated around one and not more than two central or basic ideas.

2. That the program be so arranged that all those participating in the conference shall have an opportunity to discuss various phases of the theme.

3. That the most competent authorities be obtained to lead in the presentation and discussion of the subject, or subjects, that are emphasized.

In our experience, the most successful annual conferences are those which, after careful deliberation, have been arranged with a view to emphasizing one or two distinct ideas or principles. I am convinced that our great mistake in the past was in attempting to discuss too many remotely related subjects. Probably the nature of extension work, covering the wide field of agriculture and home economics, has led us to feel that each of the many subjects should be given some consideration. Thus, in times past, we have tried to give each specialist an opportunity to present his views and have expected the county agents and home demonstration agents to take part in the discussion. The result has been that, often, the time available has permitted only fragmentary and superficial consideration of the subject and no important conclusions were reached or lasting impression was made by the discussion.

Emphasize One Idea

In the past few years we have followed the plan of selecting one or two subjects for the whole conference and have built the program around those subjects. So far as our extension workers are concerned, I believe that they have received greater benefit and more inspiration by restricting the discussions to the main theme of the conference.

As an illustration, at our extension conference in 1928 the theme for the county agents was "Marketing Farm Products" and for the women, emphasis was placed upon "Clothing Standards, Nutrition, and Household Management." We began to appreciate during that conference the desirability of presenting one subject thoroughly. I feel sure that the discussion of marketing from various angles was appreciated by members of the conference.

Conference Themes

In 1929 the theme of the general conference was "Presentation of Extension Work and Stopping the Leaks in Agriculture." Instruction in public speaking and in the proper methods of presenting extension work was extended to both men and women agents. "Recreation in the Home Demonstration Program" and "Methods of Follow-up Work in Nutrition and Home Management" were discussed rather thoroughly by the women. In discussing the presentation of extension work each member of the conference was expected to make a short address for criticism by specialists in public speaking. The technique of the proper analysis of the subject presented and the principles of technique of oral expression and practice were discussed by the specialists and all members of the conference. Considerable attention was given to methods of extension publicity and the promotion of extension work through the use of pictures and other visual aids. I am convinced that too much attention can not be given to the proficiency of extension workers in the presentation of their work.

In 1930 our conference theme for the men was "Better Business in Agriculture." "Nutrition and Food Work" was given special discussion by the women with a carry-over of "Presenting Methods in Creating Desire for Extension Work."

In emphasizing the theme "Better Business in Agriculture" an opportunity was presented to discuss the economics of the industry in all its phases. This subject proved to be a most helpful one in which all participated.

In 1931 a deviation from previous programs was inaugurated by constructing a program upon the theme "Adult Education." Both groups were presented with the fundamentals of adult education by competent specialists. Emphasis was placed upon the theme in its relation to rural people from a psychological standpoint and the opportunities that are presented to extension workers in enriching the life of rural people by having them think in deeper and broader terms of education and culture. The theme of

the conference last January was exceedingly effective and I believe enjoyed by every member of the conference.

I cite the above subjects as illustrations to show how we are coming to realize more and more that it is wise to select one general theme for the conference and permit time on the program for an earnest and deliberate discussion of same.

I will not attempt further discussion of the types of subjects which may properly be made the basis for an annual extension conference, as the subjects selected necessarily vary somewhat for the different States. It is worthy of mention, however, that a program built upon this plan affords an excellent opportunity to give all the extension workers of a State a vision of some of the subjects which have not yet become prominent, but which seem destined to be important in the near future and about which they should be thinking.

It is a truism that a person gets out of a conference in proportion to what he puts into it. So, it goes without saying that the program should be planned with a view to providing an opportunity for each member of the conference to participate. I am strong for discussion by all members of a conference, but I am also convinced that conferees can generate greater enthusiasm if the so-called discussion method is led by an able and experienced authority.

Due to the rush of extension work and the increasing demands upon both administrative officials and those engaged in other lines of extension activities, we have not given sufficient thought to setting up programs which will be of greatest benefit to all concerned. It was with that thought in mind that we adopted a few years ago this distinctly different type of program for our annual conference, and the results thus far have been quite gratifying.

A survey of 33 terraced farms in McCulloch County, Tex., shows that in the face of what is said to have been the driest year in the country's history, terraced land made 158 pounds of lint cotton to the acre and 1,500 pounds of milo maize per acre. The county average cotton yield was 1 bale to 10 acres and 600 pounds of milo maize heads per acre. James D. Prewit, county agricultural agent, gathered the figures on terraced crops from his demonstrations, which showed that terracing made a difference of $10.80 per acre in cotton returns this year.

Missouri's Sheep Improvement Plan

MISSOURI'S plan for sheep improvement found expression in the adoption of improved practices in flock management on 5,900 farms in 1930, reports J. W. Burch, extension animal husbandman in that State. This figure is a striking contrast to the 349 farms that started in September. Records are kept of the feed given to ewes and lambs, and this cost is balanced against the income from wool and fat lambs. Production contests have been found helpful in getting demonstrations carried through to completion with adequate records.

A flock of ewes in Missouri which had the proper winter care

adopted improved practices in this phase of animal husbandry in 1926, the year in which the sheep improvement plan was started.

There are seven steps in Missouri's plan for sheep improvement: (1) The production of early lambs, (2) the use of good purebred rams, (3) proper winter care and feed for bred ewes, (4) docking and castrating lambs, (5) creep feeding of lambs, (6) selling lambs on a graded basis, and (7) the control of parasites.

The work is usually started in January in each county with a county-wide meeting of sheep growers selected from each school district, at which the year's activities are planned. The county agricultural agent holds method demonstration meetings on docking and castrating and grain feeding during February and March, on lamb grading during May and June, and on stomach worm control during July and August. Meetings on purebred rams and ram sales are also held during July and August.

Result demonstrations, which really form the foundation of the work, are

In Missouri the work is organized so that there are animal-husbandry specialists rather than separate hog, sheep, and cattle specialists. This organization enables the specialists to work on all phases of the animal-husbandry work in a county on one visit and permits intensive concentration on one project when timely work is needed.

Sheep producers in Missouri have been very much interested in this plan o sheep improvement. This was shown by the fact that in 1930, for the second year in succession, Missouri won first place in the national lamb improvement project for obtaining the greatest number of changed practices in sheep production by the farmers in a State.

The record of recommended practices adopted which gave Missouri first place in this project compared with results obtained in 1926 follow: The number of lambs docked and castrated increased from 8,107 in 1926 to 278,311 in 1930; lambs creep-fed grain, from 4,475 to 91,734; sheep treated for stomach worms, from 15,434 to 159,023; and lambs sold on a graded basis, from 460 in 1926 to 24,649 in 1930.

Extension Service Review

Issued monthly by the EXTENSION SERVICE of the United States Department of Agriculture Washington, D. C.

The Extension Service Review is published in the interests of workers and cooperators of the Department of Agriculture engaged in extension activities. It contains official statements and other information necessary to the performance of their duties and is issued free to them by law. Others may obtain copies of the Review from the Superintendent of Documents, Government Printing Office, Washington, D. C., 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, Extension Work*
C. B. SMITH, *Chief, Office of Cooperative Extension Work*
J. W. HISCOX, *Chief, Office of Exhibits*
RAYMOND EVANS, *Chief, Office of Motion Pictures*

REUBEN BRIGHAM, *Editor*

AUGUST, 1931

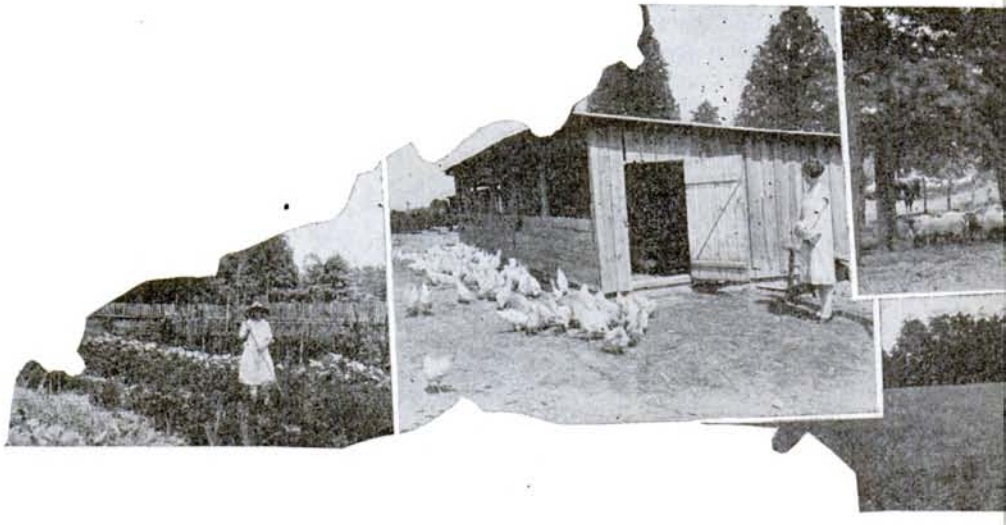
A Steady Job

The most important thing to be done in America right now is to insure to the willing worker a steady job—a job that he can hold without fear of losing it. This is what Associate Director K. L. Hatch, of Wisconsin, said in the introduction to that State's annual extension report for 1930, and it is more than ever true to-day. Director Hatch continues, "The one place where a steady job is afforded with more certainty than anywhere else, is to the farmer operating his own farm. With a roof over his head, with plenty to eat and a good place to live, a farm, right now, looks mighty attractive. This insurance of a steady job is the strongest single force that to-day is adding to the attractiveness of farm life."

Vital to Prosperity

Efficient farmers' cooperative associations are vital to the prosperity of agriculture. Cooperative extension employees are expected to work in every legitimate way for the development and successful conduct of such organizations. In these two sentences is expressed the department's policy toward the support of the cooperative movement by extension agents as outlined in the statement in this issue of the REVIEW by C. B. Smith on serving farmers' cooperative organizations.

North Carolina Farmers Add $



BETWEEN $19,000,000 and $20,000,000 was added to the value of their food and feed crops by North Carolina farmers in 1930 as the result of an intensive live-at-home campaign which was conducted by the extension service in cooperation with various agencies, says F. H. Jeter, State extension editor, in summarizing the results of the campaign.

Ordinarily nearly one-half of the cultivated area in North Carolina is planted to cotton and tobacco, and since the world's supply of these crops was greater than the demand in 1930 the price to the growers was so low that only the most efficient producers could receive as much as the cost of production. Neither could any other so-called cash crop be generally substituted for these two crops without similar difficulties resulting. Also each year approximately $158,180,000 was being sent out of North Carolina to buy food and feedstuffs which could be produced economically within the State. Accordingly, believing that an increased acreage in food and feed crops would automatically reduce the acreage of cotton and tobacco and reduce to a corresponding degree the amount of money sent out of the State for food and feed, Director I. O. Schaub and his associates in the North Carolina Extension Service determined to enter on a vigorous campaign for the increased production of food and feed crops in the State, and named it North Carolina's live-at-home campaign.

Not only were farmers and extension workers enlisted in the live-at-home campaign, but also the country merchants and bankers who were furnishing production credit, for they realized that if they were to continue in business it would be necessary for them to extend credit only on cash crops.

In its live-at-home campaign the extension service offered no radically different policies than had been advocated for years. Both in 1928 and 1929 serious and concentrated attempts had been made to promote what was called "balanced farming." A comprehensive program had been developed and printed as an extension circular. This was not handed down as a mandate to farmers. They had representatives on the committees designing the program and adopted the final recommendations of these committees at the annual State farmers' convention.

Starting the Campaign

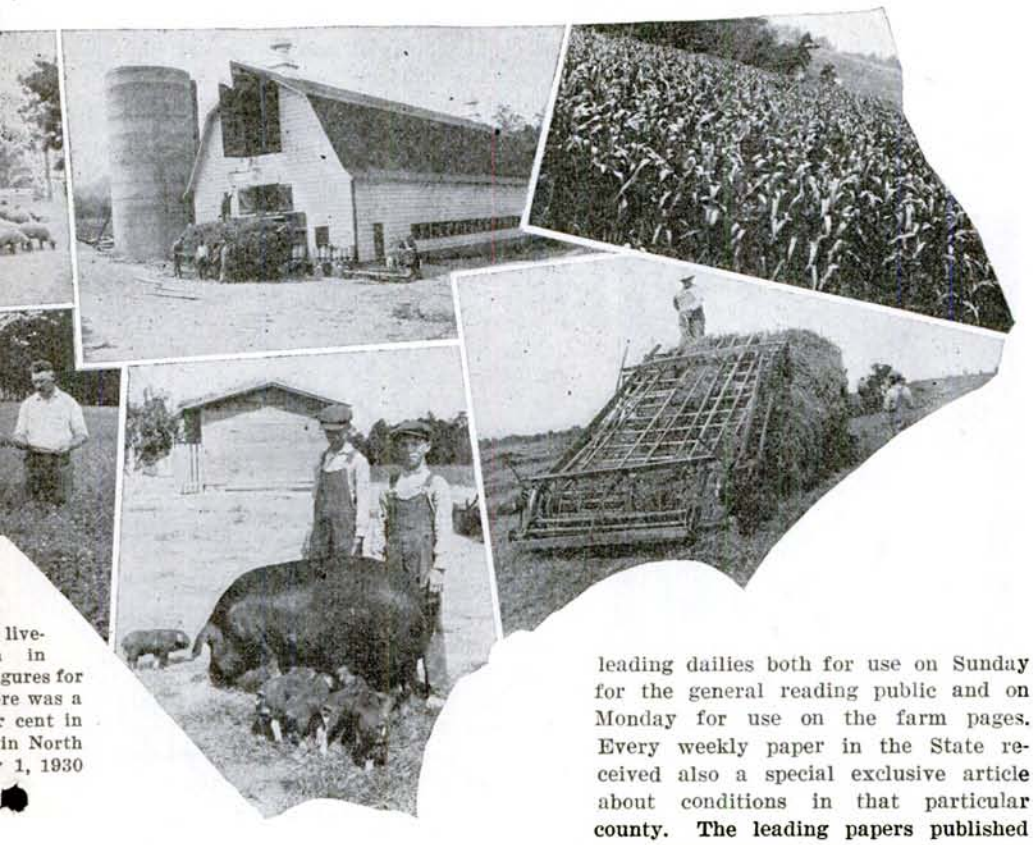
When Gov. O. Max Gardner came into office, he appointed an agricultural advisory commission and made certain recommendations as to improved agricultural practices. One of these was to make the State-owned farms responsible to the governor. Another step enacted into law by the North Carolina General Assembly resulted in the formation of the North Carolina Seed Improvement Association, which is now functioning most successfully.

The governor next threw the full weight of his office and influence into the fight for a real live-at-home movement in North Carolina. This work reached its crest in 1930. A formal live-at-home banquet was served at the gov-

Some o
ucts th
tured
at-hom
North
1931 sh
reducti
the cot
Carolin

Twenty
the value o
North Caro
sult of th
campaign i
overproduct
cotton and
penditures
feeds, to u
profitably
these were
North Car
sought to
home camp
this campa
yields and
crops in
farms to-da
ply of food
lina's farm
ize, even i
depression,
credit, and
is possible
North Caro

00,000 in Food and Feed Crops



live-
in
gures for
re was a
cent in
in North
1, 1930

ars added to
feed crops in
he direct re-
live-at-home
o counteract
ash crops of
o reduce ex-
d foods and
labor more
r periods—
gs that the
sion Service
its live-at-
thanks to
e the poor
of its cash
n Carolina's
lentiful sup-
North Caro-
me to real-
of business
ures, limited
ome, that it
live well on

ernor's mansion in Raleigh with members of the North Carolina Press association as honor guests. All food on the menu was produced within the State, and the dinner was arranged by Mrs. Jane S. McKimmon, State home demonstration agent.

Presenting the Situation to the Farmers

The home and farm agents then went back to their respective counties and arranged similar county live-at-home dinners on a smaller scale with representatives of the agricultural extension service on the program as speakers. The extension supervisory force developed facts and made tabulations showing the production of food and feedstuffs in each county and how far short the county fell of supplying its own needs in this respect. These figures were used as the basis for articles and lectures all over the State.

For three months during the crucial preparation and planting season the agricultural editor distributed feature articles to the leading dailies both for use on Sunday for the general reading public and on Monday for use on the farm pages. Every weekly paper in the State received also a special exclusive article about conditions in that particular county. The leading papers published the articles furnished. Whenever the governor, the president of the college, or the director of extension was invited to a farm meeting during the campaign, the live-at-home idea was used as a basis for the speeches made.

Attention was directed to the importance of the movement because there was considerable farm distress in North Carolina during the winter of 1929–30. Low yields of tobacco and low prices coupled with a heavy boll-weevil infestation of cotton and low prices had caused the East to suffer severely. For the first time in the history of the State relief measures had to be put into operation. Therefore the live-at-home campaign of 1930 fell on willing ears. The people went to work. The farm agents began to send in reports that the corn acreage in a county had been increased 40 per cent, idle land had been planted to food crops, and not a tenant house was vacant in the county.

Then the drought came. It appeared for a while that all good intentions would come to naught. Light rains, however, fell over the State in time to save the gardens, the pastures, and the hay crops. Only the extreme northwestern part of the State suffered drastically from the drought. From all parts of the State came reports that the State was producing good crops of hay, corn, vegetables, and other feed and forage crops. From comparative surveys made on several thousand farms in 1929 and again in 1930 it was found that the increase in food and feed production would amount to nearly $20,000,000. The greatest increase was in farm gardens and truck crops. North Carolina was the only State in the South to reduce its cotton acreage by as much as 10 per cent.

Aside from the actual production in food and feed crops, however, a great idea gained prominence in the State during the year. Balanced and safe farming took on a new meaning and the farmers of the State learned that it was possible for them to produce on their own farms the actual necessities of life.

Those who traveled much in North Carolina last fall heard on all sides of well-filled pantries and storehouses. In Alamance County, recently, the president of the county council of home demonstration clubs reported that every pantry and smokehouse in the county was filled to capacity.

There is no doubt but that the farmers of North Carolina went to work last year. While they do not have much cash this year because of low prices for cash crops, they do have plentiful supplies of food and feed. There have been bank failures because of the business depression and credit will be hard to obtain in some communities, but had it not been for the live-at-home campaign and the success which attended it no one could say what conditions would have prevailed on North Carolina's farms to-day.

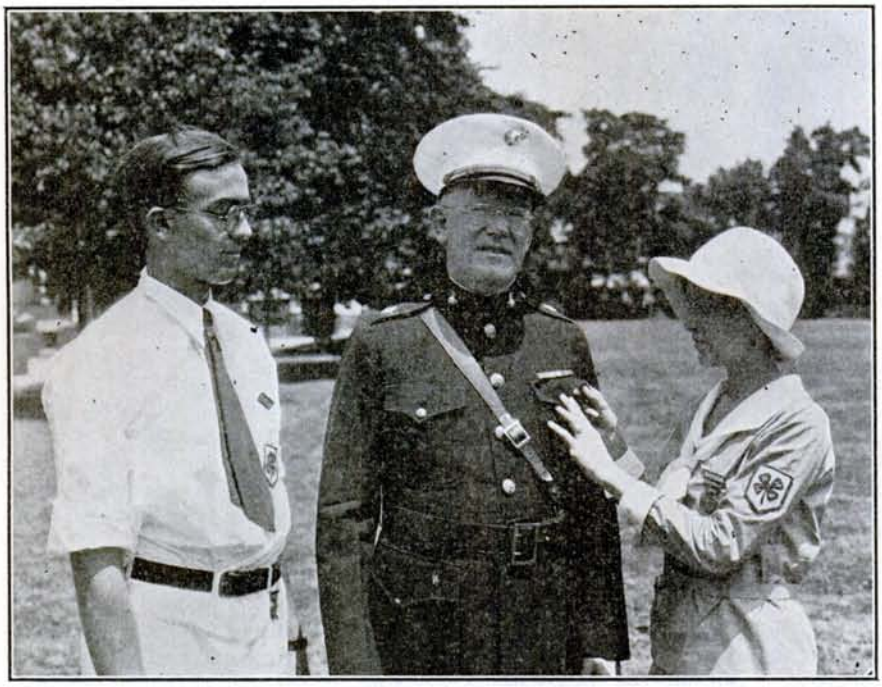
Maryland Team Wins in England

Maryland's 4-H club dairy judging team won first place for the United States in the annual International Dairy Judging Contest at the Royal Livestock Show, at Warwick, England, on July 8.

The American team made a score of 1,917 points out of a possible 2,160 points. The North Ireland team was second and the English team third. Two other countries also competed. In individual scores, William Chilcoat, of Baltimore County, Md., stood first, Charles H. Clark, of Harford County, Md., was second, and David James Johnston, of Baltimore County, Md., sixth.

The contest was first held in 1922. The United States has won in 1923, 1924, 1925, 1926, 1929, and 1931. The Maryland team won the right to represent the United States by making the highest judging score at the 1930 National Dairy Exposition.

Captain Branson Made Honorary 4-H Club Member



Eloise Bangs, of Virginia, and Francis Underwood, of Maryland, decorate Captain Branson with the 4-H membership insignia

HONORARY membership in the boys' and girls' 4-H clubs was conferred upon Capt. Taylor Branson, leader of the United States Marine Band, at the fifth national 4-H club camp on Friday, June 19. R. W. Dunlap, Assistant Secretary of Agriculture, introduced Captain Branson, and Eloise Bangs, of Virginia, and Francis Underwood, of Maryland, presented him with a gold 4-H pin.

In congratulating Captain Branson, C. W. Warburton, Director of Extension Work, said:

The boys and girls in the 4-H clubs are proud to know that you have accepted the honorary 4-H membership conferred upon you by delegates and State 4-H supervisors at the national club camp. This is the second honorary membership that has been thus awarded.

In spirit you have been a 4-H club member since the United States Marine Band first took part in the national 4-H club radio programs. Extension workers and club members throughout the entire country have become intimately acquainted with you through your participation in the national 4-H club radio programs. They are pleased to have you so thoroughly interested in them and look upon you as one of the foremost friends of 4-H club work.

The honorary membership in the 4-H club was awarded to you as a mark of recognition for your unselfish service to 4-H club members and as an expression of their appreciation for the important contribution you are making to the 4-H club movement.

Home Demonstration Pageants

HOME demonstration groups in various parts of the country have picturized local history in their pageants.

As a feature of the annual home makers' meeting which was held in Middlesex County, Mass., on June 9, more than 500 women participated in 53 scenes portraying the history of home life in their county. The scenes included Indian feasts, pioneer days, the first Thanksgiving, the casting of a Paul Revere bell, the old school, early New England industries, Civil War homes, the gay nineties, the coming of the extension service, and the modern American home.

The women in Rice County, Minn., recently put on a 5-act pageant which depicted the problems faced successively by Indian women, pioneer women, women of foreign races, and the women of present-day Minnesota homes in doing housework and sewing. Gwendolyn A. Watts, the county home demonstration agent, prepared a prologue for each act which outlined the historical significance of the following scenes and which was read while scenery was being shifted.

A group of Indian women in Erie County, N. Y., demonstrated the contrast between the Indian costumes of many years ago and the American costumes worn by the Indians of to-day at a summary of the clothing project held in that county last spring. First entered an Indian mother in original Indian costume carrying a papoose on her back. She was followed by an Indian woman of to-day carrying a baby dressed in modern clothing. Contrasting costumes, with explanations, were given also for children, youths, brides, and grandmothers.

The Niagara County, N. Y., home demonstration women presented at their spring meeting a pageant on "Fifty Years of Fashion" which gave the typical fashions of 1880, 1890, 1900, 1910, 1920, and 1931. Each scene was preceded by a descriptive reading. Songs associated with each period were sung by the audience between scenes.

Woman's part in the development of Wyoming was portrayed in pageants which were presented at recreation camps held in that State last year. (See Extension Service Review for June, 1931, p. 91.)

Radio in Club Work

Recognizing the increasing importance of the radio as a means of organization, 4-H club leaders in Indiana have taken to the air in promoting club work. According to W. R. Amick, assistant State club leader in Indiana, club members usually are glad to appear on the radio programs because of the novelty of being heard over the air by their families and friends.

The club members in Vigo County broadcast a program on three successive nights in connection with their fall exhibit. Thirty-seven Tippecanoe County club members recently took part in an hour program which was broadcast over the Purdue University station. According to a check made by John C. Ralston, Tippecanoe County club agent, about 3,000 club members and their parents heard this program.

The Quality Milk Project in Maine

IMPROVEMENT in the quality of milk and an increase in the amount produced during the fall months have been obtained in Maine through the cooperation of farmers and various educational agencies concerned with problems of milk production and consumption. As a result of this coordinated effort the amount of grade 1 milk marketed increased from about 44 per cent in 1929 to 62 per cent in 1930. The milk plant making the greatest improvement showed 30.2 per cent increase in the product delivered as first grade.

An acute shortage of milk was felt in the Boston market during the fall of 1928. This same situation had existed in previous years, particularly in the months of October, November, and December. It was believed in the Boston and New York markets that unless a source of supply could be obtained from near-by States that milk from western uninspected territory would enter the eastern market.

To consider this milk shortage and to recommend plans for improving conditions, representatives from the principal milk dealers in Boston, the New England Milk Producers Association, the State Department of Agriculture, the College of Agriculture, the Maine Extension Service, and the Maine Central Railroad met in conference in 1928.

Conclusions Reached

The conference concluded that (1) Maine offered the best prospective territory from which more fluid milk might come; (2) sections shipping cream might change to milk to advantage to the producer and the market needing the product; (3) many farms in Maine were equipped to handle more dairy cows, without extra outlay; and (4) before any effort was made to obtain additional milk from Maine, 7-day transportation service should be made available in the most adaptable milk territory.

The Maine Central Railroad immediately agreed to furnish 7-day service in several of the logical milk-shipping areas. In January, 1929, the Boston Board of Health put into force a regulation that milk exceeding 750,000 bacteria per cubic centimeter on arriving in Boston would be rejected. Since that date other changes in requirements have been passed, all of which show the general tendency of those in charge of inspection work to reduce the amount of poor milk offered for sale and to insist that producers comply with existing regulations. Besides this phase of regulatory laws and rules to insure a quality product in the Boston market, it was felt that the milk quality project would be of assistance to producers who sell locally fluid milk, cream, or manufacture butter.

Study Made

Through the cooperation of J. B. Parker, senior extension dairyman, and L. H. Burgwald, market milk specialist, United States Department of Agriculture, a preliminary study was made regarding the quality of milk delivered to seven milk plants in eastern Maine which ship to the Boston market.

Sediment and methylene blue tests were made of the milk and cream delivered by 197 patrons. The results gave conclusive evidence that improvement in quality was needed. This work was also of benefit in getting creamery managers and patrons interested in the project undertaken.

Following this study a conference in Boston was arranged by R. F. Talbot, Maine dairy extension specialist, at which dealers, distributors, and representatives of the Boston Board of Health, United States Department of Agriculture, New England Dairy Food Council, and the New England Milk Producers Association were present.

This conference was held to explain the quality milk project being undertaken in Maine, to obtain information concerning the quality of milk being shipped from Maine, to ascertain the most important things that affect desirable changes in the quality of milk, and to discuss ways in which the organizations represented might help forward the quality milk project and to procure their assistance.

Quality Milk Meetings

During February, March, and April a series of quality milk meetings was held in 79 communities adopting the project. These meetings were attended by 1,241 farmers. Circular letters, news articles, posters in creameries, and announcements at other meetings aided in obtaining this attendance. Of those attending 276 were enrolled as cooperators in this project.

The farmers were encouraged to bring samples of milk on which sediment and methylene blue tests were run as a part of the laboratory work. Both of these tests helped to secure interest, and many people saw the need for greater cleanliness, or at least a different strainer, after the results of sediment tests were shown to them.

The lecture part of the program was divided into two major topics, cleanliness and proper cooling. The former was discussed in considerable detail, emphasis being placed on things which could be done to prevent dirty milk rather than means to be used so it might reach the market as barely acceptable.

Lantern slides, film strips, and motion pictures relative to clean milk were used at many of these meetings. Small-top pails, strainers, strainer pads, model milk cooling tanks, and other equipment were on exhibition, and 30 milk cooling tanks were built as demonstrations.

Two circulars were prepared by the dairy extension specialist, entitled "Ice Cold Facts" and "Steaming Hot Facts," the former calling attention to the necessity for sufficient ice and the latter the importance of properly cleaning utensils. These were sent out principally through the creameries with the pay checks of creamery patrons. The 100 per cent cooperation obtained from creameries in this method of distribution might be attributed, in part at least, to procuring their interest as was done through the conference in Boston. The circulars were received by patrons just before and during the time meetings were being held. They called attention to United States Department of Agriculture bulletins and circulars relating to the production of quality milk.

National 4-H Club Radio Program

SATURDAY, SEPTEMBER 5

HOW MUSIC MAY REFLECT OUR MOODS

Patriotism ..... Star-Spangled Banner.
Sorrow ..... Funeral March.
Chopin
Romance ..... Serenade.
Schubert
Regret ..... Humoresque.
Dvorak
Joy ..... Elfin Dance.
Grieg
Resignation ..... Moonlight Sonata.
Beethoven
Religious Praise ..... Hallelujah Chorus.
Handel

Kansas Women Study Refrigeration

THE lack of satisfactory refrigeration in Kansas is one reason why a considerable number of home makers have difficulty in maintaining an adequate diet for their families during the summer months.

The foods and nutrition specialists in that State, who for several years have been emphasizing an adequate diet, found that in the summer, when there would seem to be an abundance of food, it was as much a problem to maintain this diet as in the winter, when there was a scarcity of green and fresh foods.

In many Kansas rural homes, where ice is not easily obtained, refrigeration is a real problem. The best the home maker can do is to keep foods in the well or in an outside cellar. Since this form of refrigeration is inadequate, the consumption of essential foods falls far below normal. To show farm women the importance of and the means for obtaining good refrigeration, Georgiana H. Smurthwaite, foods and nutrition specialist, and Marguerite Harper, household-management specialist, worked out a joint project, Miss Harper emphasizing the points of good refrigeration and Miss Smurthwaite demonstrating the direct relation between the health of the family and the proper care of food.

Sedgwick County was the place in which this joint project was conducted. A 2-day meeting was held at which the construction of mechanical refrigerators, ice refrigerators, and iceless refrigerators as well as the efficiency of the various types of refrigerators in preserving foods were discussed. Demonstrations on making frozen desserts and beverages were given.

Four types of refrigerators were lent for this use by local merchants. These refrigerators were put into operation two days before the school began and the temperatures taken and tabulated every three hours during these two days as well as during the days of the meeting. This testing furnished important data upon which to base the discussion. The proper care of refrigerators was also emphasized as well as the correct placing of foods to maintain lowest temperature during refrigeration.

Petri plates, which were used to show the growth of bacteria as they appear in milk, were exposed to varying degrees of temperature. Some of the plates were covered and some were left exposed to the air. These plates showed the women the part that temperature plays in the preservation of milk.

The outstanding result of this project, which was conducted for the first time this year, was that women became interested in the types of refrigerators on the market. It is hoped that with the continuation of the project, the women will be interested in the need of adequate refrigeration for preserving food and maintaining an adequate diet as well as in the construction and the make-up of various available refrigerators.

Mississippi's 4-H Forestry Project

IN 1926 when an extension forester was added to the staff in Mississippi, he prepared instructions for 4-H forestry clubs under four projects—fire protection, thinning, renovation or weeding, and reclamation of gullied lands. None of these projects were adopted by any county agents and no clubs were formed. D. E. Lauderburn, the present State extension forester, attributes this to the lack of opportunity for earning money in 4-H forestry club work such as the members have in other projects and the hesitancy of county agents to take up a project involving a subject on which they are not informed.

The support of the county agents and the boys and girls has been enlisted in forestry work in Mississippi by the development of community action on the part of 4-H club members which gives them some simple and definite act to do, instructs them in the reasons for doing it, and enrolls them as cooperators with the State forest service by taking upon themselves the responsibility for doing it. The 4-H club forestry project in Mississippi, which is being conducted in 59 counties, consists of having the members put up fire warning posters in public places and on the public highways which run through woods.

Each year one theme is featured in the work and displayed on the posters. The first year it was "Everybody loses when the woods burn" and the second year it was "Prevent woods fires—it pays."

Before posters are distributed, meetings are held to instruct the boys and girls on how to put up the posters, and the meaning and significance of their act. Material for talks to be given by club members at these meetings on "why everybody loses" and "why it pays" is prepared and supplied to the county agents, thereby relieving them of the responsibility for any material or subject matter for the meetings except songs or other entertaining features. The first year 500 meetings were held and the second year 700 meetings were held, with an estimated attendance of 25,000 each year.

Club boy and girl putting up fire-warning posters

The first year of the work posters were shipped to every county agent and 28,000 posters were put up in 50 counties. The second year posters were sent out only after requisitions for them had been sent in by the county agents and 50,000 posters were put up in 59 counties.

The boys and girls sign each poster which they put up as "cooperator." This gives them a feeling of personal responsibility for putting the posters up properly and in the most effective places. The Mississippi Forest Service has furnished the posters both years.

This project is teaching the boys and girls some of the economics of forestry, and why there is an economic loss to the State and a definite financial loss to the farmer from woods fires, Mr. Lauderburn says. It is planned to develop the work into definite activity in woodland management as soon as there is a better acceptance in Mississippi of the idea of management for continuous timber production.

Oregon Operates Dairy Train

OREGON has found a dairy demonstration effective in emphasizing the importance in dairy production of lower costs, higher quality, better marketing, and increased consumption. "Economy and quality for profit, the slogan of the train, sums up the message carried," says John C. Burtner, associate director of news service at the State college.

This special train, the demonstration personnel of which was supplied by the Oregon Extension Service, made 15 scheduled stops.

The train consisted of 9 cars, of which 4 were coaches fitted as exhibit cars, 1 was a platform car for livestock demonstrations, and another was a baggage car equipped with stalls for hauling the 11 head of dairy stock taken on the trip.

The total number of people visiting the train was 15,610 or almost 1,000 to a stop. Many more attended the flat-car demonstrations who did not stay to inspect the remainder of the train. The great majority of the visitors were farmers and their families, rather than town people and children drawn by curiosity. Business men, however, cooperated at every stop and were among the most interested spectators.

The flat-car program was held first at each stop with P. M. Brandt, head of the dairy department, in charge. Mr. Brandt exhibited six cows—three mothers with their three daughters all sired by the same bull—and contrasted their production. He said that the combined production of the three daughters over the three mothers had an increased value of $233.14 a year. Use of better cows, he explained, will bring increased profits even if less total production is placed on the market.

Three good sires were shown by breed representatives, and two heifers, one grown properly and one neglected at the critical growing period, completed the livestock demonstrations.

As the crowd entered the first exhibit car a demonstrator called attention to the introductory display, which showed how to make dairying profitable with cheap feed and pastures, good cows free from disease, and good markets obtained by producing quality goods. The remainder of the car was devoted to charts and exhibits of recent findings regarding pastures, legumes, and succulents.

Better management through use of economical-sized herds, better cows, and disease-free stock was the message of the second car. It was shown that 10 cows from one actual herd were as profitable as 80 of the kind tested in another.

Sanitation Equipment

The third car was almost entirely filled with sanitation equipment used in sterilization and refrigeration. Equipment was included for farms with or without electricity. Two cans of sweet cream were carried along in this car in refrigeration, the cream being just as good in flavor after 250 hours as when it started the journey.

Food value of dairy products was emphasized in the fourth car, together with exhibits showing the value of Federal inspection and quality certificates in marketing. One mechanical exhibit showed a train crossing a bridge with Oregon dairy products. The piers of the bridge were labeled with the factors found important in success in dairying and the admonition to keep the bridge strong.

In order to get the greatest possible benefit from the visit of the demonstration train a preliminary meeting was held at each point at which the county agent and others summarized the situation of the dairy industry in that locality.

Negroes Conduct Curb Markets in Alabama

THREE curb markets which were conducted by negroes in Alabama in 1930 under the direction of the negro home demonstration agents in Macon, Morgan, and Limestone Counties realized a total income of $3,800.

The markets are located in small towns and are operated regularly two or three days a week a part of the year. No organized agency has fostered or promoted these projects, but individuals permit the free use of sites for the markets, where cars and wagons of those who sell can be parked. In one town an unoccupied building is used and in another two improvised stalls with tables were set up.

The organizations were effected by the home demonstration agents through the organized clubs in the county, which appointed a curb market committee to draw up the necessary rules and regulations for the operation of the market. Market masters were appointed to apportion stalls, issue permits, and fix the same price for the same quality of products throughout the market.

No assessments have been made for selling permits and the like by city governments. The organization charges a small sum for annual permits and a small assessment for each day the producer sells on the market to cover expenses in maintaining the market.

Prices are somewhat below the regular market price because there are no transportation, delivery, or middleman's profit to consider.

Fruits, vegetables, poultry, and dairy products were the principal items offered for sale. Dairy products were not usually adaptable to curb selling because of pure food and inspection laws. The products were graded according to size and variety.

The home demonstration agent attends the market in her county and helps to make the displays attractive. In the field she selects marketable wares and aids with the grading of produce.

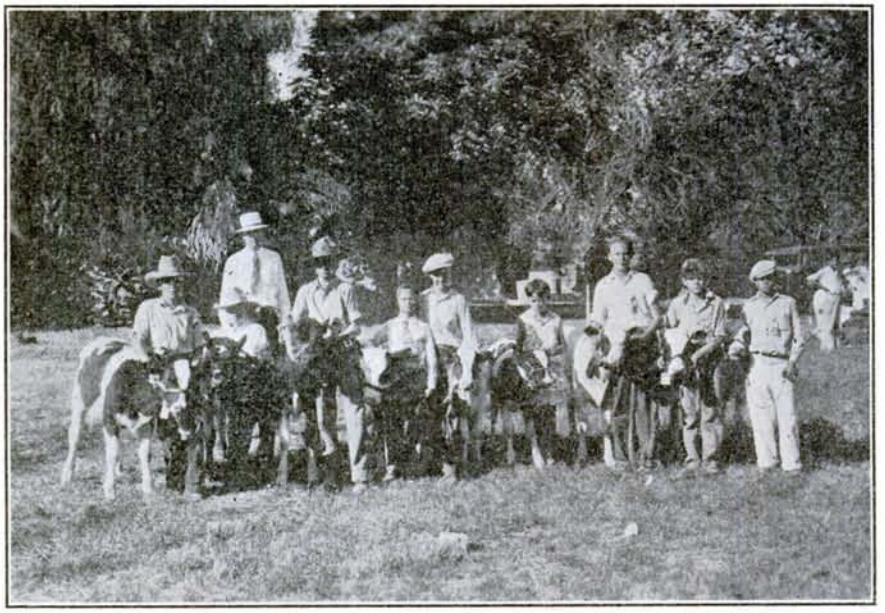
One problem encountered in the operation of a curb market is the house-to-house selling by people not connected with the curb markets. Greater variety, a more attractive arrangement, and lower prices offered at the markets are inducements to home makers.

More Vegetables

Commercial truck growing and home gardening are becoming more popular in New Mexico, according to H. C. Stewart, extension horticulturist in New Mexico. Mr. Stewart attributes this increased popularity to the farmer's desire for crops that will produce a quick cash return in order to lighten the burden caused by cheap wheat and cotton. Home demonstration agents are aiding this project in New Mexico by encouraging the use of more green and canned vegetables. Although New Mexico does not produce enough fruit, except apples, to supply its own needs, Mr. Stewart says that the home orchard seems to be more popular than the commercial phase of orcharding.

4-H Club Fair in Arizona

MORE than 1,000 entries were exhibited by 500 members of 4-H clubs at the tenth annual Maricopa County 4-H club fair on the campus of the Arizona State Teachers College, April 10 and 11. This fair is managed entirely by the club members, except for a general superintendent, who is a student-teacher in the training school of the teachers' college.



Club members exhibited these calves at the Maricopa County club fair

4-H club work is sponsored in the training school of the teachers' college because the officials of the college believe that club work is valuable to the boys and girls and that the experience which the students receive as 4-H club leaders is excellent training for future teachers, according to H. R. Baker, boys' and girls' club specialist in Arizona.

Better Sires Improve Louisiana Dairy Cattle

IN ADDITION to improving the quality and productivity of dairy cattle, better sires campaigns have induced the farmers in Louisiana to learn how to care for and feed their livestock, to grow more of their own feed, and to increase the size of their herds with purebred heifers and cows, according to Bentley B. Mackay, extension editor in Louisiana.

Four years ago the extension dairy specialists in Louisiana decided that they would attempt to replace as many scrub bulls as possible with purebred sires because so many farmers were supplementing their regular incomes with "cream checks." In order to get farmers interested in cooperative bull associations, a great deal of preliminary work was done during 1926 by the county agricultural agents in cooperation with E. W. Neasham, extension dairymen in that State.

Getting Farmers Interested

Scrub-bull trials were held, first at the annual farm short course and then in the various parishes (counties are called parishes in Louisiana). Following a scrub-bull trial, the county agents in adjoining parishes (Claiborne and Lincoln) conducted an eradication campaign and replaced 700 scrubs by 68 purebreds from register of merit cows.

In Louisiana the farmers are being taught to "grow" into dairying and not to "go" into it. Before an association is formed in a community the dairy specialist and county agent hold several meetings, and, by the use of moving pictures, lectures, circulars, and charts they endeavor to show farmers that it is cheaper to own one good bull in the community rather than a number of scrubs. Then personal visits are made to each farmer, and, when enough have signed up to purchase a good purebred bull, an association is formed. The associations consist of 4, 10, or more members depending upon the amount of money that each member is willing to contribute.

Establishing Associations

Usually the dairy specialist and the county agricultural agent select the bull to be purchased and one farmer keeps and cares for it. This farmer is given free service of the bull, the members of the association are charged a small fee, and the nonmembers are charged a larger fee for service. These fees pay for the keep of the bull and provide a fund for replacement when the present bull has served his usefulness. Each association in Louisiana now owns three or more bulls which are exchanged every two years.

The first year of the work, 1926, there were 10 cooperative bull associations formed with 10 purebred bulls. On January 1, 1931, there were 52 associations with 219 bulls serving 7,890 cows.

It is reported that in one parish there have been added 1,350 grade heifer calves from 23 bulls in two years.

Production Increased

While Government charts prove the ability of a good sire to increase production over the dam, the records on file from the dairy herd improvement associations which Mr. Neasham has organized show what has been accomplished in Louisiana. One bull, Hood Farms Rebel Tormenter, bred to dams averaging 3,693 pounds of milk and 208 pounds of butterfat (considerably above the State average), produced daughters giving 5,354 pounds of milk and 293 pounds of butterfat.

Another sire, Sultain's Fontaine Raleigh, increased the production of the daughters over the dams by 2,076 pounds of milk and 119 pounds of butterfat, or an increase of 48.7 per cent in milk and 58 per cent in butterfat production.

Training Farmers to Terrace in Texas

THE big terracing problem in Texas to-day is not to show how terrace lines are surveyed and how terraces are built, but to have a sufficient number of men trained to survey terrace lines so that the demand for this work can be met and the county agricultural agent will not be called upon to do such personal service work, reports M. R. Bentley, extension agricultural engineer in Texas.

The extension service aroused the farmers, business men, and bankers to the necessity of immediate and cooperative action on terracing, by personal interviews, letters, news stories, meetings, models of terraced farms, terracing demonstrations, and the results of experiments on erosion.

The Terracing Meetings

For five years terracing meetings have been held to train men to run terrace lines. These meetings are given primarily for training rather than for promoting interest in terracing. The program which Mr. Bentley recommends and uses for these meetings is to devote the forenoon to actually running terrace lines and to teaching the fundamentals of setting up and adjusting the farm level. In the afternoon talks are given on (1) the rapidity of soil washing upon different slopes of land and land planted to different crops; (2) explaining the most desirable row system and its effect upon soil erosion and water conservation; (3) displaying and explaining the use of soil saving dams and outlet controls; and (4) the effect of soil erosion on the farm family, the community, business centers, and the future generation.

After the talks a profitable and permanent system of farming is outlined from the experience of farmers, and then the crowd returns to the field to see the terraces which have been completed in the afternoon.

When terracing has been demonstrated in a community and enough men are qualified to survey terrace lines, the work proceeds without the presence of the county agricultural agent except for an occasional visit for conferences on especially difficult field problems.

This Program Is Supported

In this program of training the farmers to do their own terracing, the extension service is actively supported by bankers, vocational agricultural teachers, railroad agricultural agents, educational agents of commercial fertilizer companies, the county commissioners, and business men. Chambers of commerce, banks, and business concerns have purchased levels, placed their names on them, and lent them to farmers.

In some counties the county commissioners have agreed to rent road-grading outfits and crews to the farmers for terracing building if the farmers pay the operating expenses. Under such an arrangement, terracing has cost from as low as 60 cents per acre on sandy loam farms to $1.50 per acre on black clay lands.

Terracing in Texas has become so general that all senior agricultural students at the State agricultural college are required to have training in terracing.

New Jersey's Can-House Tomato Project

THE average State yield of tomatoes for manufacture in New Jersey has increased from 4.8 tons per acre in 1926 to 6 tons in 1929 and 5.8 tons in 1930 as the result of an extension project, reports C. H. Nissley, New Jersey extension specialist in vegetable growing. With this increase in yield per acre the growers find the crop more profitable, therefore, the acreage has increased from 28,000 acres in 1926 to more than 40,000 acres in 1930.

This project was organized in 1927 with the assistance of H. W. Hochbaum, Office of Cooperative Extension Work. Realizing that the tonnage per acre of can-house tomatoes in New Jersey was not profitable to a large number of growers, the extension service conducted tests in 1925 and 1926 in the can-house tomato-growing counties to determine important production factors. In addition to these tests, a survey was made which included 224 farms with a total of 2,445 acres in tomatoes. The results of the tests and the survey show that good plants and early field planting are primary factors in yield.

The 1927 season was opened with an intensive extension campaign to acquaint growers with the fact that good plants and early field planting result in increased yields. This information was presented to the growers through meetings, charts, colored posters, colored stickers on correspondence, press releases from the county agents and the specialist, and circular letters. The circular letters were prepared by Mr. Nissley, printed with fascimiles of the signatures of the county agents, were folded ready for the envelopes, and then sent to the different county agents. An average of 4,000 to 4,500 were printed and they were sent to practically every tomato grower in the can-house tomato area.

The same procedure has been followed each season since 1927, but each year more data are obtained. The extension service now has records from almost 1,000 farms involving over 11,000 acres of tomatoes, which give conclusive evidence to both growers and canners that good plants and early field plantings will result in larger yields and more profit to the growers.

In three years the number of May-set plants distributed by one canner alone has increased from 12,000,000 to 29,000,000, while the June-set plants have decreased from about 8,500,000 to about 4,700,000. The increase in the total number of plants sold in three years was more than 13,590,000.

Grain-Grading School Train

One-day grain-grading schools were conducted this spring in Minnesota and North Dakota in an attempt to improve the quality of spring and durum wheats, encourage the growing of pure seed, and reduce the losses from smut diseases. These schools were held cooperatively by the extension services in Minnesota and North Dakota, a railroad company, the Northwest Crop Improvement Association, and the Federal grain supervision of the United States Bureau of Agricultural Economics.

The schools were given primarily to bring facts before the producers and the country grain shippers. The program included subject matter on smut control and recommended varieties of wheat, instruction in grain grading and inspection at terminal markets under the grain standards act, and actual analyses of samples by those attending the schools. All the meetings were held in a specially fitted railroad car. Three meetings were held in Minnesota and 23 in North Dakota, with a total attendance of 796.

Film-Strip Prices Unchanged

The same low prices for United States Department of Agriculture film strips will prevail during the fiscal year 1931–32 as have been in effect during the past three years, according to an announcement recently issued by the Office of Cooperative Extension Work of the United States Department of Agriculture. The Consolidated Film Industries (Inc.), Main Street, Fort Lee, N. J., was awarded the contract for film-strip production for the fourth successive year because of the low bids it submitted in competition with other firms.

The prices for film strips until June 30, 1932, will range from 35 to 71 cents each, depending upon the number of illustrations in the series. The majority of the 120 series that the department has available will sell for 35 and 44 cents each. Film strips are available on such subjects as farm crops, dairying, farm animals, farm forestry, plant and animal diseases and pests, farm economics, farm engineering, home economics, and adult and junior extension work. Lecture notes are provided with each film strip purchased.

During the fiscal year 1930–31 the sales of department film strips increased considerably over the previous year. The popularity of film strips among extension workers, teachers, and others has been due primarily to the reasonable prices charged for them, the convenience with which they can be handled, and their effectiveness in educational work. A list of available film strips and instructions on how to purchase them may be obtained by writing to the Office of Cooperative Extension Work, United States Department of Agriculture, Washington, D. C.

Department Exhibits Being Shown at Fairs

The Office of Exhibits of the United States Department of Agriculture is already well under way in putting on exhibits at State and interstate fairs. Plans have been developed, old exhibits have been renovated, and new ones built.

Much interest is manifested in all the exhibits which the department has to offer. The most popular exhibits include mechanical devices that make it possible for little pigs to get sick, roll over, and die, repeating the performance continuously; for a cow to carry on a conversation with the farmer who owns her; and for a hen to give a talk on food while she shows to the audience the processes of digestion taking place within her body. Already there have been almost a hundred requests for this "Nutrition of Poultry" exhibit, or the mechanical hen, as it is commonly called. This has made it advisable to build more hens, duplicates of the first; but even with a flock of them, it would probably be impossible to comply with all the requests.

Put Up Your 4-H Sign

This boy and his sister put their club membership signs on a tree near the road

Every year boys and girls enrolled for 4-H club work in New York receive a membership sign bearing the 4-H clover and their names. One of the requirements for the first year's work in some counties is that the members make a display board for their signs. The members receive new signs each year so that motorists will always have a clean announcement that a 4-H club member lives in that home. Sometimes the farm bureau membership signs and the 4-H club membership signs are placed on the same tree or post.

List of Motion Pictures Issued

A new and up-to-date list of the motion pictures now in the department's film library with information on how to obtain them is now available to extension workers.

Miscellaneous Publication 111, Motion Pictures of the Department of Agriculture, 1931, describes the 266 subjects now in circulation. The films listed are silent films, with explanatory titles. These films have been designed to aid in the work of extension and field workers of the department and cooperating State institutions, and their primary use is by or under the supervision of such workers. There are no rental charges for department films. Borrowers are required to pay transportation charges to and from Washington, D. C. In all cases it is necessary that some responsible person assume responsibility for transportation charges as well as for the safe-keeping, proper use, and prompt return of the films. Practically all the films are on slow-burning 35-millimeter stock. Extension workers desiring copies of the new list of films should write to the Office of Motion Pictures, U. S. Department of Agriculture, Washington, D. C.

A supplementary list of sound films will be issued in the near future.

A Method for Judging Exhibits

Exhibits at the Colorado State seed show last year were judged by the exhibitors themselves rather than by a small group of judges.

Each exhibitor ranked all the exhibits, except his own, in the order of his preference. A score card was generally followed, but only the numerical order from the first to the last was counted. The exhibit receiving the highest score was placed first, the one receiving the next highest score was placed second, and so on down to last place.

T. G. Stewart, extension agronomist in Colorado, reports that this method of scoring is educational because it requires an intensive study of all the booths by the exhibitors themselves and that it is satisfactory because the most capable judge of exhibits is the person who puts up one. He believes that the method will work satisfactorily whenever there are more than 5, but not more than 25, community or county exhibits to be judged.

U. S. GOVERNMENT PRINTING OFFICE: 1931

A NEW RADIO FEATURE

OF ESPECIAL INTEREST TO EXTENSION WORKERS

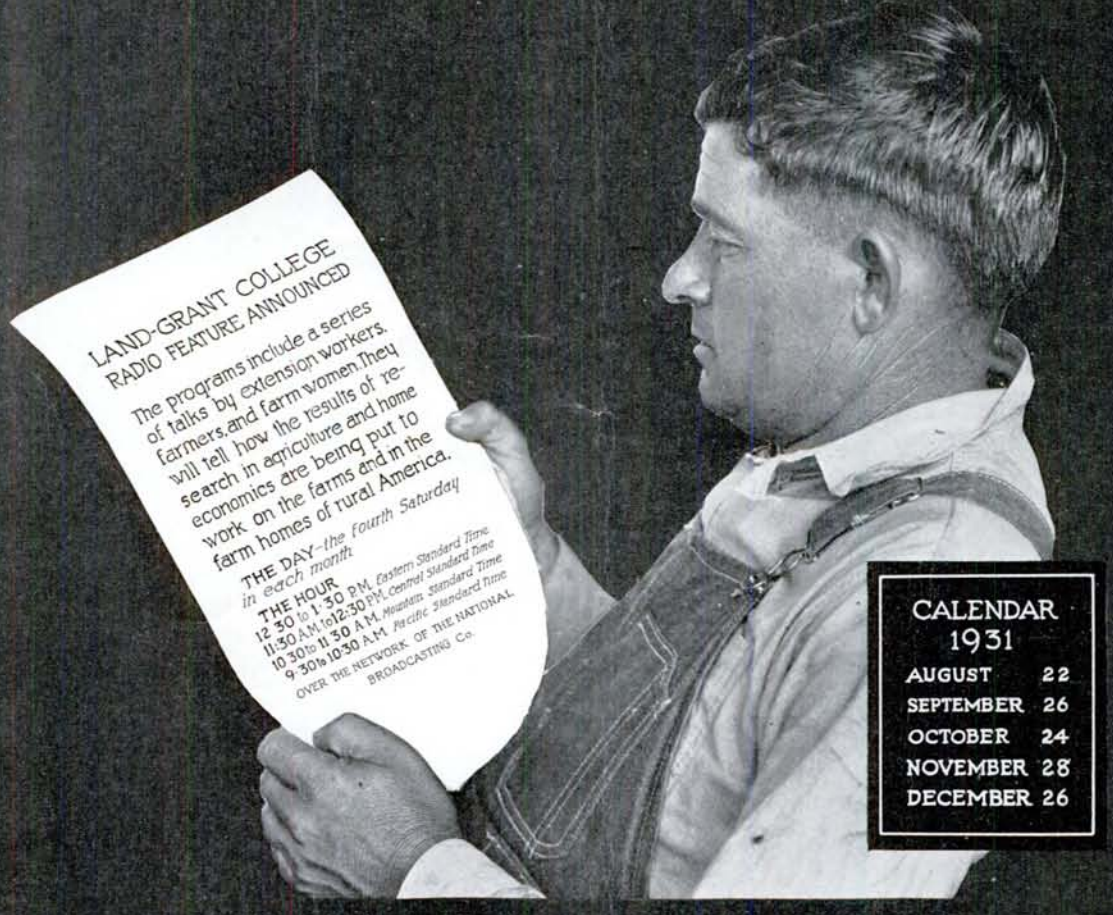
TUNE IN ON THE

LAND-GRANT COLLEGE PROGRAM

THE FOURTH SATURDAY OF EVERY MONTH

From 12:30 to 1:30 P. M., Eastern Standard Time

These programs are conducted by the Association of Land-Grant Colleges and Universities in cooperation with the United States Department of Agriculture at the invitation of the National Broadcasting Co. The musical part of the program is played by the United States Army Band through courtesy of the Department of War.



WATCH FOR ANNOUNCEMENTS

Agriculture, too, must organize. We must begin to see that this vast army of 27,500,000 farm people, sprawled entirely across the continent, divided into 6,000,000 producing plants or farms, do have a common interest.

ARTHUR M. HYDE

U. S. GOVERNMENT PRINTING OFFICE: 1931

Extension Service Review

VOL. 2, NO. 9 SEPTEMBER, 1931

THE EXTENSION AGENT IS ESSENTIALLY A TEACHER

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 136 FOR PRICES

In This Issue

DID you know that the first nation-wide cooperative for wool marketing was formed in November, 1929? That this cooperative handled in 1930 116,000,000 pounds of wool and 15,000,000 pounds of mohair? That sales were made in the same year to 220 different mills? These and other facts that ought to interest every extension worker are presented by J. B. Wilson. He is proud of the record of the National Wool Cooperative. He has a right to be.

COMMUNITY scoring and the holding of community country life conferences has taught West Virginia's rural women to think readily and logically in terms of the community's problems, says Gertrude Humphreys. The problem of West Virginia's home demonstration agents, she asserts, is to help the women of their communities select from among those suggested, the problems that shall be the immediate objects of study and solution.

EXTENSION workers are being confronted constantly with new problems, including many and very complex relationships, that can not be solved out of the experiences of other groups of educators. So says Nat T. Frame in his brief for the new National Cooperative Extension Workers Association. His argument is well worth following. It leads to the next annual meeting of the associations in Chicago on December 4 and an urgent invitation to be there. What do you say?

MORSE SALISBURY outlines a plan whereby the principle of Federal and State cooperation may be applied to radio broadcasting. Through this plan State extension divisions share equally in the radio time obtained by the department on 250 stations in the development of its radio programs in the past seven years. The new programs, localized by the staff of the State extension divisions, will be of much more practical value to farm listeners and will lend invaluable aid to present extension effort.

Contents

THE use of improved farm machinery in South Carolina is making real headway. J. T. McAlister tells of cooperation with effect with county extension agents, farmers, and implement dealers in getting more power and efficiency onto South Carolina farms.

MICHIGAN goes about getting home demonstration news before its public systematically. Jimmy Hasselman, and Muriel Dundas join forces in making successful club reporters out of Michigan's 300 home demonstration club secretaries. A series of one day news-writing schools do the trick.

On the Calendar

THE Central States will hold an Agricultural Outlook and Economic Conference at Urbana, Ill., September 16–18. Current economic conditions and their effect on the agricultural outlook will be considered, as well as adjustments in agriculture and the outlook for different farm commodities in the Central States.

Camp Vail, Springfield, Mass., September 19–26.
Dairy Cattle Congress, Waterloo, Iowa, September 28–October 4.
Connecticut Conference of County Club Agents, September 30.
National Dairy Show, St. Louis, Mo., October 17–24.
Pacific International Livestock Exposition, Portland, Oreg., October 24–31.
International Livestock Exposition, Chicago, Ill., November 28–December 5.

DURING September the Office of Exhibits will present the educational exhibits of the United States Department of Agriculture at the following events:

Nebraska State Fair, Lincoln, Nebr., September 4–11.
California State Fair, Sacramento, Calif., September 5–12.
Minnesota State Fair, Hamline, Minn., September 5–12.
Michigan State Fair, Detroit, Mich., September 6–12.
Midland Empire Fair, Billings, Mont., September 7–11.
Rochester Exposition, Rochester, N. Y., September 7–12.
Rutland Fair, Rutland, Vt., September 7–12.
Trenton Inter-State Fair, Trenton, N. J., September 7–12.
Appalachian Tri-State Fair, Johnson City, Tenn., September 7–13.
Kansas Free State Fair, Topeka, Kans., September 14–19.
Kansas State Fair, Hutchinson, Kans., September 19–25.
Eastern States Exposition, Springfield, Mass., September 20–26.
Western Washington Fair, Puyallup, Wash., September 21–27.
Dairy Cattle Congress, Waterloo, Iowa, September 28–October 4.

CERTIFICATE.—By direction of the Secretary of Agriculture, the matter contained herein is published as administrative information and is required for the proper transaction of the public business.

Extension Service Review

VOL. 2 WASHINGTON, D. C., SEPTEMBER, 1931 NO. 9

Increasing California's Income from Dairying by $25,000,000 a Year

B. H. CROCHERON

Director, California Extension Service

IN 1922 the California Agricultural Extension Service began a statewide dairy campaign which was to run through 1930. The campaign undertook to raise the average butterfat production of California cows from 182 pounds per year up to 265 pounds by the end of 1930. Well, we are there!

Here's how it all came about:

As far back as anyone could remember, the dairy industry of California had been an "in and out business" with consequent dissatisfaction to all concerned. Dairying was based on alfalfa. When alfalfa hay was high in price, dairymen sold their cows and sold alfalfa hay. When the price of hay went down, they bought such cows as were obtainable and fed the hay. Of course only poor cows could be bought; so poor cows were what they had. The industry was disorganized and unprofitable to everyone concerned. A study of the situation showed that, on the average, dairymen only made money when hay was cheap. The volume of production was so low that dairying was a marginal business. It was always hanging on the ragged edge between profit and loss.

The Problem

Now dairying is of high importance to California. Dairying furnishes nitrogen and humus for our farm lands. Dairying should be a balance wheel in our rural economy. It should help to stabilize the income of the State, which fluctuates with the erratic returns from the special fruit crops. But dairying was not a balance wheel in 1921. The volume of dairying varied materially with changes in the price of alfalfa hay. On such a basis no real improvement could be made. To become a staple permanent business, dairying had to climb to a new level of production whereby men could build profitable and high-producing herds over a long series of years.

A study of the 1920 census disclosed that the average production of California cows was 182 pounds of butterfat per year. This was higher than the national average by about 40 pounds but was not high enough to create a settled industry in California. A study of costs of production on a number of California farms showed that, on the average, cows ought to produce about 50 per cent more than the State average if they were to be permanently profitable. Such production was entirely feasible for an individual dairyman; but was it possible for a whole State? Could production be raised to any such figure in any reasonable time? In the previous 20 years production per cow per year in California had been increasing at the rate of only six-tenths of a pound, despite all the efforts of all the agencies at work. At such a rate it would take generations to rise to a profitable production level.

The Agricultural Extension Service believed it could be done. A study of the Humboldt County Cow-Testing Association, which was the oldest in the West, showed that the production of the lower half of the herds in that association was 265 pounds per year. It seemed reasonable to suppose that the whole State could be raised to that figure if enough people worked hard enough at it for a long enough time. The methods of procedure were perfectly well known: Get farmers to test their cows for butterfat production and to weed out the low producers. Have them buy a good bull from high-producing ancestry and save the promising heifers. Then have them feed intelligently. If those things were done by a large enough number of people, the State average would rise.

Such results could not be achieved by reaching a small minority of the dairymen. A few men getting high production would influence the average State production but little. The great mass of dairy producers must be reached and influenced to adopt these methods. It would take a large staff of men constantly at work, but it could be done.

At the Pacific Slope Dairy Show held at Stockton on December 5, 1921, the campaign was announced. It was proposed that the State production, then at 182 pounds per year, be raised to 265 pounds by the end of 1930. The figures of production were based upon the 1920 census; therefore the 1930 census would be the judge as to whether the goal had been reached. The annual report of the Agricultural Extension Service for 1922 stated:

The outstanding feature of dairy improvement has been the setting of a goal and the adoption of a program of work which outlines means whereby this goal may be reached. Because average butterfat production per cow per year is a good measure of the status of the industry, and because the work is planned to benefit the industry of the whole State, a goal of 265 pounds of fat per cow per year in 1930 has been established for the State. The present average production is about 182 pounds of fat. The program of work, which specifies the activities through which we hope to reach this goal, consists mainly of methods which will secure:

1. More and better cow-testing associations.
2. Wider use of good purebred dairy bulls.
3. Better feeding practices.
4. Better care of dairy cattle.
5. More control and eradication of cattle diseases.

Working for the Goal

And then they went to work! County agricultural agents and assistant county agents over California were specially detailed to the dairy project; dairy departments of the farm bureau were formed; cow-testing associations organized; testers employed. Of course people did not expect the goal would be reached. They generally regarded the goal as a distant star at which to shoot. They supposed the campaign would help somewhat and would raise production materially; but to climb to such an unattained figure—that seemed impossible.

However, early and late, for nine years the county agents toiled at the job. Every day, in sun and rain, county

70614—31

agents were seeking members for cow-testing associations, were helping men to get good bulls, were talking with them of their feeding problems, were advising which cows to weed out. In a few years it was evident that production was going rapidly upward, rising at least 10 times as fast as before the campaign was started. By 1926 production appeared to be above 225 pounds per year. The number of cows discarded as unprofitable from cow-testing herds climbed up to 5,000 per year, then to 10,000, finally 15,000. The number of cows under test reached 50,000 by 1926, 75,000 by 1928, and almost 100,000 by 1930.

The campaign increased in speed and volume like a snowball rolling downhill. The campaign was a going concern. Everybody got a thrill seeing the dairy industry grow from a whipped dog to the leader of the pack. People sang a new song. Formerly the successful farmers planted trees. Now they began to say that the dairy industry was the only bright spot in the State. One of our dairymen bought an airplane to use up his profits.

Now comes the 1930 census. Using the same methods of computation as that used in 1920, which methods of computation were duly placed on file by a conference at the time so that there might be no argument in later years—by using those same methods the average production for California in 1930 was 265.6 pounds.

Of course it just happens that the production is exactly at the figure set, but it did not "just happen" that this great increase in production was made. It was planned and executed. A large number of men were set to work at that task and were held to it until the result was achieved.

So we hold forth this dairy campaign as a method for agricultural advancement. The campaign shows the way by which progress in agriculture can and will be made. Here is the recipe. We give it especially for those who believe you can pass a law and advance somewhere and for those who think progress is achieved by holding a meeting and writing some resolutions. Here is the recipe:

1. Study the industry; find a simple and feasible program for its improvement.
2. Set a goal within the bounds of reasonable possibility.
3. Employ a sufficient number of competent men so that they can reach individual farmers on their home farms in personal contact. Pay them a living wage and keep them at work.
4. Stick to the program and methods through thick and thin.

That program will bring results.

What are the results, in dollars and cents, of this dairy campaign? Well, in 1930 the average (weighted) farm price of butterfat in California was 54.4 cents per pound. In that year 571,959 cows in the State gave 83.5 pounds of butterfat more than the average in 1920. This was an increase of 47,758,576 pounds over the amount the same cows would have given had their production been that of 1920. At 54.4 cents per pound this increase brought $25,980,665 in the year 1930.

Butterfat production in California

	1920	1925	1930
Number of cows	[1] 502,415	[2] 557,268	[3] 571,959
Total pounds of butterfat	[4] 91,533,839	[4] 125,043,036	[5] 151,939,520
Average pounds of butterfat produced per cow	182.1	224.3	265.6

[1] 1920 United States census.
[2] 1925 United States census.
[3] 1930 United States census.
[4] Statistical Report of California Dairy Products (Special Publication No. 99, California State Department of Agriculture).
[5] Report of 1930 Production. Dr. M. E. McDonald, chief, bureau of dairy control, California State Department of Agriculture.

Twenty-five million dollars per year is a sizable amount of money. It is material to the whole financial structure of the State. We may expect this increased value to be maintained for the future. An industry once improved is likely to remain at the new high level. It has increased the productive capital of the State by the amount of which $25,980,665 is the interest. At 5 per cent, it is interest on over $500,000,000. At the beginning of the campaign, in 1921, we said that if successful this project of the Agricultural Extension Service would add more value to the wealth of the State than that represented by the cost of the Panama Canal. Our predictions have been exceeded by the results.

A System for Field Records

A system for keeping field records, which he has found to be thorough, definite, flexible, convenient, and compact, has been worked out by W. L. Funkhouser, county agricultural agent in Cheshire County, N. H.

The records are kept on 6¾ by 10½ inch loose-leaf sheets which are folded twice so that they may be kept in a pocket-sized notebook. Lines are ruled to allow for names and addresses on the side margin and projects across the top of the page. Each sheet is made out for the people in one community. Any information concerning an individual is placed opposite his name and under the project or item to which it relates.

By making all of the entries for the people in a community or section on one sheet, Mr. Funkhouser has found that he has a convenient and complete list of all the extension service cooperators in his county by communities and that at a glance he can determine just what to take up with each person, what material to carry with him when visiting any community, and just how his itinerary should be planned to keep travel at a minimum and avoid retracing his steps.

Where the records cover several years, trends can be seen at a glance. At the end of the year much of the statistical material for the annual report is already assembled and quickly and easily summarized from these records, Mr. Funkhouser reports.

New Jersey's Plant-Growing Structures Project

New Jersey's plant-growing structures project is conducted with individuals rather than groups and largely on an advisory basis, by C. H. Nissley, the extension horticulturist. He believes that thoroughness of publicity and having the proper material to give the grower are the essentials for success. Accordingly he sends out news releases during the fall, winter, and spring months and has prepared a bulletin, Plant Growing and Plant Growing Structures, and another, Cloth Covered Coldframe, as well as blue prints of construction for the sash greenhouse, hot-water heated hot bed, and flue-heated hot bed. A set of lantern slides on plant-growing structures and another on plant growing have been used in many illustrated lectures on this work during the last 10 years.

When a grower inquires about plant-growing structures, a copy of the available bulletins and blue prints are forwarded to him, he is requested to see and study the structures of the key man in his section, the county agricultural agent is notified, a check-up is made, and personal work is done by Mr. Nissley to help the growers with special problems.

One of the papers presented at the fifteenth annual editors' short course in Minnesota outlined how newspaper publishers might advantageously follow the extension-service programs in their communities and thereby interest local merchants in advertising the materials needed to carry out the extension programs. For example, during a soil-maintenance campaign fertilizer dealers could be interested in advertising their commodities.

The National Wool Marketing Corporation

J. B. WILSON

Secretary-Treasurer, National Wool Marketing Corporation

AFTER many years of patient effort, thanks to the agricultural marketing act and the assistance of the Federal Farm Board, the American wool and mohair producers at last have their own marketing agency. Although wool cooperative marketing is not a product of this generation, the National Wool Marketing Corporation, made possible under the agricultural marketing act, is the first nation-wide cooperative for wool and mohair.

The past 25 years have witnessed a growing desire among wool producers to change from the old speculative method of selling wool. Growers constantly have been doing more talking and thinking along cooperative lines at their conventions. It was not surprising, therefore, that when the agricultural marketing act was passed in 1929 the wool producers were among the first to see the opportunities it offered them to realize their goal. This act was passed by Congress in June, 1929, and the wool cooperative was formed in November.

Amount of Business Handled

Those who have followed the tremendous strides made in cooperative endeavor since the agricultural marketing act became a law are familiar with the splendid response given by the wool growers. More than 40,000 wool and mohair producers took advantage of the first opportunity to market their product cooperatively on a nation-wide basis. The 1930 volume of the National Wool Marketing Corporation amounted to approximately 116,000,000 pounds of wool and 15,000,000 pounds of mohair.

While it is somewhat early at the time this is written to estimate what the 1931 cooperative wool tonnage will be, it is reasonably safe to say it will be equal to that of the first year. On July 8 the volume of wool actually received by the national in Boston was 80,142,361 pounds. In addition to this tonnage at the country's big wool market are several million pounds of wool stored at Pacific coast points for sale to western mills. A year ago, July 5, the national's receipts of wool at Boston were only 62,388,543 pounds. On July 15, 1930, the cooperative's shipments at Boston amounted to 72,917,198 pounds. Thus, with 1931 shipments running substantially ahead of those of last year, it would seem that a great many wool growers appreciate the opportunities of cooperative marketing and are taking advantage of the facilities which growers are developing under the agricultural marketing act.

The National Wool Marketing Corporation is a grower controlled and operated organization. The national is composed of 28 stockholder associations, each of which delivered over 500,000 pounds of wool or mohair last year, the minimum volume for stockholder membership. These associations are scattered throughout the United States, making it possible for any wool producer, anywhere, to take advantage of the cooperative set-up.

On the board of directors of the National Wool Marketing Corporation are men who have had experience in the Nation's wool industry. For several years some of these men have given a good deal of thought toward the possibilities of a national selling organization.

The president of our organization, Mr. Sol Mayer, is a succesful sheep and livestock operator in the State of Texas. He is also an outstanding figure in banking circles in the Southwest and is a sound business man and thinker. Mr. Mayer is earnestly working for the success of the National Wool Marketing Corporation because he believes that it is a great movement for the sheep and goat industry.

In the national wool marketing program the individual grower signs a marketing contract to deliver his wool to his local association affiliated with the National Wool Marketing Corporation. The local association in turn signs a marketing agreement to deliver all of the wool of its members to the national. The grower has his vote in his local association and elects representatives from his association to a district meeting where directors are selected for the national.

Marketing the Wool

Although the National Wool Marketing Corporation is only a year old, I feel a great deal of good has been done toward stabilizing the country prices. Private dealers have recognized the fact that the corporation is serious competition and they have had to meet or better the corporation's advances. Growers, I believe, have benefited several cents per pound on both the 1930 and 1931 clips because of this competition.

Throughout the marketing season of 1930 it was very difficult for the cooperative to sell wool. This was due to competitors underselling the cooperative and using the cooperative as an umbrella to get out from under a slipping market. The cooperative influence on the market at that time was a great stabilizing factor.

Sol Mayer, President of the National Wool Marketing Corporation

To handle the volume of wool and mohair the size of that given the National Wool Marketing Corporation by its grower-members last year required a large and efficient selling force. To accomplish this selling the national acquired the services of one of the foremost wool firms in Boston. This firm is devoting its full energy to the cooperative, having given up entirely its trading activity in domestic wool.

The national has provided its producer-member with the closest connection he has ever had with the mills, which are the consumers of his product. During the season of 1930 we sold wool or by-products to 220 mills in amounts ranging from $4.85 to $1,257,388. The national has reached every important wool-goods manufacturer in this country. We sold 2 mills over $1,000,000 worth of wools each, 1 mill took $933,000 worth, another $812,000 worth, and 3 others over $500,000 worth each. We sold 9 other mills wools in amounts averaging $663,000. We have sold 33 mills wools in amounts varying from $52,700 to $247,857 each, an average of $103,700 per mill. We have sold 171 mills wools and by-products in amounts ranging from $4.85 to $45,917, or an average of $7,470 each.

Records will show that during 1930 the wool market was very inactive. The national could have sold much more

(*Continued on bottom of page 132*)

Correlated Federal-State Radio Programs

MORSE SALISBURY

Chief, Radio Service, U. S. Department of Agriculture

WITH the aim of making its broadcasting work of maximum usefulness to farmer and home maker listeners by putting them in touch with the programs and workers of State agricultural extension services, the United States Department of Agriculture has submitted to State directors of extension a correlated Federal-State program of broadcasting through cooperating radio stations in each State.

The proposed program was purposely so drawn as to permit of modifications desired by each State extension service in order to make Federal-State broadcast programs tie in effectively with the State program of extension work. To facilitate the adoption of the new program Alan Dailey, formerly department radio writer, and before that extension editor in South Dakota, was appointed radio extension specialist in April. He is now in the field visiting State extension divisions and assisting in arranging broadcasting set-ups suited to conditions in each State.

The general principles of Federal - State correlation of extension broadcasting as stated in the proposal submitted by C. W. Warburton, director of extension, and M. S. Eisenhower, director of information, both of the department, may be summarized as follows:

1. The department will maintain relations with the network broadcasting companies. The States will handle relations with individual stations within their States, except for some 20 stations of high power located near State border lines, which serve more than one State.

2. The subject matter of extension programs will be contributed half by the United States Department of Agriculture and half by the State extension services. The department will organize its portion of the programs largely on the basis of recommendations of the State extension services.

3. Listeners whose interest is enlisted by the programs in the adoption of recommended practices will be provided with both Federal and State bulletins for further study and will be directed to get in touch with extension field workers or to attend meetings and demonstrations. A feature of the service will be its use to gather attendance at extension meetings and demonstrations.

The proposal applies both to network programs and to syndicate programs now maintained by the department. If the majority of State extension services wish to participate in the network programs through stations within their States, the department will request the National Broadcasting Co. to allow time either within or before or after the national and western farm and home hour programs for presentation from each of the 51 stations in the networks of daily State extension programs.

As to the syndicate programs, the proposal includes a recommendation that county agricultural agents be authorized to lend their voices to presentation of the farm programs through cooperating stations, and that county home demonstration agents likewise be authorized to deliver as many of the home-economics programs as they can present without interference with field work.

The aim of the proposed plan is, according to the outline submitted by Directors Warburton and Eisenhower, to put on the air daily from 250 cooperating radio stations a Federal-State radio program designed to widen the influence of each State extension service among farmers and home makers. The method is complete sharing of responsibility for building programs by the United States Department of Agriculture and each State extension service.

County 4-H Club Band Broadcasts

The Chenango County (N. Y.) 4-H club band has broadcast concerts recently over stations WGY in Schenectady and WEAI in Ithaca, N. Y. All of the 40 members of the band are bona fide 4-H club members in good standing, and practically all of them live on farms. The director of the band is a former 4-H club member. Money for their uniforms was raised by giving a benefit theater party in cooperation with a theater in the county seat.

Arkansas has held an anual cooperative marketing school for four years to bring together farmers and agricultural leaders for a 3-day study of problems in the cooperative marketing of cotton, rice, fruit, truck crops, livestock, and poultry.

Officers of cooperatives lead the discussions on organization problems embracing contracts, causes of membership, services rendered, field agents, and officership.

Aside from the actual problems of marketing, both within and outside of the cooperatives, intermediate credit banking, the relation of educational institutions to cooperative marketing, and other related subjects are discussed.

Farmers, educational workers, bankers, agricultural journalists, and business men attended the school this year, reports Kenneth B. Roy, extension editor in Arkansas.

The National Wool Marketing Corporation

(*Continued from page 131*)

wool, but it would have been necessary to meet the competition of other sources of supply which were constantly lowering their prices This spring and summer the national has been selling wool at a considerably faster pace than it did last year, because the wool situation is much more healthful. Wool is being consumed at a faster rate, the market is more active, and prices are showing strengthening tendencies. The National Wool Marketing Corporation is in a splendid position to secure for its members the benefits of the wool-market improvements now taking shape.

I believe it has been demonstrated that the national can handle a large volume of wool, and, I think, in the next few years we will demonstrate convincingly that it pays to be a member of our national wool cooperative. Present developments are in favor of the wool cooperator.

Improved Farm Machinery for South Carolina Farms

THE farm-machinery program in South Carolina is making the farmers more familiar with their machinery, teaching them to operate it more efficiently, helping them to find more uses for it, and reducing their production costs by increasing their labor income. This project is divided into the work with power machinery for farms cultivating 150 acres or more and that with 2-horse machinery for the numerous smaller farms. This is the third year the project has been under way, and it is conducted by J. T. McAlister, extension agricultural engineer in South Carolina.

Mr. McAlister says that a number of South Carolina farmers bought tractors and other farm equipment in changing from a 1-crop cotton system. Since these farmers and the negro laborers had little experience in operating equipment larger than a 1-mule plow, the project was started to meet their needs.

The county agricultural agents select as cooperators farmers who already own general-purpose tractors with planting and cultivating attachments. A definite acreage of row crops, such as cotton or corn, is set aside upon which all work is performed with the tractor and attachments. Records are kept of all operations and costs.

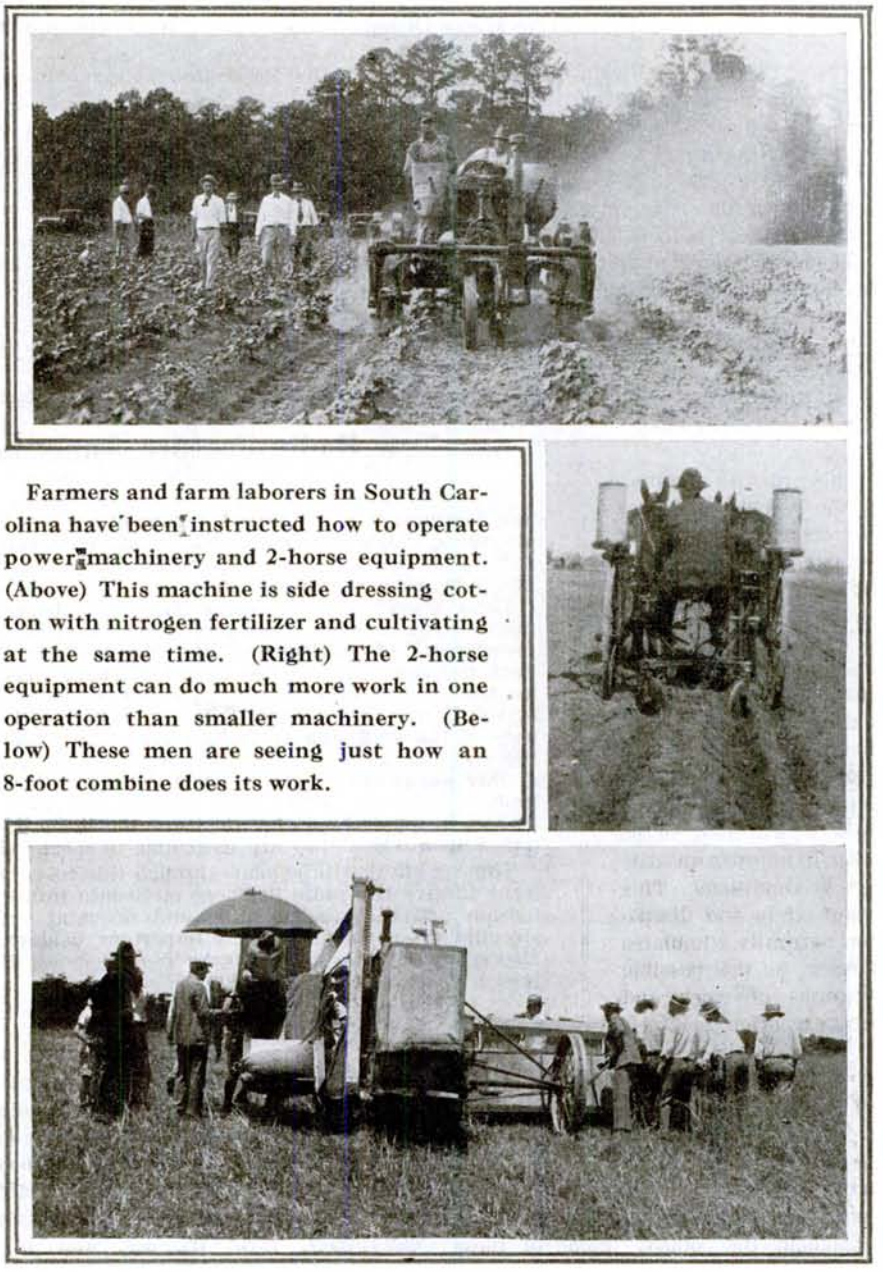
The extension agricultural engineer and the county agricultural agents visit and assist these farmers in adjusting and operating their equipment. In most instances the assistance of branch houses and local dealers of farm machinery has been obtained also. The specialist prepares circular letters giving detailed instructions on how to make adjustments and operate the equipment in the most efficient manner and sends these letters to the farmers, dealers, and county agricultural agents.

For three seasons a "power-farming tour" has been been conducted lasting from one to three days, during which time county agricultural agents and interested farmers have joined the motorcade at points along the way to see ordinary farm labor operating the equipment under actual field conditions and to visit result demonstrations. This is found more effective than a staged demonstration at which machinery service men operate the equipment.

Numerous 1-day method demonstrations have been held with the 2-horse cultivators and other 2-horse machinery. The single plows in these demonstrations use the same types of sweeps and shovels that are used on cultivators. This shows that one man can double the amount of his work and usually improve its quality.

Most of the county agricultural agents have attended 1-week schools at the State college to familiarize themselves with the operation and adjustment of the more common machines used in the State so that they can assist farmers with their machinery problems. A school was held for the machinery dealers too, because it is usually the local dealer that the farmer goes to when he has machinery troubles.

Mr. McAlister submits the following figures to show the practicability of this work in South Carolina. In 1930 the yields of cotton lint per acre were as follows: State average 227 pounds; 2-horse machinery demonstrators, 310 pounds; power-farming demonstrators, 317 pounds. The figures on the cost of producing this cotton indicate the economy of using larger machinery. The cost of producing each pound of lint was 13.2 cents for the State average, 8.04 cents for the 2-horse machinery demonstrators, and 7.39 cents for the power-farming demonstrators.



Farmers and farm laborers in South Carolina have been instructed how to operate power machinery and 2-horse equipment. (Above) This machine is side dressing cotton with nitrogen fertilizer and cultivating at the same time. (Right) The 2-horse equipment can do much more work in one operation than smaller machinery. (Below) These men are seeing just how an 8-foot combine does its work.

Building a Long-Time Home-Economics Program

GERTRUDE HUMPHREYS

State Home Demonstration Agent, West Virginia Extension Service

TO THE West Virginia extension worker, program-planning time in the well-organized communities and counties of the State is one of the fascinating and inspiring periods of the year. It is seldom that the extension worker has to suggest projects in which she is particularly interested or that she thinks the club should undertake. It is rather a matter of her helping the women choose wisely, from among their many suggestions, the projects which she thinks they can carry successfully during the year.

This program planning by the people themselves has come about largely through community scoring and country life conference work which have given the farm people an opportunity to visualize their own community with its existing conditions and problems, to study these problems, and to discuss as a group the steps which need to be taken to improve unsatisfactory conditions. This group study and discussion naturally stimulates interest in the possible programs of work and their execution.

New Radio Feature Announced

As secretary of the radio committee of the Land-Grant College Association, I am pleased to announce a new series of radio programs, which will be broadcast from a network of about 50 stations on the fourth Saturday of each month from 12.30 to 1.30 p. m., eastern standard time.

These programs will present important phases of the work that is being done by the Extension Service of the United States Department of Agriculture, and the land-grant institutions. Each program will include about four short talks by outstanding leaders, and in addition a program of music will be played by the United States Army Band. Speakers will include members of the staff and specialists from the Federal Extension Service and the extension services of the several States. County agricultural agents, home demonstration agents, local leaders, and farmers and home makers who have had distinct success in some phase of agriculture and home life will discuss topics upon which they are most able to speak with authority.

Thus an effort will be made through this cooperative arrangement to give the radio listeners up-to-date information on extension activities and results, and acquaint them with the splendid developments in this important field of education.—*Excerpt from radio talk given by T. B. Symons, director, Maryland Extension Service, on July 25.*

County Programs

The county programs usually grow out of the combined suggestions of the representatives from the local communities and are based upon the needs which seem to these leaders to be most common throughout the county. Some of these have been consciously planned to extend over a period of more than one year, and others for the immediate future only.

Directly in line with our former method of program making, but more intensified and on a county-wide basis, a practical method of setting the stage for the local people to work out their own long-time county-wide program was demonstrated in Randolph County about a year ago. This took the form of a farm and home economic conference under the direction of Eugene Merritt, extension economist, and Miss Florence L. Hall, extension home economist, both of the Office of Cooperative Extension Work, United States Department of Agriculture.

Preceding the conference a county-wide survey was made of farm and home conditions by the farm men and women themselves with the guidance of the county agricultural agent and the home demonstration agent. The women, through their farm women's clubs, secured records which pictured the living conditions of 171 homes throughout the county. This information was grouped under four main headings, namely, foods, clothing, home furnishings and equipment, and home conditions, including health, recreation, education, religion, and the relation of the family pocketbook to home living. The men secured records from 130 farms in regard to farm enterprises, farm incomes, and farm expenditures.

The summarized data from this survey revealed to the people of the county some rather surprising facts which had not been brought to their attention previously—facts not only about their own local communities, but about the county as a whole. The 2-day farm and home economic conference at which these data were presented was attended by men and women from all parts of the county—from the rugged mountain areas and from the fertile valleys. After getting the whole picture of both farm and home conditions, the group was divided into committees to discuss the problems, and to work out recommendations for the solution of these problems. The committees worked during the afternoon of the first day and the forenoon of the second day. They then assembled at the final session for the presentation and adoption of the recommendations.

After spending much time during the course of several weeks in collecting these data, working on committees to study the information intensively, and then hearing the recommendations of all the committees giving a composite picture of the problems and suggested programs for both the farm and the home, these people could not help being more interested than ever before in putting the program into action and in planning it far into the future.

This conference resulted in a realization on the part of the people (1) that the majority of the homes in the county have not reached a fully satisfactory standard of living, (2) that the farm incomes are inadequate to provide for this standard toward which they are striving, and (3) that there is need for a better mode of living, as for instance regarding health, recreation, education, the church and other inter-related phases of the community and the home.

Objectives

With these needs in mind the following objectives were agreed on as the basis for the home demonstration program of work for several years hence:

1. To help increase the farm income to meet the desired standard of living and to budget carefully the receipts and expenditures of the home and the farm so as to include all the phases which help make farm life more satisfying.
2. To provide such living conditions in the farm home as will give the best opportunity possible for the physical, social, mental, and moral development of the children.
3. To provide beyond the limits of the home such training and education for the children as will enable them to earn a good living, and to cope successfully with the problems of life.

4. To maintain a clothing standard for the farm family which will permit them to retain their self-respect with the groups with whom they associate.
5. To have available and use daily in each farm home such amounts of milk, butter, eggs, vegetables, fruits, cereals, and other foods as are recommended by nutritionists as being necessary for the maintenance of good health.

As the first step in carrying out this program of work the home demonstration plan of work for the county for 1931 is as follows:

1. Conduct a living-room contest with recognition for the contestants who make the most improvement with the least expenditure of money.
2. Conduct a county garden contest including at least one demonstration garden in each community.
3. Hold a public demonstration in the canning of meats in each community.
4. Sponsor health clinics in five communities.
5. Sponsor two home industries schools:
   (*a*) Winter meeting—baked goods and cottage cheese production.
   (*b*) Spring meeting — canning, jelly, and blackberry jam making.
6. Help develop the 4-H club program through participation in the club meetings, camps, exhibits and other activities; provide capable adult leadership for the local clubs; give the club members the encouragement necessary for the successful completion of their projects.
7. Encourage the recreation and art league by taking part in its activities.
8. Make music a part of each community and county meeting.
9. Encourage at least four women in each community to keep home accounts.

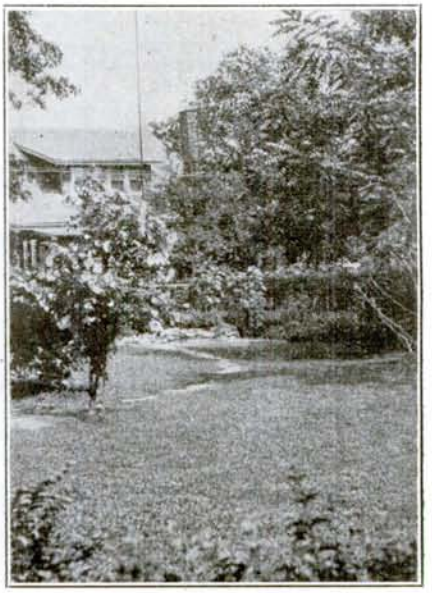
This farm and home economic conference meant a great deal of work for the home demonstration agent and the county agent, but it was time and effort profitably spent because of the interest created among the farm men and women of the county in working out a long-time program which these people themselves recognize as a product of their own efforts and thought.

A Telephone Club

Wasco County, Oreg., has a 4-H telephone club. This club is the Maupin Canning Club. It is not organized for the purpose of making telephones, but twice a week the meetings are held over the local telephone line.

The president gives their designated ring which calls the meeting to order. After roll call, talks and discussions regarding their canning work are given for about 15 minutes, and then the members temporarily adjourn to start their canning work. While the jars are processing, the president calls the club together for further discussion. This club at other times meets at the homes of the different members.

Beautifying Farm Homes in Missouri



A Missouri farm home before and after improvement

ADDING attractiveness to farm life through improving the setting of the farm homes was undertaken in Missouri seven years ago, and since that time there has been a steady growth in accomplishments along this line.

In 1930 the grounds of 3,997 homes were beautified in the 14 counties that made a complete report on the work done. In accomplishing these results there were 11,154 improved practices adopted. These ranged from the more expensive improvements, such as the building of 48 new homes, the remodeling of 87 and the painting of 254, the building of 155 outbuildings, the repairing of 382 and the painting of 490, of which 244 were painted the same color as the dwelling, to the less expensive improvements, such as the building of 276 new fences, the repairing of 327 fences, and the clearing of rubbish from 2,325 yards.

There were 117 homes reporting the grading and 205 the seeding of yards, while 1,078 kept them mowed. At 231 homes families planted shade trees, 287 planted shrubs to screen unsightly objects, 416 planted shrubs along borders, and 892 made a permanent foundation planting. There were 815 homes that increased their perennial and 1,657 their annual plantings.

Coops, clotheslines, flower beds, and scattered shrubs were moved to new locations in order that the appearance of farm homes might be improved. Driveways were made at 51 homes and walks laid at 79.

The greatest results in home beautification are not those that can be seen by the passing tourist, such as well-painted dwellings and outbuildings painted the same color; adequate shade provided by well-shaped, long-lived trees; smooth, well-kept lawns; attractive foundation, border, and corner plantings; and all equipment for carrying on the home work relegated to the back yard where it is well screened, but in the added self-respect, in the growing pride of home that is shown by the families that have beautified the home grounds in the appreciation of the fact that at least a part of the back yard can be made into an ideal outdoor living room where sunlight and fresh air add to the happiness of the farm family. These results, the ones most worth while, can only be felt, not seen.

At the 4-H club leaders' training school in Utah this year a class for 4-H club advisers considered (1) the objectives of 4-H club work, (2) proper procedure in organizing clubs, (3) methods of acquainting leaders with the scope of the 4-H club program, (4) record keeping, (5) contests, (6) the relationship between the extension service and cooperative organizations, and (7) 4-H club standards.

An outlook banquet for the farmers of Stanley County, S. Dak., has been given for two years by the business men of Fort Pierre, the county seat, reports S. H. Reck, jr., extension editor in South Dakota.

Extension Service Review

Issued monthly by the EXTENSION SERVICE of the United States Department of Agriculture Washington, D. C.

The Extension Service Review is published in the interests of workers and cooperators of the Department of Agriculture engaged in extension activities. It contains official statements and other information necessary to the performance of their duties and is issued free to them by law. Others may obtain copies of the Review from the Superintendent of Documents, Government Printing Office, Washington, D. C., 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, Extension Work*
C. B. SMITH, *Chief, Office of Cooperative Extention Work*
J. W. HISCOX, *Chief, Office of Exhibits*
RAYMOND EVANS, *Chief, Office of Motion Pictures*

REUBEN BRIGHAM, *Editor*

SEPTEMBER, 1931

The Job Was Done

"We are there!" announces B. H. Crocheron in this issue of the REVIEW regarding the successful conclusion of California's 9-year campaign from 1922 to 1931 to raise the average butterfat production of her dairy cows from 182 pounds to 265 pounds per year.

When the campaign was projected in 1922, Director Crocheron was confident its objective could be gained, if enough people worked hard enough and long enough at it. It could be done.

To reach the objective sought, it was realized that the great mass of dairy producers in the State must be reached and influenced to adopt the proper methods. So with the opening of the campaign the extension organization of California was set to work at the task and held to it until the result was achieved. Every county agricultural agent and assistant agent was detailed to the duty of forwarding the campaign. Every day, year in and year out, agents and specialists in the State of California helped farmers to get good bulls, were talking with farmers about their feeding problems, and were advising which cows to weed out.

What happened? The mass of dairy producers moved and moved rapidly. By 1930 there were nearly 100,000 dairy cows on test for production. In 1930, too, there were nearly 50,000,000 more pounds of butterfat produced by California's cows than in 1920. This was an increase of $25,000,000 in the value of California's dairy products—the interest at 5 per cent on an investment of $500,000,000. And from an industry in the dumps the dairy industry became in nine short years the balance wheel in California's rural economy.

A job was set for the California extension service—a job that, if successful, meant adding millions of dollars to California's annual agricultural income. Enough people were put to work to do the job. They worked hard and long to get the desired result. The job was done.

Take Them Along

How to get more in return for the time and mileage spent on the farm visit is always a problem with the ambitious agent. We talked with an agent the other day who said, "When I visit a number of demonstrations in a community, I get the demonstrators, when I can arrange it, to go on with me to the other farms I visit. I often make such a trip to a community a sort of informal tour. I find my farmers enjoy visiting each other in this way. Then, too, I get to know them better and, afterward, they pass the word around as to what is being accomplished with extension assistance in their community."

Following such a plan calls for more thought and planning than just making up a list of farms and visiting them, but it is thought and time well spent. The more active each demonstrator in a community is, the more he knows about the local results of extension work from personal experience and observation, the wider and more effective becomes the influence of the agent in that community.

A Wider World

Two young farm people, Mary Todd, of Georgia, and Andy Colebank, of Tennessee, will come to Washington October 1 to study the organization and work of the United States Department of Agriculture and of other departments of the Government. They are the fortunate winners of two national scholarships offered by the Payne Foundation of New York to the two former 4-H club members in the United States who were regarded as outstanding in scholarship, qualities of cooperation and leadership, and club achievement. One of the requisites for eligibility for competition in the contest was graduation from an accredited college. Consequently the systematic observations they will make and the instruction they will receive during the present school year will be in the nature of an especially conducted postgraduate course.

It will be the duty of Miss Todd and of Mr. Colebank not only to study the organization of the department and its activities but to bring together the facts developed for publication. It is hoped that in this way there may be brought to the wide attention of 4-H club members and the communities in which they live a better understanding of the significance of government to its rural citizenship. It is hoped, too, that this effort may be the beginning of a wider knowledge of what science, financed and encouraged by government, is doing for agriculture and for the rural home in the United States.

With the eagerness for knowledge and fresh enthusiasm which Miss Todd and Mr. Colebank bring to their task it seems certain that they will find in the department not only useful facts and improved methods but something of the inspiration and romance of a great nation-wide governmental service, dedicated to the improvement of agriculture and the rural home.

There are many activities in the department, now little known and understood, that Mary Todd and Andy Colebank through their endeavors can discover and make public knowledge. They will open to 4-H club members and to their parents, friends, and neighbors the windows to a wider world.

Questions and Answers

The REVIEW from time to time will publish a series of questions and answers. The questions come directly from the field and are points of discussion with our field workers. The answers will represent the best thought we can obtain from specialists in the work represented by the question.

Q. What can county agricultural agents do to bring about more cooperation with veterinarians?

A. Some county agricultural agents have made an arrangement with local veterinarians whereby the offices of the veterinarians become free clinics for the identification of poultry diseases. This plan enlarges the acquaintanceship of veterinarians among farm people. It also relieves county agents of sending many specimens to the State agricultural college for diagnosis.

Q. What steps are taken by the Federal extension office to determine whether the plans of work submitted are followed?

A. This is determined by a review of the reports of specialists and county extension agents at the end of the year and by conferences between the State extension directors, State extension specialists, and the field agents of the Office of Cooperative Extension Work.

National Cooperative Extension Workers' Association

NAT T. FRAME

President, National Cooperative Extension Workers Association

THAT "extension workers are being confronted constantly with new problems, including many and very complex relationships, that can not be solved out of the experiences of other educators," was the unanimous report of a special committee of the National County Agents Association. Recognition of this fact by extension workers has prompted the organization of State associations of extension workers, a national county agents' association, an extension section of the American Home Economics Association, a national camp and conference for 4-H club leaders, and a series of conferences on a national extension organization at Urbana, Ill., in 1928, at Houston, Tex., in 1929, and at St. Louis, Mo., in 1930. These conferences culminated in the organization at Chicago, December, 1930, of the National Cooperative Extension Workers' Association.

These various organized activities of extension workers are in no way antagonistic to or in opposition to research workers, resident teachers, or workers in other divisions of the institutions to which the extension workers belong. But just as teachers of science, leaders in religious education, vocational educators, and other groups have found mutual benefits through organizations within their particular fields, so extension workers have come to realize similar possibilities from extension workers' organizations. In our field the need most freely expressed, during the conferences leading up to the national organization, is that of bringing together into State associations, and then into a national association, all types of extension workers for closer relationships and better articulation of activities in mutual self-help and attainment of extension objectives.

The extension representatives who formulated the constitution for the national association at Chicago last December included Federal field agents, State directors, State leaders of county agents, State leaders of home demonstration agents, State club leaders, agricultural subject-matter specialists, home-economics specialists, county agricultural agents, county home demonstration agents, and county club agents. A considerable number of those who voted to establish the association have been for 10 years or more in the service and are active, enthusiastic members of Epsilon Sigma Phi, although the large majority have not been in the service long enough to be members of the fraternity.

These extension workers from 30 States adopted a constitution and fixed the next annual meeting for Friday, December 4, 1931, at the Sherman Hotel, Chicago. The executive committee for the year is:

President.—Nat T. Frame, director, Morgantown, W. Va.

Vice president.—R. L. Olds, county agent, Kalamazoo, Mich.

Secretary-treasurer.—Mabel E. Hiller, county home demonstration agent, Clarksburg, W. Va.

Western region.—C. W. Creel, director. Reno, Nev.

Central.—Florence Carvin, home demonstration agent, Independence, Mo.

Southern.—Judd Brooks, county agricultural agent, Jackson, Tenn.

Eastern.—George L. Farley, State club leader, Amherst, Mass.

Organizations of extension workers in the States of Louisiana, Massachusetts, Michigan, Missouri, Nebraska, Nevada, New Jersey, West Virginia, and Wyoming have voted to affiliate in this national organization and to be represented at Chicago. In many other States the proposition will come up during conferences of extension workers to be held during the late summer and fall, so that every indication points to 24 or more States officially represented at the 1931 meeting.

These representatives from the various States will then act upon a number of important propositions to come before the association from committees now at work including:

Committee on membership service.—(1) Securing retirement privileges by making a study of the Federal and State retirement acts and taking steps to have the best in these acts apply to extension field work. (2) Gaining the full benefit of the compensation act for extension field workers. (3) Securing fair reimbursement for necessary and profitable travel.

Committee on public relations.—Cooperating with the committee of Epsilon Sigma Phi and with the committee on extension organization and policy of the Land-Grant College Association in preparing definite bills covering Federal retirement provisions and to meet situations in different States.

Committee on emergency relief.—Helps already rendered.

Committee on professional status.—Standards for professional training in extension work, professional recognition for extension workers, sabbatical leave, and a code of ethics for professional workers.

Committee on official magazine.—Whether there is need for a new periodical or what is the most effective cooperation we can give magazines already featuring or willing to feature extension work.

Committee on participation in the George Washington Bicentennial, 1932.—Plans for a pilgrimage of extension workers from all parts of the country to Mount Vernon, including a week of sight-seeing, official visitation, entertainment, and organization business meetings in Washington.

Committee on reorganization plans.—Carrying out the provisions of the present constitution "when State organizations from 24 States have affiliated, it shall be the duty of the president to place before the association the question of reorganization."

Individual Membership

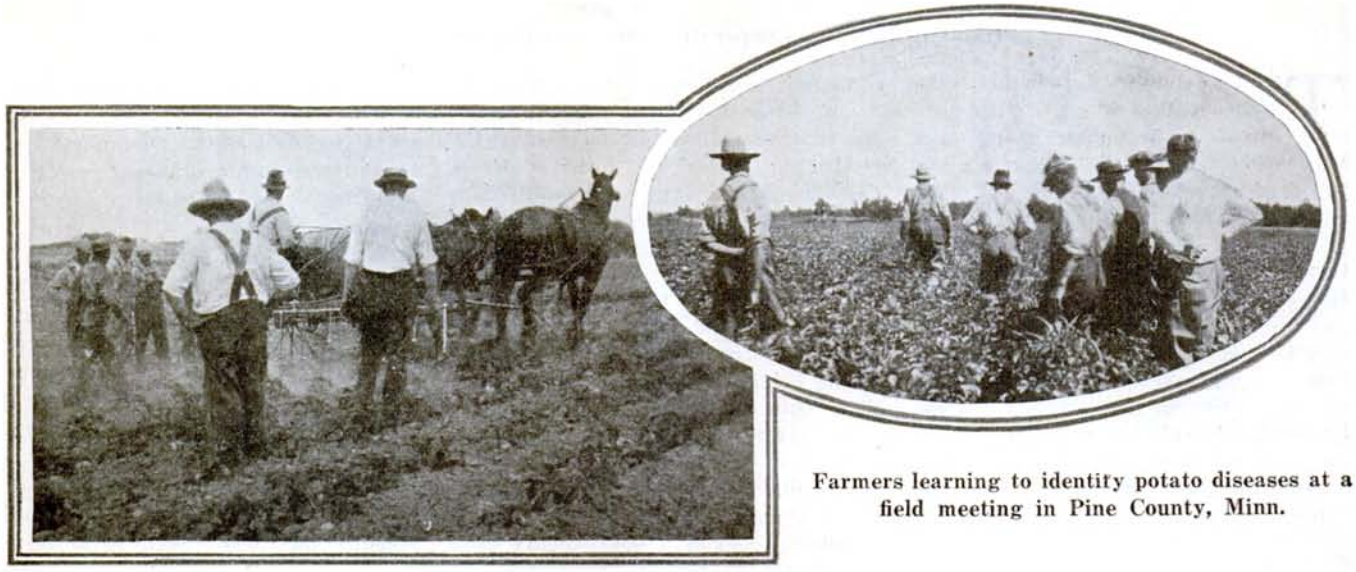
Since the present constitution provided for individual membership, it is expected that extension workers who plan to be in Chicago, December 4, in connection with the National Club Congress, the International Exposition, or other meetings will arrange their schedule so as to sit in the National Extension Workers Association meetings on December 4, whether the extension workers' organization in their State has found the opportunity to affiliate or not.

Educational motion pictures of the United States Department of Agriculture were broadcast nightly in half tone by television over station W3XK in Washington, D. C., from March 16 through July 11. Good reception was reported in Connecticut, Georgia, Kansas, Massachusetts, Michigan, Minnesota, New York, Ohio, and neighboring States.

Women in Alabama report that through keeping home accounts they have been able to make adjustments in their household management which have enabled them to purchase conveniences such as automatic refrigerators and electric ranges.

Local leaders have been trained in the use of and supplied with film-strip projectors for use at local meetings by G. H. Iftner, Effingham County (Ill.) agricultural agent.

Minnesota Spray Rings Control Potato Blight



Farmers learning to identify potato diseases at a field meeting in Pine County, Minn.

THE operation of spray rings for the collective use of high-pressure spraying machines in applying Bordeaux mixture has solved the problem of late blight on potatoes in Pine County, Minn., during the past three years, reports Harold L. Harris, extension editor in Minnesota. This work was introduced and is being conducted by W. F. Hammargren, Pine County agricultural agent, and R. C. Rose, Minnesota extension plant pathologist.

The organization of the first spray ring in 1928 was preceded by three years in which the potato growers in Pine County had suffered big losses from late blight. The farmers hesitated to follow the recommended practice of applying Bordeaux mixture with a high-pressure sprayer because of the high cost of the equipment. The encouraging results obtained with the ordinary low-pressure sprayers and the losses on untreated potatoes finally made a number of farmers ready to try the high-pressure sprayer plan.

The first year (1928) two spray rings were organized by growers having a total of more than 200 acres of potatoes. In 1930, 16 machines were operated in the county by 7 spray rings and a number of individuals. In addition to holding series of potato disease control meetings, the extension workers have been instrumental in organizing the spray rings by interesting two or three of the larger growers of a community and getting them to purchase a machine for their own spraying and their neighbors' spraying. The sprayers used in the county are 100-gallon high-pressure machines operated by horses.

The rings are all informal organizations. Farmers and hardware stores have purchased the machines and rent them out at a fixed cost per hour or per acre, with or without power. Each grower furnishes his own materials. Sometimes the rental is $1 an hour to farmers furnishing their own teams, which makes the spraying cost less than 60 cents an acre.

The number of men in the rings ranges from 2 to 17, with an average of 10. Mr. Hammargren recommends that the total acreage for each machine should not exceed 75 acres and says that this may be too much if there are more than 12 or 15 members in the ring. He strongly advocates that the operation and care of the sprayer should be left to a single individual. The sprayers are also used for insect control.

On one farm three sprayings increased the yield of potatoes from 240 bushels an acre on an unsprayed plot to 419 bushels on a sprayed plot

Agricultural Economics in Russia

In 1861 the Russian Government founded its first agricultural high school, according to an article in the Journal of Farm Economics for April, 1930, by A. Tchayanov of the Scientific Institute of Agricultural Economics of the Union of Socialist Soviet Republics.

At the beginning of the twentieth century, Professor Tchayanov reports, the organs of local self-government in Russia undertook a number of sweeping measures for the improvement of peasant farming. By 1914 the number of "zemsky (county) agriculturists," so called, had risen to 9,000 and they were stimulating the adoption of improved methods and the reorganization of peasant farms. At this time over 3,000,000 peasant farms belonged to agricultural cooperatives which were spread all over rural Russia. Although the war and revolution slackened the progress of the science of farm management, Professor Tchayanov says that farm management has taken on new energy under the influence of the programs of reorganization which have been promulgated by the Union of Socialist Soviet Republics.

The methods employed to teach subjects in agriculture and agricultural economics vary considerably. In Moscow the following subjects are given in the order named over a period of four or five years: Political science, agricultural economics, farm management and taxation, seminar in detailed organization plans for actual farms, and practical work for a year on some large farm. The students are also required to write research reports on problems in farm management and after graduating must present annual reports of their farm-management experience.

Seventy rural bankers in Ohio called the attention of 80,000 families to the Ohio Farmers' Week this year by paying for the publication in their local newspapers of advertisements which the State university prepared on the farmers' week.

Schools and Tours Aid Ohio Cattle Feeders

AS A RESULT of extension schools and tours in Ohio, feeders have learned to study markets and prices, to use more economical rations for a reduction in the costs of grains, and to appraise their own cattle. Consequently they have greater self-confidence and success in dealing with buyers, reports J. E. McClintock, extension editor in Ohio. Lighter-weight cattle and calves are being fed now, feeding practices include an increased use of protein supplements and corn silage, and the farmers are giving more thought to the cost of gains. The farmers are also more open and frank in discussing their methods and experience with neighboring feeders.

Getting Records

In September or October this project is started by the county agricultural agents, usually accompanied by L. P. McCann, beef-cattle specialist in Ohio, visiting cattle feeders and getting from 6 to 20 men to keep a record of their feeding operations during the winter. To make the project more valuable, an attempt is made to get records on cattle of different types, quality, sex, and weight, as well as on varying feeding methods.

No blank record books or forms are provided except the form upon which the records will be summarized finally. This tells the farmer what information is wanted, but he keeps the record in his own individual manner. Some extension workers may question the possible success of such a method for obtaining any records at all. In reply Mr. McCann and the county agricultural agents say "It works in Ohio."

Cattle-Feeder Schools

Three cattle-feeder schools are held during the year and each one is devoted to a separate phase of the business: First, general problems of the cattle feeder; second, feeds and rations; and third, marketing. All sessions start promptly at a definite time and are punctually dismissed an hour and a half later, so that those attending will not be detained. Although ample time is allowed for questions and open discussion, anyone may remain after adjournment for further questions and discussion. Both the county agricultural agents and the specialist assume responsibility for part of the subject matter discussed.

In some counties the three meetings are held on successive evenings; in others they are held in August or September, November or December, and February or March, respectively. In nearly every county the attendance has increased with each succeeding meeting.

Arranging the Tours

The dates for the tours are determined by the time at which most of the cattle within the county will be ready for market, usually between the middle of March and middle of April. The specialist supplies the farm and local papers with a complete outline of the tours in the State, and the county agricultural agents send out circular letters two or three weeks in advance of the tour, and sometimes a post-card reminder a few days before the tour.

In most counties, at least four days prior to the tour, the specialist and the agents personally collect each feeder's summary and the weight of his cattle at that time. Every person attending the tour is supplied with a mimeographed copy of the final calculations. Feeders from adjoining counties have been known to save these records and refer to them two years after the tour.

The county agricultural agent takes charge at the tour and introduces the owner at each feed lot. He tells the story of his cattle—where he bought them, their cost, his methods of feeding and management, and when and where he plans to market them. Usually the agent and the specialist add a few words of explanation, and then the visitors are given an opportunity to ask questions.

In the meantime cattle salesmen have been appraising the cattle. They individually tell the group approximately what these cattle would bring on their markets that day.

It has been found a half-day tour including three or four feed lots is more popular and effective than an all-day tour including six or eight feed lots. In 1930 summarizations and comments on the tours were given in seven counties at luncheons or dinners attended by those on the tours.

Water Systems Installed in North Dakota Homes

WATER and sewage systems have been installed or are being installed in more than 100 homes in North Dakota as a result of extension work along this line conducted by Jessie Marion, home management specialist, C. L. Hamilton, agricultural engineer, and the county agricultural and home demonstration agents.

Keener interest is stimulated and more effective information and advice on the technical planning of the systems is rendered by the home management and agricultural engineering specialists conducting the work jointly. The home management specialist arouses interest by discussing the subject at a regular home demonstration project meeting. The agricultural engineer then holds educational meetings in the same communities on the cost of installing the systems, the conditions under which they are practical, and the value of the improvements in terms of comfort and convenience. Charts and illustrations are used to give a clear explanation of the various water systems. Emphasis is placed on a complete system as the ultimate goal, but it is explained that units of the equipment may be added gradually as financial circumstances permit.

When farm men and women exhibit a real interest in the project, the agricultural engineer and the county home demonstration or agricultural agents hold an individual conference with them or visit them to consider any special problems on installing water or sewage systems in their homes.

Installed systems have been used as demonstrations so effectively that other farms have copied these systems without further assistance. While such demonstrations necessitate a great deal of planning, they give the agricultural engineer an opportunity to familiarize the county extension agents with the details of the work so that the project can be carried on in their counties without undue assistance from the specialist.

The project is carried only in the clubs requesting it, and the county extension agents and the specialists develop the work systematically as the interest of the people crystallizes. The best results have been obtained in counties carrying the kitchen-improvement project.

The extension service in Iowa has issued a mimeographed book which shows on maps of Iowa just what counties reported work on each project during 1930. Underneath the map a statistical summary is given of the work in the entire State on that project during 1930. There is a separate map sheet for each project.

News-Writing and Circular-Letter Contest

INDIANA county agricultural agents participated in a state-wide news-writing and circular-letter contest, covering their work during 1930, which culminated in an exhibit of the prize-winning stories and letters at the annual conference of extension workers held at Purdue University last fall, according to T. R. Johnston, Indiana extension editor.

There were three classes for the news-writing contest: For the best single newspaper story used in local papers during the year the winner received a ribbon; for the best collection of between 5 and 10 newspaper stories written by the county agent and published in local weeklies during the year the winner received a cup; and for the best collection of between 5 and 10 newspaper stories written by the county agent and published in local dailies during the year the winner received a cup. To emphasize the value of continuous publicity throughout the year the cups were awarded for series of news stories rather than for a single story.

There were four classes for the circular-letter contest: The best individual mimeographed letter, the best series of mimeographed letters, the best individual printed letter, and the best series of printed letters.

All entries had to reach the university at least five days before the opening of the conference to give the judges an opportunity of making the placings. After each letter had been properly labeled and mounted on panels, all the entries were placed in a room adjoining the main conference room where the county agents, specialists, and others interested in the letters might study them between the regular sessions of the conference.

This display also included sets of circular letters which won in contests sponsored by the American Association of Agricultural College Editors, the Minnesota Extension Service, and the Wisconsin Extension Service, as well as a set of particularly effective letters which H. W. Gilbertson, of the Office of Co-operative Extension Work, had collected.

As a result of the contest and displays, the better ideas from both stories and letters were set forth and the agents gained certain information or inspiration from a study of the exhibits, according to Mr. Johnston.

Home Accounts Kept in Ohio

AS A result of keeping household accounts, home makers in Ohio are changing their spending practices. They are using more farm products, taking an interest in plans for future spending, and obtaining increased satisfaction from their income. These women now derive a broader and fuller appreciation of country life and its advantages, stimulate the interest of other members of their household in account keeping, and study their own economic condition. They are also making a beginning toward studying the farm standard of living, reports Thelma Beall, extension home management specialist in Ohio.

The women say that the home-account project shows them exactly where the money is going, helps them realize what things are really needed and what things are merely desired, and assists them to detect leaks in their spending so that they can stop them by better buying, making or remaking expensive clothing, and arranging for the farm to furnish the home with as much food and fuel as possible.

The home account book used in Ohio is divided into two sections, one for cash expended and the other for farm products used. The first is printed on white paper and the second on yellow paper, so that although they are in the same book, it is easy to distinguish between them and get the entries in the right place.

The value of the farm products used is estimated at the price of the produce that would be obtained if it were sold at the farm. Price lists are sent to the cooperators by the county extension agents two or three times a year as a guide in determining these figures.

Families who kept records were selected by the county extension agents on the basis of the home maker's interest in household accounts and her willingness and ability to keep and report a satisfactory record.

Some women start keeping their accounts on March 1 so that their records will cover the same period of time as the farm accounts. Other women prefer to start with the calendar year so that they can become accustomed to recording expenditures before the spring rush of work.

Farm household account keeping in Ohio was started as a part of the extension program in 1924 to show the value of keeping accounts as a guide to family expenditures and to obtain more information about farm conditions so that extension projects could be planned on a basis of the needs and desires of farm families. Miss Beall reports that the home furnishings specialist has used the facts from these studies as a guide in planning her project and that the horticulture, nutrition, and home management specialists have worked out a co-operative project for better gardens which will furnish an adequate supply of vegetables for the entire family throughout the year.

From the beginning the household accounts project has been conducted co-operatively by the rural economics and home economics departments of the agricultural experiment station and the home economics department of the State extension service. The experiment station records and summarizes the reports and has made detailed studies of food and operating expenses of farm families.

The home management specialist meets with the women at the beginning of the year to instruct them in the use of the household accounts book and at the end of the year to summarize, study, and compare the records. She also writes letters to the women and agents when additional information is needed or corrections are made.

The extension nutrition, clothing, and health specialists send timely letters to the home makers on their special projects, and the farm management specialists send in the names of the wives of farm account keepers who are interested in keeping home accounts. The farm accounts show how the income is made and the household accounts show how it is spent. In some counties arrangements are made to have at the same time the summary schools for the men keeping farm accounts and the women keeping home accounts.

Leo Geeting, of Montana, produced 752 bushels of potatoes on an acre of land.

In commenting on this record, E. E. Isaac, extension horticulturist in Montana, says that Mr. Geeting's profit of $443.15 indicates that, even though their State is a long way from terminal markets, a grower still can make money by cutting his production costs through larger yields.

Mr. Geeting attributes his success to the fact that he used only certified seed, prepared his land thoroughly, irrigated early, cultivated carefully, and properly timed all of these operations.

Beef-Calf Shows and Sales Combined in Tennessee

THE beef-cattle shows and sales projects in Tennessee is interesting small livestock farmers and 4-H club members in the finishing of cattle according to the best methods of management and feeding, and, more important, it is providing them with a satisfactory market for less-than-carload lots of cattle. At the last sale at the State fair grounds at Nashville the calves were auctioned to 14 packer buyers and butchers for an average of $10.58 per hundredweight, or approximately $80 a head.

The project also has taught the farmers that feeding livestock is profitable and that it will increase the farm income. These results were the objectives of the extension service in starting this project in 1925.

Under the present arrangements any 4-H club member, vocational agricultural student, or adult farmer may exhibit and sell as many beef calves at the annual show and sale as he wants to, provided he owns and feeds them himself and makes his entries prior to June 15.

The State fair association and the State department of agriculture provided the prize money in 1930. In addition to awards for individual calves, prizes are given for the best county groups of eight 4-H club calves, not more than two of which can be owned by one individual. The eight calves in the above illustration gave first place to Montgomery County last year.

The county agricultural agents visit the members at intervals to assist them with their project, and L. A. Richardson, the animal husbandry specialist, endeavors to visit each cooperator at least once during the season with the agent. The specialist also prepares letters of timely instruction on feeding and management, which are sent to each contestant under the county agricultural agent's signature.

The following table shows how extensively the boys and farmers have adopted the project:

Beef-calf shows and sales in Tennessee

	1925	1926	1927	1928	1929	1930
Number boys exhibiting		36	65	82	162	279
Number farmers exhibiting	6	8	19	37	85	85
Total number people exhibiting	6	44	84	119	247	364
Number counties represented	2	7	8	12	22	34
Number of cattle exhibited and sold	12	74	165	278	502	613
Total sale price for the cattle	$994	$5,552	$16,778	$26,344	$47,793	$49,008
Total prizes awarded	$250	$1,199	$1,333	$1,862	$3,084	$2,535

A club meeting appointment card has been worked up by Dorothea M. Hoxie, club agent in Bristol and Providence Counties, R. I., according to Robert G. Foster, of the Office of Cooperative Extension Work. Miss Hoxie gives a copy of this card to the different groups in her counties so that when they are making out their local club plans of work for the year they may indicate on this card the special assistance desired from the agent during the year. The card asks for the name of the club, the project being undertaken, the time and place of the meetings, and the number of meetings each month.

Doctor Foster believes that this system is placing the responsibility for local club planning more and more where it belongs—with the local club and the local leader.

Fellowships Awarded to 4-H Club Members

MISS Mary Todd, of Georgia, and Mr. Andy Colebank, of Tennessee, have been awarded $1,000 fellowships by the Payne Fund of New York City. They will come to Washington in September to study for nine months and will devote 50 per cent of their time to a study of the governmental activities in the Department of Agriculture and other Government departments, 20 per cent to academic study, and 30 per cent to some specific research problem.

A committee appointed by the United States Department of Agriculture selected them for this honor for their high scholastic record, excellence in 4-H club work, interest in agricultural and home economics subjects, and promise of leadership in these fields.

The qualifications required of the candidates for this fellowship are (1) a college degree in agriculture or home economics; (2) five years' participation in 4-H club work with interest continuing through college; (3) a definite interest in extension work in agriculture or home economics, and (4) not over 25 years of age. There is also a limitation that no one section of the country shall be awarded the same fellowship in two successive years.

Miss Todd was graduated from the University of Georgia and Mr. Colebank from the University of Tennessee this year.

In announcing the award to the delegates at the fifth annual 4-H club camp, S. Howard Evans, of the Payne Fund, said:

These young people will look carefully into the many departmental activities. From time to time they will be reporting to you on what they find. They will be keeping before you the larger vision of the field wherein your interest lies. They will be your window to a wider world.

A Questionnaire that Stimulates Local Leaders

Questionnaires filled in regularly by local 4-H club leaders have stimulated and maintained the interest of the leaders in their work, reports Dorothea M. Hoxie, county club agent for Bristol and Providence Counties, R. I. The summary which is made from the individual replies shows what is going on in the successful clubs.

The questionnaires are used as the basis for reports at the county-wide meetings of the local leaders and serve as a means of getting new ideas from each club. They enable the leaders who are unable to attend the meetings to send in their reports and ideas and to receive a summary of the experience and ideas of the other leaders. The leaders feel that they will be surer to report all of the new developments in their work if a questionnaire is sent to them at regular intervals.

There are 11 questions which the leaders voluntarily fill out. Some of the questions are: "How have you taught your club members responsibility either for their share in the club program or for their own project?" "What have the members taught you?" "Have you any original way of earning money or have you had especial success with some of the tried schemes?" "Will you not write here two or three questions that are puzzling you and on which you would appreciate the experience of another leader?"

Group Insurance

All men and women working under the supervision of the Office of Cooperative Extension Work who meet reasonable health requirements are eligible to the benefits of group health and accident insurance under arrangements recently made by the board of directors of the department's beneficial and relief association. This insurance is being handled under a contract with the National Casualty Co., of Detroit, Mich., which was given an "A–1" rating in Bests' 1930 report of insurance companies.

The plan adopted provides indemnities for disability from illness or accident ranging from $10 to $50 a week, beginning on the fifteenth day of disability and continuing as long as disability exists, not exceeding a total of 52 weeks. The positions have been divided into two groups: A, nonhazardous occupations; and B, hazardous occupations. The cost of the insurance for Group A employees ranges from $3.40 semiannually, for a weekly indemnity of $10, to $17 semiannually, for a weekly indemnity of $50. The cost of Group B ranges from $4.74 to $23.70 semiannually.

For an additional premium, the insurance will pay a cash indemnity in case of accidental death or dismemberment. This costs $1.56 for class A and $2.28 for class B a year for each $1,000 of indemnity, but any one individual may not subscribe for more than $5,000.

Premiums are payable semiannually or annually directly to the National Casualty Co., which will handle directly all claims. However, the department beneficial and relief association will, in case of any dispute, take action to protect the employee's interest.

Further information may be obtained by addressing the National Casualty Co., 1100 Barr Building, Washington, D. C.

Transplanting Trees

Protecting roots from drying out by leaving at least a square foot of dirt around them and wrapping them with burlap is the keynote to the successful removal of trees, according to W. O. Edmondson, extension forester and horticulturist in Wyoming. This picture was taken at a demonstration on the proper way of transplanting evergreens which was given at a picnic. More than 100 people participated in digging up 100 shrubs and 25 evergreens to be planted around their homes in accordance with plans and specifications given by Mr. Edmondson and C. A. Johnson, Washakie County agricultural agent.

Merchants and Home-Makers Meetings

Meetings of merchants and home makers have been sponsored by Inez LaBossier and Julia E. Brekke, clothing specialists in North Dakota, in the 13 counties in North Dakota which carry a major project in clothing. The purposes of these meetings were (1) to further good will and cooperation between merchants and the extension service; (2) to acquaint merchants with the work which the extension service is doing with home makers and 4-H clubs on the purchasing power and habits of people; and (3) to obtain the merchants' point of view on problems as they concern the consumer.

The county home demonstration agent or agricultural agent sent letters of invitation to all general merchants, managers of stores, and sales people handling clothing in their county and usually talked personally with each merchant to interest him in the idea.

At the meetings the clothing specialist talked briefly on extension work as it functions in the State and county and then gave a demonstration on selecting fabrics. She endeavored to illustrate how subject-matter information is relayed to the club members through the medium of leader training meetings.

The remainder of the evening was devoted to an informal discussion on the problems of the consumer from the viewpoint of both the merchant and the consumer. An effort was made to find out what the merchant wanted his customer to know and to show the merchant what the customer would appreciate from the store in the way of correct information and service.

Old reports and records were used as the basis for a story on 4-H club work in Crawford County, Iowa, in a special edition of the local newspaper published during the county 4-H club fair. The outstanding local leaders, clubs, and club members, with their achievements, were given briefly for each year since 4-H club work was started in the county.

Circular Letters Studied

Studies have been made by the Extension Service of the United States Department of Agriculture in cooperation with the extension service of a large number of States, to determine the relative effectiveness of the various means and agencies employed in carrying out the extension program as well as the cost of conducting each of the means and agencies per unit of quantitative results obtained. These studies show that the effectiveness of circular letters, from the standpoint of practices adopted by farmers and farm women, is relatively low: only 2.33 per cent of the 30,183 changes involved were influenced by this means. However, from the standpoint of expenditures of time and money the circular letter was found to be one of the least expensive of the various methods used.

A study of the contents of 2,553 circular letters taken from the 1929 annual reports of extension workers has just been completed by the division of extension studies and teaching of the Office of Cooperative Extension Work.

Somewhat less than half, 44 per cent, of the letters analyzed, contained subject-matter information. Twice as high a proportion of the letters prepared by agricultural workers included subject-matter information as was true of the letters written by home-economics extension workers, the percentages being 53 and 26, respectively. These percentages are practically reversed when comparison is made between the use of circular letters by home economics and by agricultural workers to make announcements of meetings or other extension activities. Fifty-six per cent of the total number of letters studied contained no subject matter whatever. Announcements of meetings or other activities made up 37 per cent, organization matters 18 per cent, and information of a service nature, 1 per cent. Thirty-one per cent of the letters analyzed were illustrated in some way with photographs, line drawings, or fancy lettering.

Authority for Content

In a few circular letters more than one authority for the subject-matter content was specified or implied. In such cases credit was given to each authority involved. These instances were relatively few, however, being only 4 per cent of the total. The signature of the agent served as the only indorsement of subject matter contained in 58 per cent of the letters. In 34 per cent either the specialist was quoted or it was stated that the information had been obtained from that source. The opinion of agents and specialists thus furnished the basis for at least a part of the subject-matter information contained in 92 per cent of the letters. The extension worker who signed the letter was not listed as an authority when some other agency was named to authenticate the subject matter given.

The successful experience of a farmer or farm woman in the community with some recommended project was described in 6 per cent of the letters. In 3 per cent of the letters a result demonstration which had been or was being conducted in the locality was cited as proof that the practice advocated was a good one. Work of the experiment station, the United States Department of Agriculture, the method demonstration, and agencies outside of the extension service each were mentioned as authorities in less than 1 per cent of the letters. Although the letters written by agricultural and home-economics workers separately showed practically the same trend, a somewhat higher percentage of the latter than of the former were based on the opinion of the extension agent or specialist.

Conclusions Reached

The data from the various studies made of the effectiveness of the different means and agencies used in extension teaching indicate that the circular letter is an efficient means of disseminating information to large numbers of people in such a way as to influence them to accept the better practices recommended, and would seem to be deserving of even greater use.

Training Club Secretaries in News Writing

NEARLY 300 secretaries of local home demonstration clubs in Michigan have been trained in news writing at 1-day county schools. These schools have been conducted cooperatively by the county home demonstration agents, Muriel Dundas, extension nutritionist, and J. B. Hasselman, extension editor in Michigan. The number of news articles published in the home demonstration counties has increased from 381 in 1927–28, to 467 in 1928–29, and to 1,117 in 1929–30. The specialists report that in the counties which do not have home demonstration agents there were 5,312 news articles published in 1929–30. (Eight of the 83 counties in Michigan have county home demonstration agents.)

The schools were developed to keep before the public the home economics program, to obtain the interest of new communities and new individuals, and to assist in building a more far-reaching organization among the farm women of the State. Specifically the schools attempt to assist the news gatherers to write home-economics news in a style (1) that will convey some definite information about the home-economics extension program and (2) that is acceptable to the local editors.

As the opening for each school the home-economics specialist discusses the purposes of the school and presents general suggestions on news writing as to content and form. The club secretaries are asked to write up the minutes of the last meeting which they have attended, and then transform the minutes into a news story. In the subsequent discussion the essential differences between minutes and news stories are brought out.

The extension editor presents the viewpoint of the newspaper and uses the material prepared earlier in the day as the basis for a discussion of news values in the county paper. The local editors are invited to send a representative to tell the group about the standards and style of their paper.

The secretaries are urged to make contacts with their local editors and explain home demonstration work to them. They are cautioned to submit their copy promptly and to observe any changes that are made to avoid future mistakes. If their efforts are disregarded consistently, another personal call is suggested.

In some counties trips through the newspaper plants with an explanation of the publication process have been arranged. The editor of one chain of rural papers asked that all his rural correspondents be permitted to attend a training school and at that time entertained the group at luncheon.

In the counties that do not have a home demonstration agent the secretaries are given mimeographed outlines of suggestions at the organization meetings. After a short time each specialist offers constructive criticism on the articles submitted.

All of the home-economics specialists have contributed to this news program by sending to the county extension agents preliminary stories for each project and by sending regular contributions to State farm papers.

The secretaries have forwarded to the State office their account of each project meeting and clippings of what has been published. One or more news articles have been published on 75 per cent of the project meetings reported.

How to Buy Foods

A CONSIDERATION of a few fundamental principles of marketing and the establishing of standards that may be used in the selection of foods is one aim of the foods and nutrition project of the Illinois Extension Service, says Grace B. Armstrong, foods and nutrition specialist.

The members of the home bureau of any county having decided to carry this work choose two local leaders from each unit, often a township, to meet with the nutrition specialist. Following this meeting, these local leaders present the work at the unit meetings, and the home demonstration agent may present certain topics.

The topic usually discussed at the first meeting is "Sources of our Food Supply and Factors Affecting the Cost of Foods." A simple breakfast menu may serve as a basis of discussion for this topic. First, the women make a list of the articles needed for the meal and locate on a wall map of the world the probable source of each. Then they consider how it was possible to have each of these foods on the breakfast table that morning. This brings out the steps in the production and marketing of foods, which may include land for raising the product; farm labor; storing; processing, as milling grain, canning fruits or roasting coffee; grading; inspecting; packing; transporting; and wholesale and retail distributing. Each of these, it is seen, affects the final cost of the product.

When the cost of retailing is found to be very high, a consideration of the reasons brings out the responsibility of the women in requiring delivery of food, credit, careless handling and sampling of food by shoppers, and the demanding of a large assortment or number of brands of a product.

Topics discussed at other meetings are: The study of staple groceries, as flour, coffee, tea, chocolate and cocoa, rice and other cereals, sugar, fats, and baking powder; fancy groceries, as flavoring extracts, coconut, olives, pickles, figs, dates, and candied fruit peels; canned foods; fresh fruits and vegetables; meats; and local Federal and State food laws. Usually 8 to 12 meetings are required for a discussion of all these topics.

In the study of each food consideration is given to quality and grades of the product, if graded. As each food product is studied, if possible, a sample is shown to illustrate the variety, grade, or other point being discussed. No one is advised regarding brands or even grades to buy, but an attempt is made to get each woman to decide this according to her income and the purpose for which the product is to be used.

Much assistance has been given by wholesale distributors, not only those handling nationally advertised foods, but also those serving small sections of Illinois. Considerable interest has been shown in the project by retail grocers, who have encouraged women to visit their stores individually or in groups.

That this subject does have practical value is shown by the fact that in one county reports of practices adopted as a result of the foods-buying subproject number over 1,600.

National 4-H Club Radio Program

Saturday, October 3

The program for the national 4-H club radio hour on Saturday, October 3, includes talks by I. W. Hill, a club girl and a club leader from Oklahoma, and a club boy from Nebraska on What's Happening Among 4-H Clubs. The United States Marine Band will play Some of Our Favorite Melodies:

Drink to Me Only with Thine Eyes—Old English air.
All Through the Night—Welsh air.
Santa Lucia—Neapolitan boat song.
Songs My Mother Taught Me.. *Dvořák.*
Soldiers' Chorus, from Faust *Gounod.*
Traumerei..... *Schumann.*
Toreador Song, from Carmen.. *Bizet.*
Love's Old Sweet Song..... *Molloy.*
Liebestraum..... *Liszt.*

Anna Searl, Livingston County home demonstration agent, says that the following are some of the comments which the women in her county have made on this work: "It has taught us money values," "Have saved $2 a week on the buying of food," "Have developed intelligent judgments," and "We have realized our spending responsibilities."

Home-Makers' Radio Clubs

The Oregon home makers' radio club series on "Do you understand your child?" interested the rural women so much that the series was repeated by request. Any club or group of home makers could form a radio club under this plan, which was outlined by Maribel Nye, State home demonstration leader in Oregon. The women met together every other week to listen to the radio talks and then discuss parent-child relations with the aid of programs and the radio lectures. The clubs sent reports on each meeting to the State agricultural college.

On alternate Tuesdays the following topics were considered: "What makes a good dad and mother?" "How can you teach desirable habits?" "What do you do when your child says 'I won't'?" "Can children be taught to eat what they should?" "How can you guide in sex education?" and "How can you teach care of belongings?"

On the other Tuesdays during the series supplementary lectures were given on: "Do you understand your child?" "Can you avoid or correct the fears of your child?" "Does your child play enough?" "Is your child growing up emotionally?" and "Are you helping your adolescent to adjust?" Club members were assigned to listen in and report these lectures at the regular club meetings.

Oklahoma's Schools for Better Rural Homes

As a part of the better-homes movement in Oklahoma 8 better-rural-homes schools were conducted in the winter, at which 1,015 men and women attended, representing 40 counties.

The movement is based on the belief that every American family should have the opportunity to live in a home which is healthful, convenient, comfortable, and attractive.

Representatives of Better Homes in America and the Oklahoma Farmer-Stockman cooperated with extension agents in holding these all-day meetings where practical demonstrations relating to home making were given. The study of home problems was encouraged so that the best use would be made of all available resources.

An excellent feature of each meeting was an educational exhibit arranged by the home demonstration agent. The articles exhibited included reconditioned furniture, homemade conveniences such as wood boxes on legs, iceless refrigerators, worktables, footstools, and articles made from sacks. In several of the counties a traveling library well arranged in a homemade bookcase was on display.

Follow-up work was carried on during Better Homes Week, April 26 to May 2.

Motion Pictures

Reach those who are difficult to reach by other teaching methods

HAVE you not noticed what a powerful appeal educational movies have? Have you not often found farm men and women attending your movie lectures whom you thought were not interested in improved practices?

NOT ONLY do motion pictures stimulate interest in better ways of farming and home making, but they help backward people to understand more readily, and then too they impress lessons more vividly with the result that they are remembered longer.

THEY VITALIZE the extension message, and by clearly visualizing the project, help the extension agent to obtain effective results in influencing farm people to adopt better practices.

THE UNITED STATES Department of Agriculture now has more than 250 motion picture subjects available on standard width (35 mm.) film. A limited number can also be obtained on narrow-width (16 mm.) film. Sound recording apparatus has also been installed and three new sound pictures have been completed.

Write for reservations of films as far as possible in advance of dates they are desired.

OFFICE OF MOTION PICTURES
EXTENSION SERVICE
UNITED STATES DEPARTMENT OF AGRICULTURE
WASHINGTON, D. C.

WE must remember that county extension agents are essentially teachers. When the agent solicits membership for a farmers' organization, acts as secretary, handles the farmer's funds, writes the farmer's letters, or makes the farmer's decision, he takes away from the farmer the opportunity to learn to do these things for himself and leaves the farmer in the end no richer in knowledge and ability than when he began. As a good teacher, the extension agent does not do for the farmer what the farmer can do for himself.

C. B. SMITH

U. S. GOVERNMENT PRINTING OFFICE: 1931

Extension Service Review

VOL. 2, NO. 10 OCTOBER, 1931

TRAINING 4-H DEMONSTRATORS IN FOOD PRESERVATION

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 152 FOR PRICES

Contents

In This Issue

MAKING South Carolina beautiful from the mountains to the sea is the alluring goal of a beautification crusade undertaken by the home demonstration agents of that State. Lonny I. Landrum, State home demonstration agent, paints the picture of the farm women of 46 counties busy with the planting and nurture of beautiful and artistic settings for their homes. Outdoor living rooms and the possibilities they afford for enjoying the full charm of country life and living as presented by Miss Landrum strike a most responsive chord in the heart of the home lover.

—

ENTERING the market as late as October, 1930, the National Pecan Marketing Association, nevertheless, got off to a good start, with 13 local grading and processing plants in operation. This year with 24 local associations in the organization, the association, according to H. G. Lucas, its president, will handle 10 million pounds of pecans or about 20 per cent of the country's pecan crop. Mr. Lucas makes a strong bid for the business of the growers in every pecan-producing county.

—

"THE cow furnished the milk for the family and we raised the vegetables and chickens. We have had plenty of everything except money but we know now that when you have a plenty of everything around you, it doesn't take much money." So says Farmer Worth, of How River, in Jane S. McKimmon's graphic account of filling the pantry shelves of North Carolina. This is the timely live-at-home philosophy that is back of the determined effort of North Carolina's farm women and girls to put up against the coming winter two and one quarter million cans of home-grown fruits and vegetables. Who says they will go hungry in North Carolina in 1932?

NEW YORK gives its farmers a highly personalized service on the planting of legumes suited to varying soil conditions. County agents and agronomy specialists combine efforts in a carefully worked out campaign to cooperate directly with from 200 to 300 farmers in each county and to obtain the introduction of legumes calculated to remain permanently in their rotations.

—

A SATISFYING dinner for four people for one dollar is the good news that Audrey L. Wiencken of Oregon sends us. The miracle dinner was one of several put on by 4-H boys and girls in Oregon's recent dollar dinner contest.

On the Calendar

THE Association of Land-Grant Colleges and Universities holds its forty-fifth annual meeting in Chicago, November 16–18. Director I. O. Schaub of North Carolina is chairman of the Committee on Extension Organization and Policy. The other members are Directors R. K. Bliss of Iowa, D. P. Trent of Oklahoma, C. E. Ladd of New York, K. L. Hatch of Wisconsin, and A. E. Bowman of Wyoming. The chairman of the subsection of extension work is Director J. C. Kendall of New Hampshire, and the secretary, Director C. A. Keffer of Tennessee.

—

National 4-H Club Congress during International Livestock Exposition, Chicago, Ill., November 27–December 4.

National Dairy Show and Exposition, St. Louis, Mo., October 10–18.

Southern States Regional Conference, Memphis, Tenn., November 10–13.

Appalachian States Regional Conference, State College, Pa., October 27–29 (includes Virginia, West Virginia, Maryland, Delaware, Pennsylvania, New Jersey, and New York).

—

DURING October and November, the Office of Exhibits will present the educational exhibits of the United States Department of Agriculture at the following events:

Southeastern Fair, Atlanta Ga., October 3–10.

Virginia State Fair, Richmond, Va., October 5–10.

National Dairy Exposition, St. Louis, Mo., October 10–18.

State Fair of Texas, Dallas, Tex., October 10–26.

North Carolina State Fair, Raleigh, N. C., October 12–17.

Petersburg Fair, Petersburg, Va., October 12–17.

Arizona State Fair, Phoenix, Ariz., November 9–15.

American Royal Livestock Show, Kansas City, Mo., November 14–21.

International Livestock Exposition, Chicago, Ill., November 28–December 5.

CERTIFICATE.—By direction of the Secretary of Agriculture, the matter contained herein is published as administrative information and is required for the proper transaction of the public business.

Extension Service Review

VOL. 2 WASHINGTON, D. C., OCTOBER, 1931 NO. 10

The Agricultural Adjustment Conference Idea

H. W. MUMFORD,
Director, Illinois Extension Service

I THINK it is safe to say that farming as a business has not adjusted itself to changing conditions as rapidly as has industry, and for several reasons: (1) It has not been easy to interpret the significance of the great industrial and economic changes that have been taking place in terms of their effect upon agriculture; (2) farming is an enterprise which is not susceptible to quick adjustment to changed conditions; (3) farming has always been looked upon as a stable business, the same yesterday, today, and forever.

It has seemed to me that some of the problems confronting our agricultural colleges and experiment stations calling for serious thought are, first, to keep the resident staff in close contact with everyday farm affairs, for it is easy in an academic atmosphere for staff members to drift away from a vital interest in such matters; second, to establish and maintain a rather intimate relationship with a considerable group of progressive farmers who are such loyal friends of the college that they will have the courage to point out, if necessary, the mistakes that they think we are making. There is a third problem of getting from highly specialized subject-matter departments whole-hearted support for attacking broad agricultural questions whose solution calls for joint action on the part of several such departments. Finally, there is the difficulty of securing acceptance of the fact that in all our work for agricultural betterment, the farm home is involved as well as the farm.

Several years of study and analysis by the College of Agriculture of the University of Illinois had developed certain facts with respect to the areas in Illinois over which rather definite types of farming predominate. While practically all types and systems of farming are to be found in every area, nevertheless certain rather definite differences exist between areas, growing out of fundamental physical and economic differences, and these, it was realized, would have to be recognized in the formulation of any plans for agricultural development.

Having satisfied myself that our heads of departments were sympathetic and would cooperate, a plan was set up calling for two major conferences or meetings in each of the eight farming-type areas in the State. One of these meetings was designated an agricultural adjustment conference and was held in October and the other, an outlook meeting, held early in February. Groups or committees of farm men and women were invited to meet with college representatives, thus carrying out the conference idea. For purposes of discussion, it was decided for the first series of conferences, to organize into committees, each of which would give special attention to one particular subject.

Information Reviewed

Prior to the actual conferences, staff members reviewed and assembled in booklet form available information having a bearing upon the question of farm adjustments in the various areas of the State. A booklet for each committee was prepared and made available at the conferences to each committee member, and subsequently a full set of booklets was furnished the farm and home advisers and the teachers of vocational agriculture. One or more members of the agricultural staff met with each one of these committee groups. Economic matters were stressed, and it has been demonstrated that there is a growing interest in and demand for such facts.

Space will not permit going into detail concerning the various methods used and the angles of our progress with this project to date. I wish, however, to call attention to the fact that both in the program of the project and in the conferences the development of the farm home and the rural community is recognized as a part of any plans for agricultural adjustment. On the programs of each of the adjustment conferences to date some representative of the resident staff of the home economics department has appeared, and this recognition on the general program has been supplemented with a separate session for women for part of the day in charge of representatives of the extension staff in home economics.

Topic Selected

It has seemed desirable, in arranging the programs for the agricultural adjustment conferences, to select where possible a central theme, around which the facts assembled and presented at the conferences by members of our staff should be centered. In the deciding on a central theme, an attempt is made to select a timely topic of general interest and wide appeal. For our fall series of meetings in 1930 it was agreed that the theme should be "Adjusting Production to Demand," with special emphasis on the difficulties involved in attempting to adjust production to demand. The following subjects were given a place on the program: Considerations Involved in Making Usable Forecasts of the Demand for and Supply of Farm Products, To What Extent Can the Demand for Farm Products Be Influenced by Quality? Changing Food Habits and Their Effect Upon the Demand for Some Agricultural Products, For an Illinois Farmer What Are the Limitations and Possibilities in Attempting to Adjust Production to Demand? and, finally, What Is the Place of Organizations Among Farmers in Adjusting Production to Demand? A separate women's section was arranged for the afternoon, in which two topics

(*Continued on page 146*)

Improving Connecticut Kitchens

BIG old-fashioned kitchens were the rule in Litchfield County, Conn. The problem that confronted Eleanor S. Moss as home demonstration agent was to help the farm women of her county reduce the mileage necessary in doing the day's work, thus saving their time and strength. So with the assistance of Gladys E. Stratton, State home management specialist, she went to work.

The wheel tray as a mileage saver opened the way for the new program. Miss Moss showed the women of her communities how to make satisfactory wheeled trays at a reasonable price. This taught them that steps could be saved, that such improvements need not cost much, and that the work of the farm kitchen may be made pleasanter and easier. In three years' time, as a result of this work in Litchfield County, 119 kitchens have been completely rearranged, 114 have been made brighter by lighter paints or more windows, and numerous labor-saving devices and arrangements have been installed.

In carrying on this kitchen improvement work, Miss Moss arranges to have a series of three meetings held during the winter at which are taken up, first, kitchen arrangement, heights of working surfaces, and floor and wall finishes; second, kitchen equipment; and third, self-scoring kitchens. Women bring plans and measurements of their kitchens to the meetings with the changes they would like to make and then receive suggestions from the specialist.

A section of a kitchen wall in the home of Mrs. Raymond Euvard, Sharon, Conn., showing arrangement of inexpensive equipment for saving steps

Mrs. Clifford Hopkins, of Torringford, Conn., converted a back hallway into a kitchen when a large house was converted into a 2-family apartment

Later in the winter or in the spring, the specialist or the agent makes at least one visit to each kitchen which is being rearranged. Although many women come to the meetings through general interest and feel that the work does not apply to them, they usually leave with ideas for some specific changes in their own homes.

Miss Moss has shown the need for more convenient arrangements by asking her hostess to cut a slice of bread, assemble the equipment needed for baking a cake, or some similar operation, and then pointing out how a different arrangement will save time and steps. This device is especially effective if there is a group of women present.

At woodwork meetings, women have made knife racks, cover racks, shelves, and wheeled trays. By using the farm bureau plumbing tools, some families were able to install new sinks even without help.

Stories in the local newspaper describing the work have been responsible for requests for home visits by the agent from women in communities not carrying the project. The kitchen trip or tour has also spread interest in better kitchens. While meetings have reached the largest number of women, the home visits have effected the greatest number of changes.

The Agricultural Adjustment Conference Idea

(*Continued from page 145*)

were presented and discussed; namely, How the Problems of Adjusting Production to Demand Affect the Woman on the Farm, and Money Problems of the Farm Home.

Lest someone should conclude that the conferences were set up to discourage attempts to adjust production to demand by showing its impracticability, may I say that the subject was approached from a constructive and helpful standpoint, but with a frank recognition that there are both minor and major difficulties involved, an intelligent understanding of which is essential if any considerable progress is to be made in this direction.

I do not believe I am foolishly optimistic about what has been accomplished to date through the adjustment conference idea nor its future possibilities. I admit frankly that in some respects results have been disappointing; in other respects, possibilities have been developed which were not anticipated at the outset. I am satisfied that even though we might decide to discontinue the adjustment conferences which we have no immediate thought of doing, and confine ourselves solely to the outlook meetings, the following desirable ends would have been reached:

1. The experiment station and extension staffs have been brought into closer relationship and into fuller cooperation and understanding.

2. The staff has learned to subordinate the departmental point of view and to approach matters of agricultural adjustment with greater appreciation of the problem as a whole.

3. A better understanding has been developed both among farmers and among members of our staff of the interrelation of production and marketing.

4. Nonagricultural agencies in the State, honestly wishing to aid farmers and agriculture in getting adjusted but more imbued with high motives than with knowledge, have largely refrained from pressing their services and advice upon farmers.

5. Our entire staff has gained a keener appreciation of the economic aspects of farming, and at the same time our agricultural economists have something very concrete and worth while to work upon.

6. Also, the economists are observing that even the economic problems of farmers can not be solved without the aid of subject-matter departments that have been longer in the field and which, generally speaking, know husbandry, if not economics.

The National Pecan Marketing Association

H. G. LUCAS
President, National Pecan Marketing Association

THE National Pecan Marketing Association is the outgrowth of a meeting of growers, extension officials, and marketing specialists of the 10 pecan-producing States held in Montgomery, Ala., June 23, 1930, at the suggestion of the Federal Farm Board. At this meeting, C. C. Teague and Charles W. Wilson, members of the Federal Farm Board, presented an outline of a plan under which they recommended that the growers organize. This was approved and adopted by the meeting as a basis for future procedure, and a committee was appointed with representatives from each State to work out the details and set up the organization. This committee with the Federal Farm Board representatives developed a plan at a conference held in Washington. On July 3, 1930, the marketing association was incorporated and sign-up work started the following week.

At the first directors' meeting, Jackson, Miss., was selected as national headquarters and the office opened there September 1. F. R. Wilcox of California was secured as sales manager, and sales work started in October. Although most pecan sales are made before this date, the association's market activities were very gratifying, the trade seeming interested in the growers' plan.

The association operated last year 13 local grading and processing plants in the pecan belt. One thousand growers delivered 3,000,000 pounds of pecans. At this time it has 24 local associations with 3,000 grower members and an estimated tonnage for 1931 of 10,000,000 pounds, or about 20 per cent of the probable production. Its operations cover 10 pecan-producing States with plants conveniently located to serve the growers. The organization is working toward standardization of grades and getting them established in the trade. It is endeavoring to stabilize prices so far as possible. It is also attempting to extend the markets both as to territory and as to time. At present, pecans are used chiefly during the holidays. The association wishes to convince the public that they are staple articles of food and are as good throughout the winter as they are at Thanksgiving and Christmas. It is seeking to increase the consumer demand by the distribution of recipe booklets, by magazine articles, and the like. Last year thousands of these booklets were distributed along with its shipments. It also supplied nut crackers where desired and found many other ways to encourage the consumption of pecans. The association is getting its share of the business in existing markets and is seeking out new ones through direct contact with retailers.

H. G. Lucas, president of the National Pecan Marketing Association, is owner of the oldest and one of the largest orchards in Texas. Mr. Lucas has had many years of experience with cooperative farm organizations

The organization has given its attention to a number of other matters related to the marketing of pecans, such as freight rates, sales, and handling costs. It adopted United States standard grades as soon as these were issued and has worked out a number of improvements in grading machines and plant equipment. It is analyzing the cost accounts of the various locals to bring the most efficient methods to the attention of all of its member associations.

The National Pecan Marketing Association is of the federated type, being composed of local or regional associations of growers which select a representative to the national board. Each local association is a separate entity except that all sales are handled by the national and all grades fixed by it.

The association makes advances upon the nuts as delivered by its members, grades and processes them, packing them in convenient size containers—25 and 50 pound wooden boxes and 50 and 100 pound cotton-lined bags. It is also trying out some smaller size packages. It makes further advances after grading and final settlement when the nuts are sold, deducting only the necessary expenses and a small reserve. Both seedlings and budded nuts are handled in about equal volume.

Since the production of pecans is increasing, with new plantings in the eastern belt and improvement work in the West, as well as new plantings, it becomes more vital to the future of the industry that a satisfactory sales agency be provided.

Association Directors

The men who compose the national board of directors are growers with large orchards and men of experience and influence in their communities. They have a very real and personal interest in the success of the association as well as the desire to serve their fellow growers.

J. Lloyd Abbot, of Spring Hill, Ala., is first vice president. He is a large grower of pecans and satsumas and has had extended experience in production and sales problems. Mr. Abbot has been secretary of the National Pecan Association, the horticultural society of the pecan industry, for a number of years.

D. C. Evans, of Stroud, Okla., is second vice president. He is a large grower and prominent business man of Stroud, and has had years of experience in the marketing of seedling pecans.

P. C. Bankston, of Edwards, Miss., is another member of the executive committee. He is a grower, a prominent business man, and president of the Bank of Edwards.

L. I. Guion, of Lugoff, S. C., the fifth member of the executive committee, is the largest grower of pecans and peaches in his State, and has had years of experience in the marketing of both. Mr. Guion, in addition to other extensive interests, is vice president of the Columbia Land Bank.

The active executives consist of the following: The directors of the association recently appointed S. H. Gibbons as general manager. Mr. Gibbons has been identified with the marketing association since its beginning as manager of field service, and has assisted in developing its program and policies. Previous to coming to the association, he had years of experience in the extension

service and in cooperative associations. He was field service director for the National Pecan Growers Exchange for some time before the National Pecan Marketing Association was formed, and previously as extension horticulturist in Alabama came in close contact with pecan producers and their problems.

E. M. Graham, the present sales manager, served previously as secretary of the organization and was for a number of years extension marketing specialist in Mississippi, in which position he gained valuable experience in the marketing of farm products in that State. Since coming with this organization he has assisted in sales and is establishing close relations with the group of brokers who are handling pecans for the association.

O. J. Wenzel, manager of plants and grading, has had years of training in the grading and processing of pecans, and has developed a number of improvements in existing grading machines.

The system of accounts and records has been carefully developed from the operating experience of last season to reflect the association's actual position at all times. The office is in charge of Mr. Greff, an expert and experienced accountant.

The National Pecan Marketing Association is distinctly a going enterprise owned and controlled by growers, and filling a need which has been recognized and which is now becoming absolutely necessary.

Club Work Established in Sweden and Finland

Boys' and girls' 4-H club work in Sweden began in 1925 in 1 county with 1 agricultural agent and about 100 boys and girls. Club work is now established in 15 of the 24 counties of Sweden with 16 agricultural agents, 15 home-economics agents, and an enrollment of more than 4,800 members.

In Finland, the demonstration began in 1926 in 3 districts with 3 club agents and slightly more than 200 club members. Club work has now become established in 176 districts with 203 agricultural club agents, 42 home demonstration club agents, 7 supervising agents, and an enrollment of almost 21,000 club members.

The demonstration of club work in Sweden and Finland, under the inauguration and support of the Rockefeller Foundation, was successful, and the two governments have officially accepted the adaptability of club work to their conditions. During 1930 the total funds for club work was nearly $37,000 in Sweden and slightly more than $64,000 in Finland.

The Ministry of Agriculture in both countries has assumed responsibility for the continuation and administration of the work as a permanent part of the training for rural young people.

Western States Conference Recommendations

RECOMMENDATIONS for extension work in soils, fertilizers, the control of noxious weeds, and 4-H club work were formulated by the committees at the Western States Extension Conference which was held in Logan, Utah, July 21–25.

Recommendations on Soils

For soils work on irrigated lands, the committee on soils advocated (1) the elimination of alkali spots from tilled fields; (2) the elimination of marginal acres; (3) concentration of water on the better lands; (4) judicious use of irrigation water; (5) leveling irrigated land to conserve water and insure its even distribution; (6) intensive cultivation to prevent the dissipation of moisture and plant food by weeds; (7) the simplification and increased use of soil surveys; and (8) addition of organic matter to impervious soils by more use of barnyard manure and the planting of green-manure crops.

The four problems on nonirrigated lands were outlined as being soil blowing, sheet erosion, gullying on steep lands, and the absence of legumes in crop rotations. To meet these problems the following methods were recommended; (1) Use of tillage implements leaving the surface soil cloddy; (2) level terraces and contour planting; (3) soil-saving dams where gullying has started; and (4) the inclusion of legumes in crop rotations.

Soil Fertilization

The committee on soil fertilization felt that there was a need for education on the real functions and uses of fertilizers so that farmers can understand what to expect from them. The group also believed that recommendations for fertilizer should be based upon a number of local tests covering a period of years.

Recommendations on Noxious Weeds

Some of the recommendations of the committee on weeds were (1) to further weed eradication with the State, county, and individual sharing the cost; (2) to acquaint the public with noxious weeds and means for their control; (3) to be conservative in undertaking extensive and costly programs of weed eradication; (4) to cooperate with the State and county agencies in educational efforts, but to avoid responsibility in regulatory work; and (5) to use the chlorates and carbon bisulphide as being on the basis of reports received the most effective chemical means for weed control so far developed.

4-H Club Work

The committee on boys' and girls' 4-H club work recommended that more work be done with the older group of young people; that the demonstrational feature in 4-H club work be strengthened; that the extension service should give increased recognition to volunteer 4-H club leaders; and that more emphasis should be placed on the quality and percentage of completions. It was recommended also that all prizes and awards, offered from outside the States concerned, be referred to the extension committee on organization and policy of the Land-Grant College Association for its approval before being considered for adoption.

"The Four-H Clover and the Rose" is a club song which was written by Harriet F. Johnson, State girls' club agent in South Carolina, and which may be borrowed on colored glass slides free of charge (except for transportation charges both ways) or purchased for 35 cents on film strips from the Office of Co-operative Extension Work. The song is a part of series 267 and consists of 19 slides, 12 of which are illustrated.

At the news writing schools held at the county agent conferences in South Dakota during March, sheets containing the facts for news stories in confused and illogical order were given to the agents who wrote up these facts according to their ideas of a good news story. Then they compared their stories with models which the extension editor had prepared. Before the conference each agent was supplied with a copy of the South Dakota stylebook for reference and guidance.

Filling the Pantry Shelves of North Carolina

JANE S. McKIMMON
State Home Demonstration Agent, North Carolina Extension Service

(Left) Mrs. W. C. Hane, of Calhoun County, S. C., sold 12,000 containers of vegetables, relish, and soup mixtures in one year

(Below) Mrs. J. H. Witherington, of Conecuh County, Ala., with some of her canned products

More canned fruits, vegetables, and jellies have been stored on pantry shelves throughout the South in 1931 than ever before, and the sale of canned goods has added to the family income of many of its enterprising farm women

FARM women and girls enrolled in home demonstration work in 57 counties in North Carolina are not letting the grass grow under their feet or in their gardens. In 1930 they filled 1,411,376 cans with vegetables and fruits during the spring and summer months. This was an increase of a quarter of a million cans over the 1929 production and means that pantry shelves in North Carolina farm homes are supplying to-day much of the food which otherwise would come from grocers' shelves. And now in the summer of 1931 they are hard at their self-appointed task of filling the pantry shelves against the needs of the coming winter and spring of 1932. Expectations are for an output of two and a quarter million cans in 1931.

It is the woman who must scheme and plan to set a well-balanced appetizing meal before her family, and she is awake to the fact that the present income will not admit of much variety if all the food must be paid for in cash. The farm housekeeper therefore has been a great ally of the North Carolina Extension Service in its live-at-home program. She planned with her husband in 1930 and again this year to grow a year-round garden, planting the things necessary for good nutrition and canning the surplus summer vegetables for use in winter months.

A properly planned canning budget requires 57 pints of a variety of vegetables and 47 pints of a variety of fruits for each person in the family.

One thousand five hundred and fifty pounds of vegetables and 1,456 pounds of fruit are required each year for a well-fed family consisting of father, mother, and three children; and 7,000 North Carolina farm homes have reported planning their gardens this year to supply the all-year-round vegetable needs.

Individual Accomplishments

Let us see how this formula works out when an earnest and capable North Carolina farm woman puts it to use. Mrs. S. W. Dixon, of Mebane, Alamance County, submits the following budget of canned foods for her family of six:

Tomatoes 108 pints, string beans 42 pints, beets 24 pints, squash 30 pints, okra 30 pints, kraut 42 pints, corn 24 pints, peas 12 pints, field peas 12 pints, soup mixture 18 pints, apples 36 pints, blackberries 36 pints, dewberries 36 pints, peaches 36 pints, pears 18 pints, cherries 6 pints, strawberries 18 pints, plums 36 pints, raspberries 6 pints, grapes 12 pints, fruit juices 30 pints, and preserves and jellies 36 pints. In addition to the 648 cans for the family's use, there were 749 pints put up for the market.

Note the 19 different varieties of vegetables and fruits canned in the grand total of 1,397 pints.

Again, Mrs. Joe Browning, of Washington County, says:

My garden and the home demonstration curb market which we have established have kept me from running an account at the store this year. I did most of my canning while I was cooking meals for my family, and I would take an old calendar and write there the amount of vegetables canned, sold, and used at home each day, so that I might have an accurate account of what my garden did for me.

I canned more than 800 pints of fruits and vegetables and besides using fresh vegetables on my table have sold to date $315 worth of garden produce and pantry supplies. The expense of fertilizer was $30, which leaves me a balance of $285 in cash from my garden

Over on Roanoke Island, where the high tides sometimes destroy all that is planted, they grew gardens, also, in 1930. "We had no high tides this year," said one enthusiast, "and gardens planted in such places as Rodanthe have a chance for their lives. Our greatest enemies were the strong winds and driving sands."

When the home agent went her round of visits, she was surprised to be led to what looked like a stockade; but when the gate was opened she walked into a little garden sanctum where collards, beets, onions, cucumbers, tomatoes, and flowers were growing in the shelter of boards as high as her head, placed upright in the ground to protect the plants from wind and sand.

Negroes Canning

Negroes have responded heartily both in garden growing and in canning. One hundred and eleven thousand three hundred and fifty-two of the 1,300,023 cans reported filled in the States were done by negroes in seven counties.

One negro woman in Robeson County displayed at the courthouse in Lumberton well-packed jars of vegetables and fruits she had canned from her farm and told an audience there assembled that she always had a dollar or two in her pocket which she made on her turnip greens, collards, onions, and canned goods in the winter, and on her tomatoes, corn, butterbeans, and other vegetables in summer.

In Melville community, Alamance County, it has been the custom of the people to depend for vegetables and everything else on the amount that the men made from working in the cotton mills. Last December the cotton mills laid off all of the negro labor, and these mills have not as yet opened to negro workers. This was an opportunity for the home agent to get gardens started in Melville community and show the people that they could live from their gardens, chickens, and cows. Every family planted a garden and produced all of the vegetables needed and filled 2,769 cans for winter use. John Worth, of Haw River, route 1, in the last community meeting said:

My family has had more to eat this year than we have ever had since we have been housekeeping. People have been crying "hard times," but we have lived better than ever. The cow furnished the milk for the family and we raised the vegetables and chickens. We have had plenty of everything except money, but we know now that when you have a plenty of everything around you it doesn't take much money.

There were 12 other families in the same community that have done what Farmer Worth did.

Commercial Canneries

Many questions are asked by persons desiring to operate commercial canneries and the division of home demonstration work of the North Carolina Extension Service has put before these people the experience of others who have gone forward to success and of those who have failed at the venture. Successful commercial canning can be done in North Carolina, but capital is needed and growers must cooperate by producing the required vegetables and fruits. Beginning in a small way and expanding as one's experience and ability increase furnishes a safe basis for operating a cannery. It is necessary to impress the buying public with the excellence of the products to be sold, and that takes time.

Calls for Canning Instruction

To take care of the many calls for instruction in canning, the division of home demonstration work has planned and is carrying out a program of instruction that is designed to reach the greater portion of the counties and communities in North Carolina.

Leaders' schools were held in the early spring and summer that skillful assistants to the county home agent might be in readiness in each county for the canning season. Mrs. Cornelia C. Morris, home demonstration district agent and specialist in canning, with the assistance of another trained specialist, conducted leaders' schools in 62 counties reaching from the coast of North Carolina to the Tennessee border.

Instruction was given in grading, packing, and sterilizing, and the most improved methods in food preservation, with special reference to standards for marketing products, were demonstrated. Attractive glasses and jars for packing salable products were placed on exhibit during each school.

The results of these schools are reflected in the well-trained leaders, who function so effectively in showing their neighbors how to fill cans for the pantry shelves and for sale on the farm women's markets.

Since April 1 and before October 1, 1931, one thousand four hundred and twenty 1-day canning schools will have been held by agents and leaders in 57 counties for white people and 7 for negroes.

Special effort is being made to cover the drought area of North Carolina and to give specific instruction to every family, both white and colored, which has received Government loans or garden seed from the Red Cross.

Surplus Used for Needy

Hampshire County, Mass., furnishes one of the many stories coming to us of farming people cooperating in providing winter food reserves for less fortunate inhabitants of industrial villages and towns. Instead of letting their surplus fruit and vegetables go to waste farmers in the vicinity of Ware, Mass., cooperated with the Massachusetts Extension Service in canning this surplus to be used by needy families who are in difficult circumstances because of mill shutdowns.

The fruit and vegetables were brought to Ware by the farmers and canned by volunteers under the direction of extension specialists. More than 1,200 cans of apples, peaches, corn, beans, and tomatoes were put up and stored for use this coming winter.

William R. Cole, horticultural manufactures specialist, originated the idea, and B. W. Buckley, chief of police at Ware, promised the utmost cooperation from his department. Mr. Buckley was put in general charge with Evelyn Stowell, Hampshire County home demonstration agent, in charge of the canning groups. Cecil Rice of the horticultural manufactures department gave canning instruction to the various groups.

On Monday 12 women, representing French organizations, did the canning; on Tuesday the Daughters of Isabella; a social-science group did the work Wednesday; and a group of Polish women finished the work Thursday.

Stoves were furnished by the Ware Gas Light Co. The Ware Beef Co. donated the use of its refrigerators for storage of raw materials until they were canned. The only cash expended was for the cans. The Welfare Department of Ware will supervise the distribution of this food during the coming winter.

At the recent Virginia State meeting of dairy herd-improvement association cow testers held at Blacksburg, the tester for the Orange County Dairy Herd-Improvement Association reported that 100 per cent of the herd sires in his association are now housed in safe-keeper bull pens. The Department Bureau of Dairy Industry, which for years has been advocating the use of safe-keeper pens for all mature bulls and has designed a safe-keeper type of pen which is used extensively, asks, "Are there other associations that can duplicate this record?"

Western Turkeys Go To Market

THE North Platte Valley Poultry Marketing Association has a record of half a dozen years of successful accomplishment in marketing turkeys for the growers of east central Wyoming and western Nebraska. Its aim has been to put quality dressed turkeys on the market, to sell the crop with the least possible expense, to get all the market will pay, and finally to give the growers cash in hand on delivery.

A flock of turkeys on a farm in the North Platte area

"So fair and square has the management been in its dealing with the growers that it is not too much to say that everybody in the valley boosts for the association," writes F. P. Lane, county agent leader in Wyoming.

Growth of Association

The association grew from a modest beginning in Goshen County, Wyo., where in 1924, the county agent assumed most of the responsibility for marketing the turkeys under rather a loose pooling system. It is now incorporated under the laws of Wyoming, handles its own affairs in a businesslike way, and markets turkeys for four counties in Wyoming and six in Nebraska. In this development, the county agents have stood shoulder to shoulder with the grower leaders to stimulate, to advise, and to assist in building an efficient organization and to insure a sufficient volume of quality birds to market.

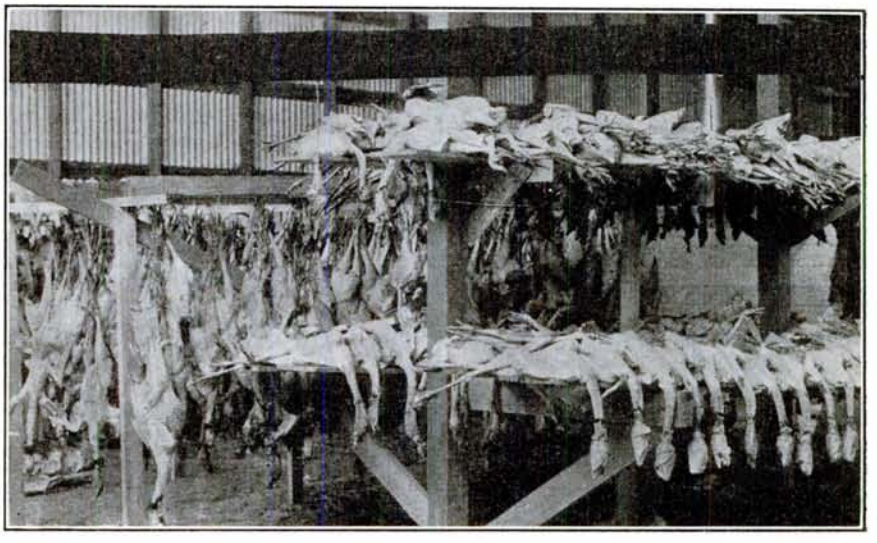
The organization, which has a membership of 800 growers, is managed by a board of directors, two from each county and one elected at large. The usual standard marketing contract for a 5-year period with withdrawal privilege is used, and in the past two years not a single member has withdrawn. As the marketing season approaches, the growers list their turkeys with the directors and the secretary notifies all the reliable buyers of the date of sale and asks them to submit sealed bids, f. o. b. loading points. The board then meets at the appointed time, opens the bids, and sells the turkeys. However, if they feel the bids are not as high as the market warrants, they may reject all offers and call for new bids. As a usual thing, there are plenty of bids and the competition is keen.

When delivery starts, the association arranges for a representative in each county to receive the shipments. The birds are carefully graded by a licensed grader, whom the growers know and have confidence in. The member sees how the grading is done, has a chance to ask questions, to compare his turkeys with his neighbors' and finally gets cash in hand when the grading is done. The graders have done their work so well that their grades are accepted by the buyers without question and the turkeys paid for with none of their representatives present.

The success of the management in keeping the packing, loading, and selling costs low has appealed strongly to the growers. The association has acquired no packing sheds or warehouses, as the loading is done at a number of different points and it has been found cheaper to rent such facilities. Deductions of 1½ cents per pound are made for expenses and ½ cent for a reserve fund. The actual packing and loading cost has never exceeded 1¼ cents per pound, and, as a consequence, ¼ cent has been returned to the members at the close of the season. The association now has a cash reserve of approximately $5,000 to take care of any contingency that may arise. It has no salaried officers except the secretary-treasurer, who functions somewhat as a sales manager and receives $500 for his season's work, together with necessary expense money. Men who receive and pack the turkeys at shipping points are paid by the day.

As the association has continued to grow, to expand its field of activity, and to make its service to the grower more efficient county agents in counties served by the association have helped the grower leaders to stimulate, to advise, and to assist not only in building up an effective and efficient organization but also in production problems tending to insure a sufficient volume of quality birds necessary to successful cooperative marketing.

The business of the association has grown until it now handles from 90 to 95 per cent of the turkeys produced in the area that it serves. Total shipments have increased from 5 cars, valued at approximately $35,000, in 1924, to 21 cars in 1930 valued, at $117,663.73.



Turkeys dressed ready for shipment to market

Extension Service Review

Issued monthly by the EXTENSION SERVICE of the United States Department of Agriculture Washington, D. C.

The Extension Service Review is published in the interests of workers and cooperators of the Department of Agriculture engaged in extension activities. It contains official statements and other information necessary to the performance of their duties and is issued free to them by law. Others may obtain copies of the Review from the Superintendent of Documents, Government Printing Office, Washington, D. C., 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, Extension Work*
C. B. SMITH, *Chief, Office of Cooperative Extension Work*
J. W. HISCOX, *Chief, Office of Exhibits*
RAYMOND EVANS, *Chief, Office of Motion Pictures*

REUBEN BRIGHAM, *Editor*

OCTOBER, 1931

Meeting the Situation

Georgia's county extension agents in a series of district conferences held recently formulated an emergency program. This program includes three specific recommendations: (1) Farm maintenance, (2) orderly marketing, and (3) an enterprise equal to cotton on every farm. Here it is in full:

1. That extension agents give their hearty support to whatever action is taken in relieving the present crisis by the Federal and State Governments representing a majority of cotton producers.

2. That the program for production of all home and farm supplies possible, such as vegetable gardens, meat, milk, and eggs, and feed for livestock, be stressed and carried through still further; that the agricultural committee of the Georgia Bankers' Association, who have given such active cooperation in this program, be urged to continue their backing to this undertaking.

3. That a definite system of soil improvement be the goal on every farm and that the winter cover crop program which is being carried out successfully on so many farms be urged upon all farms in every county.

4. That minor enterprises be established on every farm so far as practicable to furnish some income to make up the decrease in cotton income, and pay running expenses as well as distribute labor.

5. That county agents lend their support to the cooperative associations that are already doing business in Georgia, foster the organization of those for which there is an apparent need, and assist farmers in grading, pooling, and selling other products that can not be so handled.

6. That every effort be put forth to conserve our forest areas and to further reforestation.

7. That every farm have at least one major cash enterprise adapted to local conditions in addition to cotton.

8. That each farmer be encouraged to build up a reserve in feed, seed, livestock, etc.

9. That each farmer provide working capital by ownership or by establishing credit on a sound basis and use credit only under conditions where he can expect adequate returns.

10. That the effort be continued to establish a balanced farm program on every farm in the State. In order to accomplish this, records should be kept on each farm so that plans may be based on facts.

Have these Georgia county agents met the needs of the existing situation in this proposed program? Is it adequate? What shall we say?

Use the Facts

"With our present efficiency in production, farm surpluses are a constant threat to people in farming. If extension forces are to help in this situation, they must teach the farmer how to control his surpluses in advance of their production. The best way of controlling surpluses is to base crop and livestock production on local farm facts secured through farm to farm surveys, or, better still, actual farm records. To this end every county agent in the United States should be encouraged to secure 30 to 50 farm records every year in his county as a background and basis for intelligent recommendations as to farm adjustments and plantings. Nothing stands out clearer in our experience to date than that National and State agricultural outlook material must be interpreted in the light of local facts. The securing of these local facts, their tabulation, analyses, interpretation and intelligent application is a vital part of any sound economic extension program that will take us forward."

Such of our present county agents, who can not do this analytical work must be instructed or given the help of assistants who can handle this phase of their work. The college of agriculture in each State must provide for the training of all its agents so that they can function happily in the economic field. That is the kind of help the farmer wants now and will want as long as we are in extension. And along with the securing, adoption, and application of these economic facts, the other thing that stands out equally clear is that in these times of farm competition it is only the farmer who produces efficiently and still more efficiently, who uses every progressive method and cuts every cost, who saves by growing his own food and feed crops that will succeed in the business of agriculture.

In this critical period of depression an extension director can not do a more helpful thing than to assemble his entire staff and give them, through a week's conference, if necessary, the full benefit of the institution's economic knowledge and philosophy, so that all specialists, all county extension agents, may function unitedly and vigorously in the economic field.

Adjustment

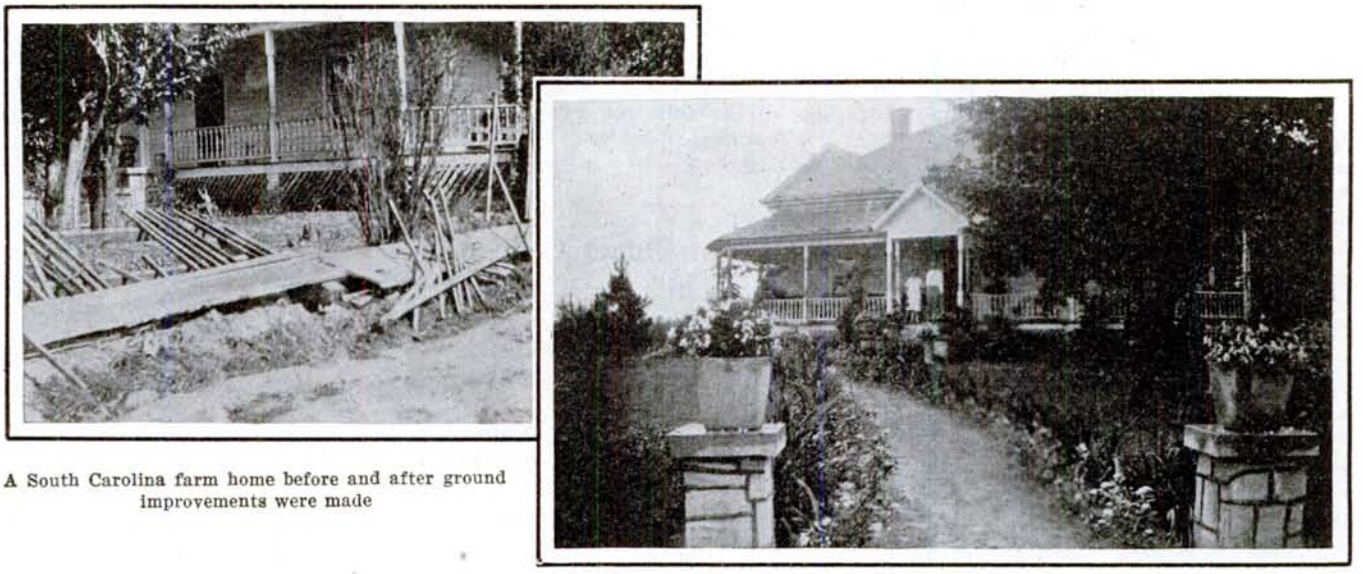
Has farming as a business adjusted itself to changing conditions as rapidly as industry? Is farming susceptible to quick adjustment to changed conditions? How intimately and in what ways are production and marketing interrelated? To what extent is the farm home involved in a program for agricultural betterment? Work out the answers to these and similar questions at agricultural adjustment conferences of farmers, farm women, extension workers, and others interested in the agricultural problems of each farming area, is the suggestion of Director H. W. Mumford, of Illinois.

Out of these conferences Director Mumford sees the State agricultural college developing a close and sympathetic relationship with a considerable group of progressive farmers and farm women of the State who will aid in shaping the policies of the college and in carrying out its program. Forming the habit of frank and thorough discussion of agricultural problems at these conferences, these men and women, though loyal friends of the college, will not hesitate, Director Mumford believes, to discuss with equal frankness the worth of the institution and will point out, if necessary, the mistakes it is making.

These conferences, too, Director Mumford believes, will educate the highly specialized subject-matter departments to recognize the full significance of a common problem and stimulate them to work together harmoniously and effectively for its solution.

Beautifying Rural South Carolina

LONNY I. LANDRUM
State Home Demonstration Agent, South Carolina Extension Service



A South Carolina farm home before and after ground improvements were made

THE early planters of South Carolina made for themselves beautiful home surroundings. Some of these old home gardens in the coastal counties are still in existence, and have become so famous that each spring they attract thousands of visitors. However, in the hard struggle for existence and the readjustments made necessary by the devastation and poverty following the war between the States, lawns and gardens were neglected, and in recent years many of the rural homes of the State lacked attractive surroundings.

Realizing the great need for pleasing settings for our farm homes, and the fact that our woods and swamps abound in a variety of native plants and shrubs, and that our climate will permit blooming flowers in the yard eight or nine months in the year, extension agents added a home-beautification project to the extension program of the State in 1925. In making definite plans for launching the project the production specialist, Mrs. Dora Dee Walker, took as her slogan "Make South Carolina beautiful from the mountains to the sea."

Gradually new phases have been added to the project so that now it includes not only the beautifying of home grounds but also the grounds of schools, churches, community parks, and highways.

Community centers were begun in nine counties in the fall of 1929. Since then, three other counties have begun community centers. These centers consist of a school, a church, a home, and a park all located near each other and near a highway so that they may be a real demonstration. The plans and plantings of these grounds are under the direct supervision of the specialist. F. L. Mulford of the United States Department of Agriculture assisted Mrs. Walker in planning the centers in Florence and Fairfield Counties. It is hoped that in working together on these community centers community spirit and responsibility will be aroused; that these centers will become the nucleus for the community educational, religious, and recreational life; and that these will be outstanding demonstrations for other communities of the county. Of course, the community center is a long-time project and none has been completed as yet although much good work has been done. When completed, each center will celebrate with a pageant depicting the history of the community.

Outdoor Living Room

The newest phase of the extension beautification program, the outdoor living room, has just been launched this year, but is already arousing much interest among the 4-H girls as well as among the club women.

The interest of the State Council of Farm Women has been enlisted in this project so that the council has adopted it as a part of its program, appointing a State chairman of beautification who in turn has appointed a county chairman in 43 of the 46 counties.

The councils also sponsor the yard and garden contest in nine counties. In this contest there are a county leader and a community leader for each club. Each of these leaders has a demonstration yard and garden. They enroll members, collect records, and give publicity concerning the contest to the papers.

The great appeal to the home maker of love for the beautiful and the fact that beautification of home and community grounds can be done with little expense have led to much work being accomplished in this project.

The 1930 reports show that during the year 6,399 women and 1,187 girls did some definite work in improving their home grounds; 193 church and school grounds were improved; 60 miles of permanent plantings were made on the highways; and as a result of the "scatter seed campaign" in March and April, 63 miles of highway were gay all summer and fall with blooming annuals.

As another result of this project a number of small home nurseries have been established which are adding to the farm income.

The following extracts from reports of home demonstration agents will tell something of the beautification work in the counties.

Mrs. E. D. Boykin says: "Every one in Williamsburg County is enthusiastic over home beautification at this season, but those who worked hardest last fall have the best results. Two members of the home beautification contest are working on flagstone walks, and another has made a lily pool. One club member is starting a small nursery. Several women in the home beautification contest are already working on their out-door living rooms."

Florence County: "The movement for a community center met with hearty

response at Sardis, where the setting of two school buildings, a teacherage, playground and church seemed made to order. On the day apponited Mother Walker, Mr. Mulford from the Washington office, and Mrs. Alice G. Courtney, home demonstration agent, met the 70 men and women who had gathered in spite of cold, rain, and wind—and how everyone worked! The work was systematized immediately, groups being assigned to hole digging, demolishing, setting, fertilizing, watering, and the like. The girls' 4-H club at Sardis gave $10 of their prize money to buy some broad-leaved evergreens for the community center, the remaining plants being contributed by the members of the community, and taken from the woods. An especial feature was the planting of a tree by each class.

"With a stop at noon for the lunch prepared by the club, work went on until shrubs and trees were set around the buildings and in the park. At least 90 per cent of these are living. The park has been drained and material gathered for rustic benches and summer houses. As soon as the new church is completed the plants will be put there, thus finishing this year's work on the community center."

Marie Lambert of Jasper County reports: "The yard work has been on the boom this month. The county and community yard and garden leaders are very enthusiastic. One of the leaders has prepared her lawn for grass seed, established a rose garden, formal garden, and has outdoor living-room plantings out. She has also put up a new yard fence and established her walks and drives with border plantings.

"The county leader is a tenant farmer. The place where she is living is bare of flowers, but this week we drew the design for her base plantings, entrance plantings, screen plantings, and annual flower garden. The home agent went with this leader and her daughter into the forest to show them the native plants that they can use for the plantings. She has a few out. We are in hopes that other tenant farmers will follow her example and beautify the tenant farm home grounds. This county leader wrote a letter for the newspaper to all her community leaders. It was a splendid letter and a good piece of publicity work."

Clarendon County: "Highway beautification work done by individuals of the county has made a splendid showing. This has been emphasized by the beautification chairman of the council of farm women. In six communities work has been done that is of credit. One woman planted the roadside with crêpe myrtle and dogwood for the distance that the road came through her farm. Then she planted cosmos in front of the shrubbery. The cosmos started to bloom in the early fall and was a thing of beauty to all who chanced to come that way.

"A club girl in another community used King Humbert cannas to border the roadside on both sides for a long way. She saw that they were well fertilized and were lovely all during the summer."

Oregon Dollar-Dinner Contest

Oregon held a 4-H dollar dinner contest at its State fair last fall. Any 4-H cookery or home-making club member in good standing was eligible as a contestant.

The contest as described by Audrey Wiencken, assistant State club leader in Oregon, consisted of the planning, buying, preparing, and serving of a dinner for four people at a cost of less than $1. Each guest paid 25 cents for his meal, thereby relieving the contestants of the major cost of the contest. Each girl turned in her purchase slips so that her expenditures could be checked: When home-produced food was used, the cost was estimated at the retail prices for such food.

Although the girls could have the help of a leader in selecting their menu, they did their own buying, preparing, serving, and cleaning up. They were also required to answer any questions which were asked by the spectators. Each girl was allowed to use the kitchen for two hours. Miss Wiencken believes that more time should be allowed because the girls were rushed to prepare the meal, serve it, wait for the people to eat it, and then clean up afterwards in two hours.

When the 18 or more heifer and steer calves, branded 4/H, belonging to members of the Jackson County beef-calf club, lined up for honors at the junior fair in Walden, September 5, history was made in the 4-H club work of the United States.

So far as known, this club, composed of 13 boys and 5 girls, is the only beef-cattle club in the United States having the official emblem of the movement as a club brand, and it is registered for their exclusive use in Colorado.

Home demonstration agents in Arkansas who are located in the nine counties that are crossed by United States Highway No. 71 are working on a project to clean-up and beautify this highway.

Colorado Stimulates Peach Consumption

To assist Colorado peach growers in marketing their crop, the Colorado Extension Service endeavored this summer to stimulate increased consumption of Colorado-grown peaches by enlisting the aid of home makers, chambers of commerce, county commissioners, State penal institutions and hospitals, hotels, restaurants, and other agencies.

Three extension representatives, E. D. Smith, T. H. Summers, and William Case, went into different sections of the State to confer with officers of chambers of commerce in 25 cities and towns and urged the fullest possible cooperation in securing a more widespread use of Colorado peaches.

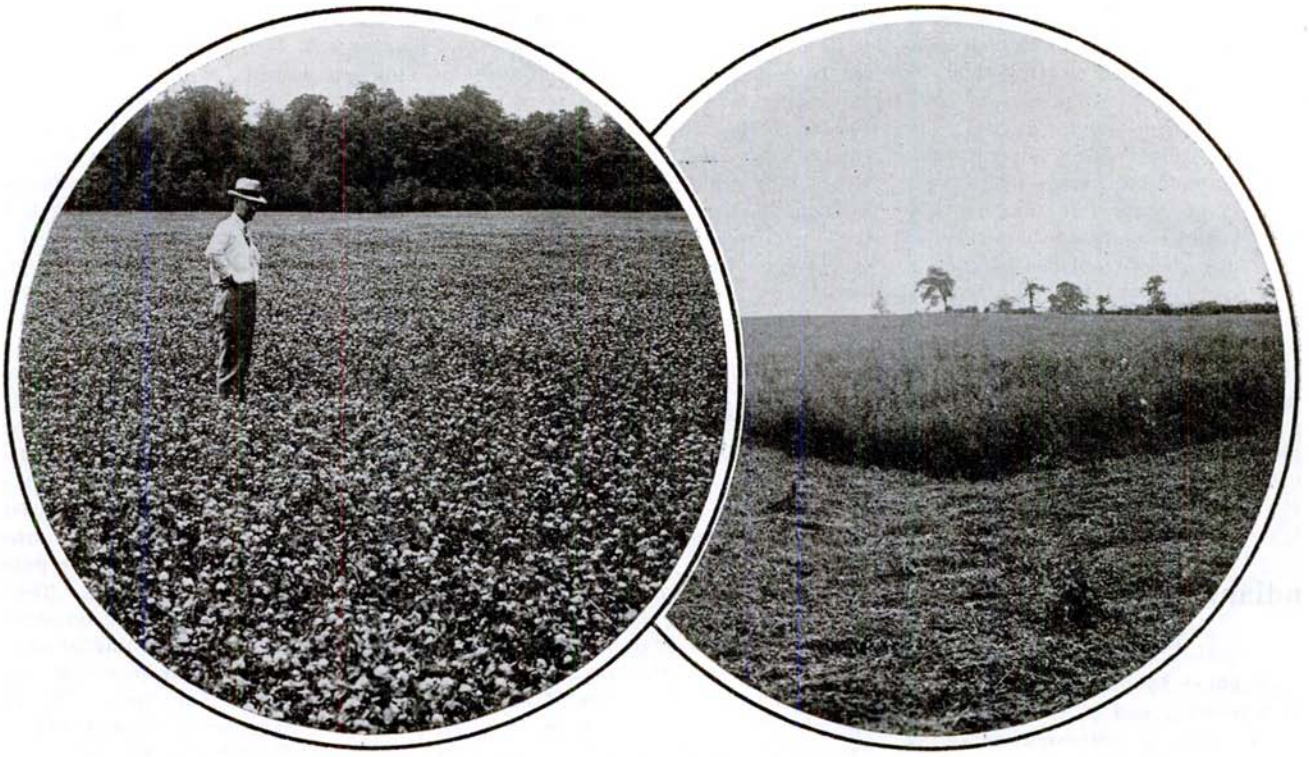
A circular on "Colorado Peach Recipes," by Miriam J. Williams, State extension nutritionist, was published for free distribution. In many localities grocers included a copy of this recipe booklet with each basket of peaches sold.

Conspicuous window streamers printed in red ink, reading, "Colorado Peaches—Buy Now—Ask for Free Recipe Booklet," were distributed to chambers of commerce, which in turn distributed them with copies of the recipe book to grocers offering Colorado peaches to the public.

The garden projects are proving not only popular but profitable this year. Woodford County, Ill., sends the following report: "Two hundred people attended the county garden tour on July 13 and 14. At the various gardens visited particular points emphasized by each garden were noted and discussed. The demonstration of garden implements used by the women proved most interesting and enlightening. Some of these gardens proved very profitable. Mrs. Robert Mayne stated that her garden cut her grocery bill two-thirds, and that one row of lettuce sold to a restaurant paid her home bureau dues. Mrs. Ellis Sharp stated she received $138 worth of vegetables from her garden with approximately $15 cost and 15 hours labor with a team of horses. Mrs. Sharp follows the directions in the Long Row Garden pamphlet."

Coat-making schools in New Hampshire last year led to the making or remodeling of more than 300 coats for women and children at an estimated saving of $4,655. These schools aided the women enrolled to make at a low cost well-fitting coats which do not have a "homemade look."

New York's Alfalfa-Clover Service



These clover and alfalfa fields indicate the success obtained by selecting the proper legume for the particular farm or field where it is grown

A PERSONAL service has been made available by county agricultural agents and agronomy extension specialists to New York farmers, enabling them to select legumes adapted to their soil conditions and to avoid failures with their seedings.

Results

In the average county where this work has been conducted, between 200 and 300 cooperators are obtained. Definite specifications are given for the seeding of from 1,000 to 2,000 acres of alfalfa and clover in each county. Due to unfavorable conditions, it is often necessary to discourage the seeding of alfalfa and advise red or even alsike clover instead. In certain counties considerable interest has been developed in sweetclover pastures. More than 200 acres of sweetclover pasture was seeded in one county as the direct result of the interest stimulated by the alfalfa-clover service.

The first step in starting the work in a county is to secure the support of the farm bureau officers and the advisory council of the local county farm bureau. The county agricultural agent then organizes a special alfalfa-clover committee which includes a representative from each town or from each important community. This committee is called together in the summer, at which time the agronomy extension specialist who has been assigned to the county explains the plans of the work covering a 2-year period. The committee is urged to cooperate in developing the work in their respective sections of the county and to assist in getting the maximum number of cooperators.

Following the organization and meeting of the committee, extensive local publicity is given to the project. Besides the county farm bureau news, the county agent utilizes the weekly, and when available, the daily press to create widespread interest on the part of the farmers of the county.

In early August cards are mailed to the farmers of the county offering them the opportunity to become cooperators and obtain personal service with their alfalfa or clover problems.

Farm visits are made to the cooperators in the fall, the agronomy specialist accompanying the county agent to the first 40 or 50 farms visited. Representative samples of surface soil and subsoil are taken from fields which are to be seeded. A regular form is used in recording information about each field sampled. The samples are sent to the agricultural college, where they are tested by the specialist. Letters are then written to the county agent advising what the individual farmer should do to succeed with his legume seeding. These letters are sent in duplicate, the original of each filed in the county farm bureau office and the copy sent by the county agent to the farmer.

The specialist conducts a series of one to two weeks of winter community meetings with the county agent. Various phases of alfalfa-clover production and harvesting are discussed and especial attention is given to the local problems and experiences of cooperators. At these meetings opportunity is given for new men to request the service, and new cooperators are thus secured who desire the soil to be sampled in the spring.

Samples of Soil Examined

Samples are taken by the county agent in the spring and throughout the summer and fall of the second year. These samples are examined and specifications furnished by the county agent. The specialist is available for assistance with any particularly difficult problems encountered the second year, but so far as possible the responsibility for the work is taken over by the county agent after the first year.

A monthly alfalfa-clover service letter is prepared by the specialists and sent to all cooperators in the State. This enables the specialists to keep in touch with the cooperators and to furnish them timely suggestions for meeting their legume problems.

An alfalfa-clover exhibit is generally made at the county fair. Several similar exhibits have been made by the specialists at the State fair the last few years. Various campaign methods of publicity have been employed by certain counties to stimulate interest in the project and especially to emphasize the value of good alfalfa and clover hay as feed for the dairy cows of the State. A special alfalfa-clover issue of the Farm Bureau News is published in each county, part of the material for this issue being furnished by the specialists.

Indiana Grain-Marketing Schools

In an effort to increase efficiency in grain marketing and in elevator operation in Indiana, 14 extension marketing schools for managers and directors of grain elevators were held during the fall of 1930. These schools were open to owners, managers, and officers of all elevators, whether privately or cooperatively owned.

All meetings were held in the evening. The original plan was to divide the work into four parts with four meetings in each county, each one week apart, but because of lack of time the material for the last two sessions was combined.

Results for two years of a 5-year study on the cost and incomes of local grain elevators in Indiana were available and were used for two of the three meetings. The work was divided under four heads: (1) Costs and incomes on grain operations, (2) sidelines—the importance of sidelines in building up volume of business and increasing efficiency of operation, (3) hedging, storage, and business practices, and (4) accounting—the need of adequate records.

These schools brought forth considerable thought and discussion on such points as the importance of a large volume of business, hedging as a means of insuring against price fluctuations, and the importance of keeping adequate, properly audited records, especially in cooperative elevators where the manager and directors are responsible to their membership.

In 6 of the 14 counties very successful meetings were held, while in 2, due partly to lack of local leadership and partly to lack of cooperation of the elevator operators the schools were unsuccessful. The attendance, which averaged 10 per meeting, was not as large as at other extension schools held by the Indiana Extension Service. However, these men were considered as leaders in their communities, and the results should reach many other people.

Pennsylvania Dairymen Receive Awards

When honor certificates are awarded at the National Dairy Exposition in St. Louis, October 10 to 14, the names of 1,037 Pennsylvania dairymen will be announced, says E. B. Fitts, in charge of dairy extension work at the Pennsylvania State College. The awards will be made to members of dairy herd-improvement associations who obtained an average of 300 or more pounds of butterfat per cow for the year ending June 30. The average production of butterfat in Pennsylvania in 1930 was approximately 196 pounds. A gain of 131 herds over the previous year is recorded for Pennsylvania.

Of the 1,037 honor herds, 285 averaged between 350 and 400 pounds of butterfat per cow, 84 herds between 400 and 450 pounds, 17 between 450 and 500, and 9 more than 500 pounds.

Bradford County leads the Keystone counties with 67 honor herds in 6 associations, Tioga County has 48 herds in 5 groups, Chester County 46 in 4, Cumberland County 45 in 2, and Union County 42 in 2.

4-H Clubs Plan National Achievement Celebration

The conclusion of another successful year of 4-H accomplishment will be observed during the national 4-H club radio hour, from 12.30 to 1.30 p. m., eastern standard time, November 7. On this day hundreds of thousands of 4-H club members and local leaders will gather around their radios to listen to and take active part in the second annual nation-wide celebration of 4-H achievement. This annual radio celebration, first put on the air on November 8 of last year, constitutes a national recognition for the activities successfully completed by 845,000 4-H club members during the year.

The 4-H achievement-day radio program will be broadcast over the coast-to-coast network of 51 radio stations associated with the National Broadcasting Co. The program will be conducted jointly by the State extension services of 40 States, in which the radio stations on the network are located, and the United States Department of Agriculture. The unique feature of the program is its dual nature. It will provide both a national broadcast of talks and music over the entire network of 51 stations to all 4-H club members and individual State broadcasts of achievement-day programs from local radio stations to the club members in each of the 40 States cooperating.

The first 15 minutes of the hour will be national in scope, and will consist of music, opening announcements, and a talk from some one nationally prominent, who will be announced later. The national network will then be temporarily dissolved and for the ensuing 30 minutes each radio station will broadcast a local State program. On these 51 State programs to be heard simultaneously all over the United States will be heard 4-H club members, governors of States, presidents of State colleges, extension directors and supervisors, leading citizens, and music characteristic of the State 4-H clubs. Promptly at the end of the 30-minute local programs, the network will again be assembled and the final 15-minute program will be broadcast from Washington, D. C., to the entire country. The program will be explained in full detail in a special announcement that will be sent to all extension workers.

Club members and their local leaders throughout the country are planning to hold group meetings and are organizing local achievement-day programs that will supplement the State and Federal programs.

Arkansas plans to coordinate local observance of 4-H achievement with the national celebration. A general round-up of 4-H club members will be held at the county seat, where prizes, medals, and certificates for the year's work will be awarded. A radio will be set up so that all club members may have an opportunity to listen in on the Federal and State programs. By having the local achievement day at this time it is hoped that the interest and enthusiasm aroused will result in a larger 4-H enrollment during 4-H club week, the first week in December.

Missouri's Home Demonstration Guide

MISSOURI home demonstration agents have adopted a guide for the conduct of their work. There are seven points to this guide: (1) Improve the quality of publicity and hold at least one training school for reporters; (2) attend only the meetings which definitely forward the program, create good will, or establish interest in new communities; (3) devote approximately one-third of the time to 4-H club work; (4) develop new centers and expand the work so that more women will be served; (5) know the county better, including school conditions, vital statistics, census figures, and financial circumstances; (6) send all the women at least three circular letters; and (7) improve the quality of leadership and train administrative leaders, home demonstration club leaders, and 4-H club leaders.

With the effectiveness of the guide in mind, Essie M. Heyle, State home demonstration leader, was careful to see that each agent's county program of work for 1931 included a training school for leaders of women's clubs. Not only was the training school definitely written into each county program, but this provision was followed up by personal assistance in the training schools, Miss Heyle and the assistant State leader, Gladys Muilenburg, both taking part in the leader training work.

Through a monthly news letter in mimeographed form mailed to all presidents of women's clubs, Miss Heyle and Miss Muilenburg also supplied instructions to club officers. This strengthened the local leadership to such an extent that the efforts of the home demonstration agents were supplemented and their influence extended into new areas.

As a corollary to this work among local leaders, the State office also encouraged each agent to make the best possible use of the local leaders, even to intrusting them with the responsibility of organizing new neighborhood women's clubs and 4-H clubs.

Results, even in the first six months under the guide plan, have been very encouraging. In practically all counties, the three circular letters mentioned have gone to the majority of homes in the counties served by home demonstration agents.

There have been from 2 to 10 new groups organized in every county. The women in the clubs already organized are making an effort to interest other women in joining their clubs. In a few places clubs are having a membership campaign contest. The 10 new clubs in one county were organized as a direct result of the efforts of old clubs and organized with almost no assistance from the county home demonstration agent. Plans are being made to have the achievement day a guest day, with each woman bringing one guest as a means of interesting more women.

As most of the county home demonstration agents are already serving as many centers as they can, an effort has been made to organize more clubs at the centers already established, and to get more women into the clubs already organized rather than to establish new centers.

In all but two counties having home demonstration agents, all-day publicity training schools have been held for club reporters by Miss Muilenburg, with the help of local editors. These training schools for club reporters and the help given to agents by the college editor's office have resulted in much better publicity. These women club reporters have been averaging nine published stories a week about their club work during the past two years, but the quality has often been poor. An effort is being made to train reporters to write stories that, in addition to having news value, give some information about worth-while homemaking practices that are being taught about the results and value of home economics extension work.

A training school in Missouri for reporters of women's clubs

Improvement in the quality of reporters' publicity is also being stimulated by a statewide publicity contest. Two small cash prizes are being offered by the State home demonstration agents to women club reporters who submit the best stories.

Thus far, only a few agents have made a serious attempt to know their communities better, but all hope to do this before the fall program planning meetings.

Considerable progress has been made in improving the quality of leadership, not only through training schools but through letters of instruction and help sent from the State office of women's club presidents, secretaries, game and song leaders, child development chairmen, and reporters.

E. D. McCollum, county agricultural agent in Livingston County, Mo., makes up tables which show comparative figures over a period of years on such items as the number of calls made, circular and individual letters prepared, people directly given service, and the average cost of giving each individual direct service. In December, 1930, and January and February, 1931, the average cost for direct service was 32 cents for each individual.

Two hundred and fifty 4-H club members and leaders from Los Angeles and Orange Counties, Calif., met together to listen to the National 4-H Club Radio Program just before going on a tour of a certified dairy.

Farm Sanitation Campaigns

One of the community forms used for making septic tanks in Pennsylvania counties

THERE are about 105 forms for the construction of septic tanks on farms in use in 65 Pennsylvania counties as a result of a farm sanitation project which has been conducted in the State since 1920.

Following the World War, many farmers installed water systems and complete bathroom equipment but did not provide for proper sewage disposal. Consequently, the need for a safe system of sanitation was emphasized in a number of county extension programs and an extension specialist in agricultural engineering to plan and supervise sanitation work was employed.

Wooden Forms Available

Only a few tanks were built the first year, and then a county agent suggested the idea of keeping the wooden forms for future use, as it was more trouble to build the forms than it was to place the concrete. At the cost of a little more material and labor and with the addition of one dozen ⅜-inch bolts the forms were made more easily assembled. Sometimes the bolt heads were so placed that they could not be withdrawn after the concrete had set. This difficulty was overcome by using wagon box rod nuts which are fastened on the outside of the form by two screws.

A model form and tank were made early in the work and did much to sell the idea. These were accompanied by a large blueprint chart and were used in meetings and lent to county agents for fair exhibits. When the first tank was built in a community, a brief news item was supplied to the local newspaper about its construction and the availability of the form for use in the community was usually mentioned. Field meetings were held in connection with the work, usually when the form was being removed from the finished tank. Brief discussions on the plumbing and water supply were given at the same time. Probably the best educator was a set of lantern slides made from photographs taken during the construction of tanks in various parts of the State.

Septic Tanks and Forms Constructed

Year	Community forms reported available	Tanks built
1920	0	3
1921	5	24
1922	16	60
1923	34	146
1924	56	195
1925	63	357
1926	85	365
1927	93	407
1928	94	335
1929	103	381
1930	87	316

There were many more forms and septic tanks built than reported. When the newness of the demonstration wore off some of the forms were not reported, even though they continued to be used. Some of the old forms were worn out and were replaced after being used in the building of about 50 tanks.

It was found desirable to have an active local leader take charge of the work. This leader usually owns the form and collects a small rental either for reimbursement or replacement. Local leaders are usually farmers, plumbers, concrete masons, or members of building-supply firms. Occasionally the form has been financed by county funds. In Tioga County the Pomona Grange appropriated $8 for materials, a planing mill did the cutting, and the county agent and specialist constructed the form.

Iowa's Reading Project

Black Hawk County, Iowa, has adopted a reading project. The project was undertaken to stimulate interest and appreciation of literature and to help rural families in the county to conveniently obtain good books and magazines. The work according to Fannie A. Gannon, State home management specialist, is furthering adult education in the county and is aiding its people to occupy their leisure time profitably.

Ninety-seven stations, in charge of a trained librarian, have been established throughout the county and a book truck is being used to keep them in touch with the central library at the county seat and to facilitate the exchanging of books. The home management specialists and the State committee on library extension of the library association selected Black Hawk County because it has had two projects emphasizing home-management practices which create leisure time.

Five meetings were held in the county at which time the following subjects were taken up: (1) Books on midwestern life; (2) biographies and autobiographies; (3) magazines and periodicals for the home; (4) books for folks of various ages; and (5) books for reading aloud in the family.

Books on midwestern life were chosen as the first group because the interest of the people can be aroused if the books have a familiar setting, are historically interesting, and are written by authors residing nearby. The work is conducted with local leaders, and lesson leaflets are prepared for each meeting to guide the leaders in presenting the subject matter and in leading the discussions.

Better Sires Improve Livestock In Kentucky

BETTER-SIRES extension work has resulted in placing 15,523 purebred sires on Kentucky farms during the last 10 years, according to a summary made by Wayland Rhoads, Kentucky extension field agent in animal husbandry. This number includes 5,916 purebred beef and dairy bulls, 3,311 purebred boars, and 6,296 purebred rams.

When this work was begun in 1920 it was estimated that an annual loss of $14,000,000 was due to the use of poor sires, not including poultry. Whereas only 20 per cent of the bulls in the State were of pure breeding, now more than 50 per cent are purebreds.

Although Kentucky was the forty-fifth State to enter the national purebred sires contest, in five years it ranked first place. To date more than 3,500 livestock producers have enrolled in the crusade against poor breeding.

Baby beeves at a sale

Purebreds Replace Scrubs

Russell County succeeded in replacing all grade and scrub bulls with purebreds in 1927, being the second county in Kentucky and the third county in the United States to accomplish this. Taylor County was the third county to reach this goal in Kentucky and the fourth county in the United States.

Mr. Rhoads describes his plan of work in eliminating scrub sires as follows:

Plan Outlined

Before work is begun in a county, representative livestock men are called together at the county seat to outline a plan of procedure for substituting purebred sires for grade and scrub sires. Usually a complete survey is made of all purebred, grade, and scrub bulls in the county. After these figures are tabulated the committee in charge is ready to begin work. Meetings are held in all sections of the county, at which time the advantages of well-bred animals over scrubs are discussed. Pictures showing better types of livestock and charts comparing the value of good stock and poor stock are shown. All of those owning grade and scrub bulls in the community are visited for the purpose of inducing them to replace these animals with purebreds. Purebred sires are located and prices obtained on them.

Exhibits at Fairs

Better-sires exhibits are shown at fairs, 57 such exhibits being made in one summer. Scrub sire trials have been held in many counties.

Better-sires special trains were operated on two railroads in the State, the college of agriculture and other interested agencies joining in making the exhibits on the trains. A purebred bull was exchanged for a grade in each county visited.

Although less emphasis is being placed on the campaign feature of the purebred sires work, county extension agents and Mr. Rhoads are continuing the work each year, and gradually the number of scrub sires is decreasing in nearly every county in the State.

Shows and Sales

Mr. Rhoads mentioned cattle shows and sales as factors in furthering interest in purebred sires, especially the shows held at Maysville and Louisville. A few years ago the beef-cattle men in Mason and adjoining counties organized a beef breeders' and producers' association. This association holds an annual sale of breeding cattle at Maysville. This year 28 head of purebreds averaged nearly $73, the prices ranging from $45 to $125.

The annual finishing, showing, and selling of 2,000 to 3,000 fat cattle by 4-H club members, Smith-Hughes high-school students, and adult feeders has had an influence on the demand for purebred sires. These feeders demand purebreds or high grades.

Baby Beef Project

The 4-H club baby-beef project calls for 600 to 800 extra-fancy calves annually. High-school students finish 200 to 300, and adults 1,000 or more. The best of these go to the annual show and sale at the Bourbon Stock Yards in Louisville in October of each year. This show attracts hundreds of feeders, buyers, and 4-H club members and their parents. The publicity given it through the newspapers, as well as local publicity, especially by 4-H club members, helps materially to further interest in better livestock and purebred sires.

4-H beef-calf clubs are the best means through which to conduct a purebred sire campaign, says D. E. Richards, Montana livestock specialist. After the club boys have exhibited their calves and seen the long-legged and long-necked ones lined up and compared with the proper beef type, Mr. Richards finds that the boys demand quality calves from stockmen, and that the records of the boys stimulate the adults to follow better practices.

The work also furnishes the specialist with a means of getting acquainted with stockmen and has introduced improved cattle feeding as a permanent enterprise of the farm business in many parts of the State.

A series of 1-day regional conferences to discuss the principles of cooperative marketing and the cooperative organizations now operating in Missouri was held for the county agricultural agents in that State during September.

Thirty older club members were trained for one week in leadership and served successfully as junior counselors for the Massachusetts State 4-H club camp this year. The training also stimulated the interest of these older boys and girls and will enable them to be more efficient leaders in their home communities.

New Film-Strip Series Now Ready

THE nine film strip series listed below have recently been completed by the Office of Cooperative Extension Work in cooperation with the Bureaus of Animal Industry, Biological Survey, Plant Industry, and Forest Service. These film strips may be purchased from the contracting firm at the prices indicated, provided authorization to purchase is procured from the Office of Cooperative Extension Work. A complete catalogue of available film strips will be supplied upon request.

Transplanting trees and shrubs; Series 176 (58 frames). Supplements Farmers' Bulletin 1591, Transplanting Trees and Shrubs. Illustrates the essentials for successful transplanting. 44 cents.

Grafting and budding fruit trees; Series 197 (36 frames). Supplements Farmers' Bulletin 1567, Propagation of Trees and Shrubs. Illustrates whip grafting, cleft grafting, and shield budding of fruit trees. 35 cents.

Rug-Making—Fireside Industry; Series 264 (100 frames). Illustrates various types of rugs, mats, and wall tapestries made by farm women and girls as one of the home industries. 71 cents.

Systems of crop farming for eastern Washington and northern Idaho; Series 266 (39 frames) supplements Washington Experiment Station Bulletin 244 and Idaho Experiment Station Bulletin 173. Illustrates profitable cropping systems, including legumes for eastern Washington and northern Idaho. 35 cents.

The United States Rabbit Experiment Station; Series 268; (34 frames) supplements a mimeographed leaflet of the Bureau of Biological Survey (Bi 983). Illustrates the plant and also the operations of the United States Rabbit Experiment Station at Fontana, Calif. 35 cents.

The Marketing of Eggs in the United States; Series 271 (46 frames) supplements Farmers' Bulletin 1378, Marketing Eggs, and Circular 73, The Cold Storage of Eggs and Poultry. Illustrates various steps in the marketing of eggs. 35 cents.

Barberry eradication protects small-grain crops; Series 272 (39 frames) supplements Farmers' Bulletin 1544, Common Barberry and Black Stem Rust. Illustrates the relationship of common barberry to black stem rust and tells the story of the campaign that is being waged against rust-spreading. 35 cents.

Four localized film strips were completed 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. These series include:

Maryland— Dairy calf club work (35 frames).

Wyoming— 4-H club camps (26 frames).
4-H club work (56 frames).
4-H club in Johnson County (36 frames).

Information that will help the extension worker to organize film strips will be supplied upon request to the Office of Cooperative Extension Work.

Louisiana Uses Motion Pictures

Motion pictures were used effectively in Louisiana's campaign for better dairy cows and improved pastures which brought together 10,000 farm men, women, and children. There were 72 meetings, which were conducted in connection with the campaign by R. A. Wasson, agronomist; E. W. Neasham, dairy specialist; and the cooperating county agricultural agents. Messrs. Wasson and Neasham reported that everyone present appeared to follow the pictures without difficulty and to get the lessons given by them. The showing of the pictures, they found, opened the way to the giving of personal suggestions and assistance to those present.

The county agricultural agents advertised the meetings and gave the titles of the pictures that were to be shown. At the meetings, the specialists illustrated their lectures with four reels on dairying and two reels on crops. After the pictures, the specialists answered questions and offered recommendations on pastures and dairying. The final number was the department's agricultural one-reel film, A Tale of Two Bulls.

By having their portable projector attached to a truck carrying a generator, the specialists had a dependable source of electric current throughout the campaign.

Eight new charts have been added to the series of four charts featuring good and bad posture, which was announced in the Extension Service Review for June, 1931. The new charts are entitled as follows: Energy Required for Various Postures, Posture When Waxing or Oiling Floors, Posture When Mopping, Posture When Wringing a Floor Mop, Modern Devices Save Energy, Method and Posture in Cleaning Floors and Rugs, Posture When Cleaning Windows, Posture When Working at Oven.

The series of 12 charts has been issued in booklet form and is available for free distribution to home demonstration agents by the Office of Cooperative Extension Work.

4-H ACHIEVEMENT

TO BE FEATURED IN NATION-WIDE CELEBRATION

NOVEMBER 7, 1931, has been dedicated to the second annual celebration of the achievements of boys' and girls' 4-H club members. The extension services of State agricultural colleges and the United States Department of Agriculture will feature 4-H achievement day in a joint Federal-State radio program to be broadcast from 12.30 to 1.30 p. m., eastern standard time, over a network of 51 stations associated with the National Broadcasting Co.

HELP TO CELEBRATE 4-H ACHIEVEMENT

TUNE IN ON THE NATIONAL 4-H ACHIEVEMENT RADIO PROGRAM, NOVEMBER 7, 1931

For the family more use must be made of milk, eggs, the vegetable garden, and fruits; for the stock there should be better pasture and hay, especially the abundant use of legumes.

—*SEAMAN A. KNAPP.*

U. S. GOVERNMENT PRINTING OFFICE: 1931

Extension Service Review

VOL. 2, NO. 11 NOVEMBER, 1931

4-H CLUB MEMBERS LEARN TO MEET MARKET REQUIREMENTS

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 176 FOR PRICES

Contents

In This Issue

"THE desire for good roads, electric power, leisure and recreation, and a more artistic home on the part of the farmer has often developed his ability to pay for these things," says K. L. Hatch of Wisconsin in discussing forces that make farm life attractive. "And," adds Director Hatch, "it is the primary job of the extension service to help the farmer increase his earning power and enable him to get the things he so much wants."

OVER 160,000 cotton farmers are now selling their crop through the American Cotton Cooperative Association direct to manufacturers of cotton goods. Around 400 of the largest manufacturers of the United States are obtaining from the association uniform and dependable supplies of raw cotton in any quantity or quality desired. These are some of the facts that C. O. Moser gives us in his review of 18 months of cooperative marketing under the leadership of the American Cotton Cooperative Association.

THE home garden and what it produced this year is very much in the center of the extension stage. W. G. Amstein of Arkansas and A. B. McKay of Mississippi, extension horticulturists, give a graphic picture of how thousands of gardens were started last spring and have been the means of supplying the table in the farm homes in their States with wholesome home-grown food. Their story gives full credit to the zeal and energy that home-demonstration agents have devoted to the growing of gardens and the canning and preserving of vegetables and fruits in the effort to have farm families provide themselves with ample food supplies for the coming winter months.

EXTENSION agents are paid a high tribute by J. R. Mohler, chief of the department's Bureau of Animal Industry, for the cooperation they have given veterinary inspectors of the bureau in campaigns for disease eradication and the improvement of sanitary conditions as he discusses the work of his bureau and its relation to extension work.

On the Calendar

THE Association of Land-Grant Colleges and Universities, Chicago, Ill., November 16–18.

National 4-H Club Congress during International Livestock Exposition, Chicago, Ill., November 27–December 4.

Hawaiian Annual Extension Conference, University of Hawaii, Honolulu, second week in December.

National Land-Utilization Conference called by the Secretary of Agriculture and the Association of Land-Grant Colleges and Universities, November 19–21, Chicago, Ill.

The date of the radio program for November will vary from the usual procedure of having these broadcasts "always on the fourth Saturday of each month." The change has been brought about by the meeting of the Association of Land-Grant Colleges and Universities in Chicago on November 16, 17, and 18. The next broadcast will be on Monday, November 16, and will come direct from the meeting of the association.

IDAHO's "Eat More Lamb" campaign suggests that our home-demonstration forces are well on their way in taking the leading rôle in popularizing and obtaining greater consumption of the native farm products of a State.

As a result of this campaign more lambs and more of each lamb are being used on Idaho tables. It is the "live-at-home" idea for the individual farm applied to the people and the products of a State. It is an idea that intrigues you with its possibilities.

CERTIFICATE.—By direction of the Secretary of Agriculture, the matter contained herein is published as administrative information and is required for the proper transaction of the public business

Extension Service Review

VOL. 2 WASHINGTON, D. C., NOVEMBER, 1931 NO. 11

The Bureau of Animal Industry

JOHN R. MOHLER

Chief, Bureau of Animal Industry, United States Department of Agriculture

FARMERS and stockmen are alert in discerning conditions that hamper livestock production. In fact, they have been the discoverers of many conditions that have kept the Bureau of Animal Industry busy since its establishment 47 years ago. The early work of this bureau was largely that of studying and eliminating diseases and other conditions adversely affecting the livestock industry. In time, other duties were assigned to the bureau by Congress, until now the work involves investigational, supervisory, regulatory, and administrative functions. Obviously it is desirable for extension workers to be familiar with these governmental activities and with the bureau's general methods of conducting them.

H. L. Shrader

E. M. Nighbert

John R. Mohler
Chief, Bureau of Animal Industry

K. F. Warner

C. D. Lowe

Important Research Findings

In order for field work to be successful, well-established facts and sound methods must be the basis for procedure. Typical examples which have a bearing on current field work are: (1) Ascertaining the life history of the cattle-fever tick and developing methods for its eradication; (2) preventive measures in dealing with hog cholera, including immunization by the serum treatment; (3) research in the control of parasites, resulting in the swine-sanitation system of controlling roundworm infestation and associated hog-lot diseases; and (4) studies of tuberculosis, resulting in a systematic campaign of eradicating this disease from livestock, thereby also protecting human health. Other research work has dealt with the germicidal power of disinfectants; the development of practical field tests for determining the proper strength of dipping and spraying solutions; and the development and improvement of equipment used for sterilizing certain imported commodities such as hay, straw, bagging and packing material likely to introduce foreign livestock diseases into the United States.

Another important field of research is the study of veterinary biological products now made in large quantities under Federal supervision and widely used in the practice of veterinary medicine. Important experimental work, also, preceded and has accompanied the administration of the Federal meat inspection which is one of the major activities of the Bureau of Animal Industry.

Under the bureau's various regulatory activities, interstate traffic in animals and their entrance from abroad are closely supervised and may be prohibited when necessary. The various States have provided similar safeguards which supplement the Federal laws. The farmers and stockmen may feel reasonably secure in the maintenance and improvement of an ample supply of livestock to meet public and private needs.

In addition to the duties mentioned, which involve the livestock industry of the entire country, the Bureau of Animal Industry is engaged in many experimental projects dealing with specialized problems. This work, much of which is conducted cooperatively with other bureaus of the department and with State institutions, deals largely with breeding, feeding, and management of certain classes of livestock and with their products.

Although the bureau's investigators are specialists in their respective fields, they also must have an ample background of practical experience and must be familiar with the principal social and economic developments of American agriculture. Knowledge of this sort has an important bearing on many current projects. It is well known, for instance, that the migratory instinct of our farming population no longer finds an outlet in free land. Our frontiers have vanished; homestead land and grazing land are now largely settled. The varied topography, climate, and soil of our country are no longer barriers to parasitic and other diseases of animals. The infections have crossed the barriers and accommodated themselves to new environments. Moreover, the use of the same pastures and feed lots for a number of years by the same classes of animals have tended to increase the number of parasites. Thus, these pests threaten to

81924—31

become veritable armies of occupation that live on the blood and tissues of animals and the labor of their owners. The bureau's investigators must keep facts like these in mind when developing scientific strategy for turning back this menace.

The Bureau of Animal Industry also studies the types of animals that produce the kind and quality of products the consuming public demands. In response to consumer preference pork supplies are now derived largely from pigs less than 8 months old. Beef commonly comes from cattle less than 2 years old. We have broiler chickens at 60 days of age and lamb every week in the year.

Fortunately the United States Department of Agriculture and cooperating institutions are so organized that the fact findings of this bureau can be carried quickly and efficiently to livestock producers, business men, and others concerned with the livestock industry. The Extension Service is the principal channel by which information is distributed in a manner giving measureable results. The effectiveness of extension work, as recorded in annual reports of the Extension Service and in special studies, has been highly interesting to administrative and technical workers of the Bureau of Animal Industry. In order to maintain close contact with extension officials in the department and in all States the bureau has selected several experienced subject-matter specialists who likewise have had extension experience. These specialists are: C. D. Lowe, extension animal husbandman; H. L. Shrader, extension poultry husbandman; E. M. Nighbert, extension veterinarian in parasite control; and K. F. Warner, extension meat specialist.

The bureau seeks to aid these and other extension workers by supplying publications, posters, exhibits, motion pictures, and related material suitable for distribution. In addition to the familiar Extension Service Handbook, a special publication containing recommendations of the Bureau of Animal Industry on problems of livestock production likewise is available to extension workers. The four specialists named enjoy the confidence and support of the bureau's administrative and technical staff and are given all possible support in the formulation of extension projects. These men participate in conferences and consultations with other specialists and are familiar with the current progress of experimental and research work.

With respect to its field veterinary activities, the Bureau of Animal Industry is often asked how extension workers can best cooperate and to what extent. This message appears to be an excellent opportunity to discuss that topic. The professional nature of disease control, particularly those branches involving diagnosis and treatment of animal maladies, obviously require for best results the training which a systematic veterinary course provides. It naturally follows that the immunization of swine, for instance, with attendant responsibilities for their health and general welfare is a function properly included among the duties of a trained veterinarian. Similarly, there has been general recognition that the extensive program of tuberculosis eradication is founded on a professional knowledge of the disease and veterinary skill in applying the tuberculin test. The Bureau of Animal Industry has inspectors in charge of its veterinary activities in the various States.

These inspectors pay generous tribute to the valuable services that State and county extension workers have rendered, especially along educational lines, in aiding disease control and eradication efforts. In numerous instances county agents have planned and organized tuberculin-testing campaigns so thoroughly that the work of the veterinarians has been greatly expedited.

Much of the public sentiment in favor of official veterinary work has been created and maintained by foresighted and energetic extension workers. The question of sanitation is also one which county agents have supported effectively. It has a particular bearing on the control of infectious abortion, in the maintenance of tuberculosis-free herds and areas, in the prevention of swine and sheep parasites and diseases, and in poultry raising. The emphasis placed by extension workers on the value of sanitation in hog lots and poultry yards has already brought about noteworthy improvement. According to the department's recent pig survey, the number of young pigs saved is slightly on the increase, and the year 1931 is the first in many years that the number saved per litter has exceeded six.

In the case of poultry, a survey conducted in Connecticut several years ago showed a mortality of 25 per cent in young chicks. The cooperators in the so-called grow-healthy-chicks plan have re-

(Continued on page 163)

A Well-Planned County Extension Office

WE often wonder what the offices of other extension workers look like. Coe Pritchett, county agricultural agent in Buchanan County, Mo., recently photographed several views of the local extension office. Let us see how he and Miss Elsie I. Jarrell, the home demonstration agent, arranged things. The views are: (1) County agricultural agent at desk with office caller, (2) reading table for office callers, (3) office secretary at her desk, (4) home demonstration agent at desk with caller, (5) main entrance with bulletin racks on each side. Mr. Pritchett's bulletin rack is on the left and Miss Jarrell's on the right.

Home Gardens Flourish in the South

THE home garden as a source of a good living for the farm family has been emphasized in the Southern States during the past year, especially in those States where the 1930 drought wiped out much of the food supply and also most of the cash income. The truly remarkable results of this work in two States are given below.

Gardens to feed Arkansas folks have been a reality this year, many agencies cooperating to secure this end. Last summer the Arkansas Extension Service, through the county agricultural and home demonstration agents, emphasized the growing of fall gardens. Following this, a year-round garden program was cooperated in by the American Red Cross, Farmers' Seed Loan office, bankers, business men, vocational agricultural workers, and all farm people. There are about 242,000 farms in Arkansas, according to the 1930 census. Based on visits to 60 counties it appears that practically all the farms with both white and colored operators have gardens.

Figures gathered from the county home demonstration agents by W. G. Amstein, extension horticulturist, show that these agents have had contact with 100,000 gardens this year. Of this total, 2,500 have been demonstration gardens and 4,500 will have records kept on them.

The 4-H club garden for boys and girls has been one of the projects most widely carried this year. More than 5,600 boys and girls have enrolled in this particular work and it is expected that 25,000 or more are taking an active part in the care of the family garden.

In the Delta areas the plantation owners have responded remarkably to the suggestions offered regarding the possible types of plantation gardens. It is reported that approximately 4,260 gardens on plantations have been under the direction of the county and negro home demonstration agents.

The American Red Cross garden packages aided more than 50,000 families to start their gardens and the carefully adapted varieties have further aided the garden program.

One farmer in Scott County, the first to pay his seed loan of $90, reports that he did so from the proceeds of a 2-acre plot of Irish potatoes. Besides paying the note, he had potatoes enough to last the family a year and $15.

Mary Alice Larche, former home demonstration agent in Tallahatchie County, Miss., instructing her garden leaders in details of garden work. (Inset) Helen Hunter, home demonstration agent in Panola County, Miss., instructing a family about growing vegetables.

One of the most outstanding examples with the gardens has been the wide variety of staple goods that has been grown. Pellagra will have hard work gaining a foothold where these garden supplies have been prepared. It is believed that on an average 17 vegetables have been grown per garden. How important this one feature is, and too often it is not recognized. It helps to provide an adequate diet. Most families made a good selection of vegetables that kept them well supplied with fresh foods and provided material for canning in amounts that can best be measured in terms of carloads. One of the largest Irish potato crops ever grown for local use was produced this season. To further the food supply many are planting fall crops of Irish potatoes and sweetpotatoes.

The fall gardens are as numerous as the spring gardens, the variety nearly as great, and certainly the fall crops will conserve the canned reserve supply until such time in the winter that the demands can not be met from fresh supplies out of the fall garden.

Last fall and winter the fall gardens provided turnips and collards particularly. In addition, many found that nearly all of the early spring vegetables would prove fully as satisfactory when selected and grown in the fall garden.

Mississippi has more than twice as many gardens this year than ever before because of the intensive efforts of extension workers. While records show that for several years past there has been a steady increase in the number of home gardens cultivated in Mississippi, existing conditions at the beginning of this year demanded that special attention be given to the home-garden project, even at the expense of slowing up temporarily on other horticultural projects.

To encourage the planting of home gardens, a demonstration garden was established in each organized community of the county, with a competent garden leader in charge to work with the home demonstration agents in creating deeper interest in growing gardens. These gardens served as a guide to what and when to plant, how to cultivate and otherwise operate a model garden. Monthly garden meetings were held in most communities. Home demonstration agents and garden leaders from several counties held 1-day meetings once each month at central places to consider garden problems. This meeting together stimulated a healthy competition in the conduct of the project, and contacts made with fellow workers from other counties strengthened each agent and garden leader for better service in their respective counties and communities.

The subject-matter specialist, A. B. McKay, cooperated with the home demonstration agents in supplying them with necessary material and responding to calls for special aid.

The Bureau of Animal Industry

(*Continued from page 162*)

duced this loss to 7 per cent. Similar results are being obtained in many other States.

Thus, extension work is supplementing in a most valuable and constructive manner the fields of animal and poultry husbandry and veterinary science. And by diffusing new knowledge among the people by well-coordinated effort the extension system is greatly hastening the adoption and use of improved practices.

Idaho Products for Idahoans

MARION HEPWORTH

State Home Demonstration Leader, Idaho Extension Service

A PROGRAM has been conducted in Idaho which took into consideration the possibilities of utilizing lamb more fully as a food and having more people know the importance of using the whole carcass. Demonstrations known as Lamb is always in season and use the forehalf, were started by the Idaho State Wool Growers Association, the Women Wool Growers of Idaho Falls, the animal husbandry department of the University of Idaho, the State extension animal husbandman, and the State home demonstration leader to bring about a more complete utilization of lamb and to emphasize the fact that lamb is available the year round.

Cutting and Cooking

The first demonstration was given at the annual meeting of the Wool Growers Association in Idaho Falls. This demonstration consisted of the cutting of the whole carcass of lamb by a local meat cutter and calling particular attention to such cuts as the rolled shoulder, rolled breast, and Saratoga chops. The State home demonstration leader cooked these cuts and also showed suitable garnishes and accompanying vegetables to serve with each cut, all of which were Idaho products. Lamb was made the center of interest but this interest was further stimulated by calling attention to the fact that lamb is particularly suited to serve with many Idaho vegetables. Rolled breast of lamb was garnished with glazed apricots, parsley, whole cooked onions, and string beans; the rolled shoulder of lamb with cinnamon apples, curled celery, browned potatoes, and watercress; Saratoga chops with spiced pears, peas, and parsley; baked neck slices, garnished with vegetable relish, buttered carrots, parsley, and glazed prunes, and the crown roast of lamb garnished with whole cooked onions, cinnamon apples, cauliflower, and endive. These menus were used in the demonstration, all Idaho products, but with lamb the feature of the meal.

From this first demonstration the program has traveled a long way. Immediately requests came from different parts of the State for the same demonstration, and it occurred to those working closely with the State home demonstration leader that there were other possibilities in advertising the value of lamb as a food, and new features were added. The same type of demonstration has been given before various types and groups, such as the Catholic Wowen's League, federated groups, parent-teacher associations, relief societies of the Latter Day Saint Church, local leaders' meetings, feeder's day programs, wool-pool meetings, economic meetings, and groups of women meeting especially for the demonstration.

Out of the small start made in Idaho Falls, 15,733 women have attended the demonstrations showing the preparation of the various cuts of lamb, featured with various Idaho products, and it is safe to say that of this number there are 12,000 women who are utilizing lamb more completely and keeping before the public the fact that lamb is always in season and that the whole carcass must be used if the price is to be within the reach of the average household.

New possibilities developed out of the original demonstration, one of which was to call to the attention of hotels and restaurants the possibility of increasing the demand for some of the less-used cuts of lamb by featuring lamb on their menus. The response was hearty. Leading hotels and the best restaurants in the State featured on their menus rolled shoulder of lamb and Saratoga chops.

Using the Whole Lamb

Local market men cooperated in showing the possibilities of using the whole carcass and the disadvantage of using only leg of lamb and lamb chops. The secretary of the State Wool Growers Association, M. C. Claar, assisted when it was impossible for the local market men to help with the cutting of the lamb. Wool growers' wives and county agricultural agents made arrangements for the demonstrations and the animal husbandry department, extension animal husbandman, and the Wool Growers Association suggested places for the demonstrations.

The Business and Professional Women's Club of Idaho cooperated in this "eat more lamb" compaign, by requesting their members to order lamb when they ate at restaurants. At their annual meeting held in June at Caldwell, Idaho, lamb was featured as a food and was dramatized. At the luncheon program, D. Sid Smith, president of the Idaho Wool Growers Association, gave a few facts concerning the history and the economic importance of the industry to the State. Lamb was featured in the meal, and Mrs. Emma Yearin, one of the sheep growers of the State, was crowned queen of the wool growers. The crown was a crown roast of lamb. It would have been difficult for any of the business and professional women who attended this meeting not to be impressed with the importance of lamb as a food and with the realization that the sheep industry means something to the State of Idaho and to the Northwest.

Window Displays

Another phase of advertising was one in which the Women Wool Growers of Idaho Falls assisted again when various markets made window displays of the whole carcass of lamb, with rolled shoulder, rolled breast, neck slices, and Saratoga chops. Rolled shoulder of lamb was prepared for each market by the State home demonstration leader and district home demonstration agent and was placed in the window with the ready-to-cook cuts. Interesting results were the sale of 21 lambs at one market that day, 18 rolled shoulders at another market, and a general increase in the interest and utilization of lamb.

Out of the program attempting to interest Idahoans to use Idaho products and to feature lamb more definitely as a food has grown a program which it is hoped will emphasize the importance of lamb as a food in eastern markets as well as in Idaho.

The importance of reaching new communities of Idaho led to the inclusion in the vacation camp programs, which are a feature in the home demonstration program, the subject, "Eastern markets and Idaho products" with lamb as the product. This talk was given by O. A. Fitzgerald, director of publicity at the University of Idaho. Following Mr. Fitzgerald's talk a demonstration showing the preparation of the fore-half cuts of lamb prepared for various types of meals, was given by the State home demonstration leader. Included in this demonstration were tomato stuffed with lamb salad, moulded lamb loaf, and lamb mousse, all being suited to summer occasions and emphasizing the value of lamb as a suitable meat for different meals. It also gave the women an opportunity to understand the importance of helping to interest eastern markets with the quality of Idaho lamb. It was a psychological move to feature lamb at these camps as more than 6,000 women representing different parts of Idaho attended, and more effective results probably were obtained in having lamb utilized more definitely in all parts of the State than could have been expected from any other type of program.

Cooperative Cotton Marketing

C. O. MOSER

Vice President, American Cotton Cooperative Association

EIGHTEEN months of cotton cooperative marketing by the American Cotton Cooperative Association have brought the American cotton farmers and the cotton textile manufacturers of the world nearer together and closer to their respective ultimate goals than ever before; that is, the doing of business together in an orderly and mutually satisfactory way.

The age-old ambition of farmers to sell their products directly to the consumer without unnecessary lost motion, waste, or excessive cost is being fully realized by more than 160,000 cotton farmers, representing important cotton-producing states from California to North Carolina. Deliveries of cotton to the State and regional associations have exceeded 2,000,000 bales this past season. Similarly, the satisfaction of obtaining uniform and dependable supplies of raw material when wanted and in any quantity or quality desired has been the experience of approximately 400 of the largest and most progressive cotton manufacturers of the United States.

In a similar way, foreign outlets have been extended to all important cotton-consuming centers of Europe and Asia. Wherever cotton is consumed throughout the world, the American Cotton Cooperative Association is there representing the cotton growers of this country. Furthermore, the association is well and favorably known for its financial responsibility and business integrity.

Likewise, amazing progress has been made in the other activities of cooperative cotton marketing. But let's look into the machinery of the organization. Conducting its affairs over an area of nearly 1,000 miles north and south and 3,000 miles east and west and doing business for farmers with every variation of financial conditions and relation to his creditors, appropriate flexibility and adaptability to meet the needs of the people must be considered, and at the same time adequate safeguards to protect the interests of the buyers. So in setting up machinery for operating the cotton cooperatives the mutual advantage of both producer and consumer have been worked out. That is, the grower is to receive the highest market value in the best world markets according to the quality produced, and the consumer has the satisfaction of trading with a concern where his interests are amply protected, where he may reliably depend upon obtaining needed supplies of raw material, and where he may feel that in buying directly from the growers he is assisting in eliminating waste and confusion in distribution and encouraging improvement in quality of production.

In carrying out the aims and purposes of cooperative cotton marketing it was found necessary to set up State or regional associations to handle certain phases of the business, while others

E. F. Creekmore, vice president and general manager of the American Cotton Cooperative Association

would be handled by the national association. Nine years of actual experience in marketing cotton cooperatively had pointed the way as to how to handle the business. But through difficulty in bringing about volunteer coordination of the 13 State organizations centralized control of marketing functions could not be obtained. With the advent of the Federal Farm Board and the inducements and influence it could offer, little difficulty was experienced in centralizing all important marketing operations in the national organization.

By agreement among all concerned the division of labors and responsibilities in the handling of cotton was as follows:

STATE OR REGIONAL ACTIVITIES

Contracts with members.

Information to and correspondence with members.

Assembling product.

Keeping records of members' accounts.

Making advance to and settlements with members.

Publication of house organ.

Working out and maintaining good will and support of bankers, business men, and public.

Operation of subsidiary corporations, such as production credit, warehousing and processing facilities, cooperative buying or other service activities.

NATIONAL ACTIVITIES

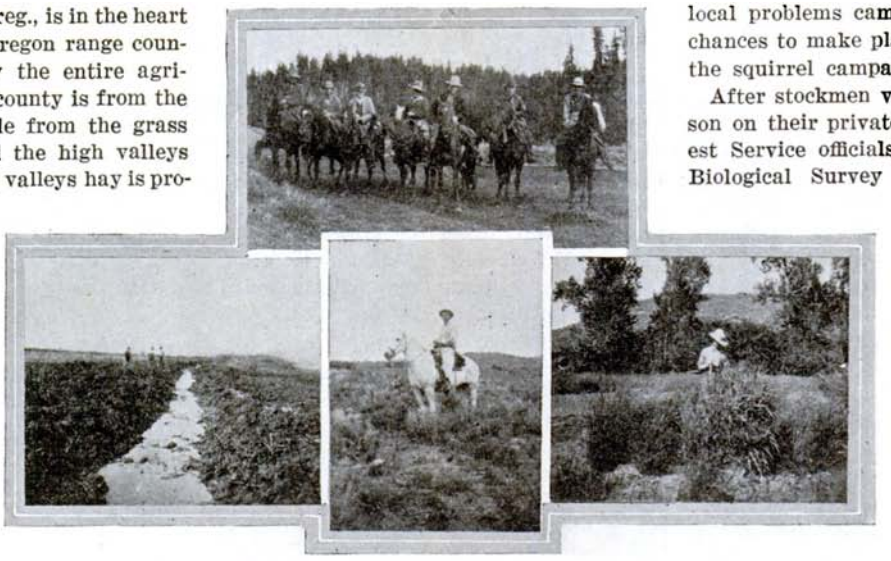
Financing, transporting, warehousing, insuring, grading, hedging, merchandising, business analysis.

Stated in another way, the cotton cooperatives adopted the sound organization principle of centralizing the business functions in the American Cotton Cooperative Association and decentralizing the membership relations in State associations. The result has been the safer and more businesslike operation of the marketing aspects of the business from the standpoint of the members and all who do business with them, while leaving to the State associations the organizational policies of service to the members. To safeguard the combined interests of the State associations in every respect and to tie the movement closely together, the national organization is owned by the State associations and controlled by them through composing its board of directors. Hence there is in reality only one organization, divided for reasons of efficiency and good business conduct into State and National units, each doing its phase of the work according to their own agreement and the approval of the Farm Board, and in accordance with efficiency and economy of operation.

Under this set-up men skilled and highly successful in business have been obtained to manage the technical angles of the business. So organized and conducted, it has earned the confidence of the business men and bankers of the South and the cooperation of the cotton growers. The result has been an increased volume of business handled by the associations of approximately 100 per cent and the establishment of the undertaking on a basis of sound business and permanent service to both the cotton growers and all necessary factors in the cotton industry.

The County Agent in the Saddle

GRANT County, Oreg., is in the heart of the eastern Oregon range country. Practically the entire agricultural income of the county is from the sale of sheep and cattle from the grass ranges which surround the high valleys of the county. In these valleys hay is produced for winter feeding, and there the headquarter ranches are located. Although a few small ranches are devoted to raising feed for sale, practically every rancher is a range operator, and many of them on a very extensive scale.



(Top) Grant County ranchers ready to scatter squirrel poison. (Left) A new ditch draining bottom land. (Center) R. G. Johnson, jr., county agricultural agent. (Right) A forage-plant nursery

Establishment of county agent work in 1925 by an interested county court was a source of considerable wonderment and no slight amount of amusement on the part of the livestock operators. Knowing that the developments the first week might make or break the usefulness of the proposed county extension agent, unusual care was exercised in selecting a man to fit the job. Fortunately, a cowpuncher with a degree from an agricultural college was available. D. E. Richards, now livestock specialist for the Montana Extension Service, was available on a ranch in Oregon. He was reared on the range in Montana, had studied animal husbandry at Oregon State College, serving for a time on the instructional staff, and was a skilled horseman. On his first week in the county he was several times invited to ride out to "look at the stock," and it is no exaggeration to state that some of the riding was difficult riding. He also had some opportunity to swing a rope and compete in various technical matters with some of the good cowmen of the region.

Passing these tests, he won a hearing for his story, yet it was not on work with cattle, but on sheep, that he made his real start. In the range country usually there were no veterinarians. Lambs had been dying in altogether disproportionate numbers for two or three years in Grant County. Navel ill was the diagnosis. By providing clean lambing quarters and giving iodine treatment—the preventive and remedy—the sheepmen in two years had the county practically cleared of this trouble.

Losses from blackleg were heavy; vaccination was practiced only here and there. Forty vaccination demonstrations were held; supplies were obtained from the dealers by the county livestock association, and 14,000 to 20,000 doses distributed each year for 4 years. Some of these first vaccination demonstrations were a page out of histories of the old West. In one extensive area of the county there were no chutes. The stockman and his crew roped the calves on the open range for branding and vaccination. To-day 95 per cent of the ranchers vaccinate once, and many twice. Now the county agent only demonstrates the use of vaccine guns to groups who are not sure of themselves in its use, or are having trouble with their guns, and to a few who are just beginning to use the vaccine.

The ground squirrel, Citellus Oregonus, was overrunning the range areas, destroying untold quantities of grass. With the assistance of a representative of the Biological Survey, 10 tons of grain were used for preparing squirrel poison.

That year the county agent was dubbed the "squirrel poisoner," and he had plenty of squirrels to work on. He picked two specific sections—Bear Valley and Fox Valley—and laid special stress on them. These lands were teeming with squirrels and pastures were being utterly destroyed. Crews were organized, meetings of ranchers held, and poisoned oats scattered. The squirrels began to retreat. In meeting the crews local problems came up and there were chances to make plans while carrying on the squirrel campaign.

After stockmen voluntarily spread poison on their privately owned areas, Forest Service officials cooperated with the Biological Survey which made special allotments of poison for use on the Government lands, and crews of 20 or more cow-punchers spread poison from horseback over 7,000 to 100,000 acres annually for six years. At the end of four years the ranges were comparatively free of rodents.

In the meantime a change in county agents occurred. Fortunately another cowboy with training fitting him to do county agent work was available. R. G. Johnson, jr., was raised on the cattle ranges of California. From his early days his most familiar seat was the saddle. He went into Grant County, underwent much of the same good-natured hazing as his predecessor, could stand the tests, and so took up established projects under favorable auspices.

He broadened the program. In every range cattle country feed is a limiting factor. Ample supplies of hay produced cheaply and good ranges are fundamental to any marked success. In Grant County as in other western range areas the pastures were depleted by overgrazing and hay supplies were not always large enough. To make more feed per acre County Agent Johnson did three things: He established the practice of using effective fertilizer for alfalfa, doubling the yield at one end of the John Day Valley which runs east and west through the county. He aided in ditching some thousands of acres of bottom land that had become water-logged, with the result that these areas are again producing good hay crops.

In the outlying valleys 10 grass and legume nurseries carrying from 5 to 20 strains and varieties have pointed the way to adapted forage plants. Crested wheat grass, for instance, was found to produce luxuriant and nutritious forage on marginal lands once plowed for grain production but later abandoned with complete loss of the original pasture grasses.

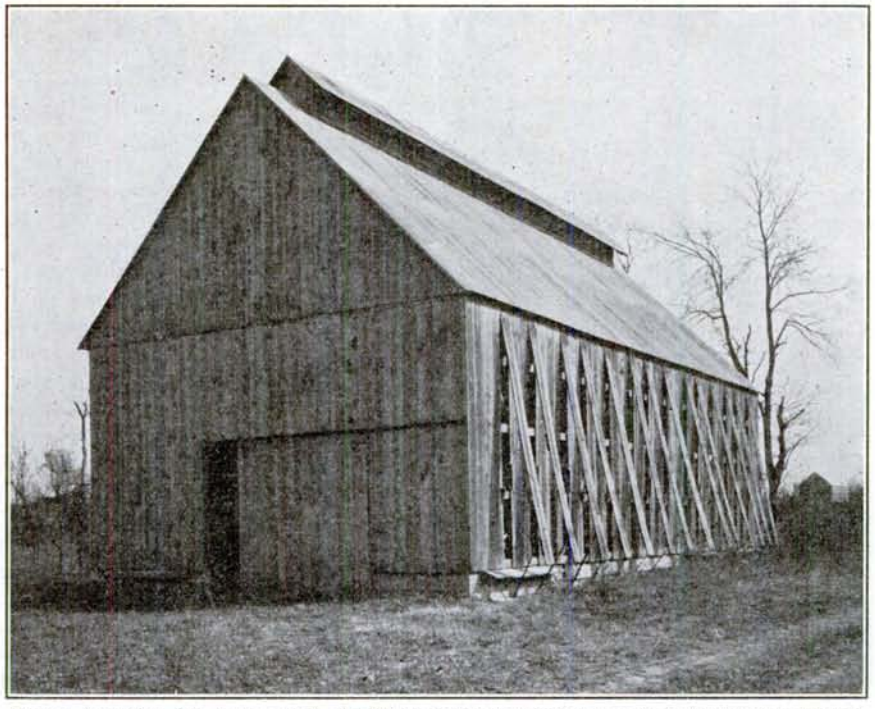
The Maryland Tobacco Growers' Cooperative Association

ECONOMIC conditions following the World War are given credit for many changes, and the situation in which Maryland tobacco growers found themselves at that time is without question the dominant factor that led them to concerted action. Prior to the war the French Government bought practically all the Maryland tobacco crop at an average price of approximately 7 cents a pound. Then came the war, and the changed conditions brought Maryland tobacco to the attention of domestic manufacturers of cigarettes. They began to buy freely, and took about 60 per cent of the crop at prices which averaged 22 cents a pound from 1916 to 1918.

Shortly after the close of the war persistent rumors came to the growers from the tobacco market that the high prices they were then receiving were soon to be dropped to pre-war levels, and they decided to do something about it. What they did and how they did it is the story of the Maryland Tobacco Growers' Association.

Tobacco farmers, themselves, initiated the movement to maintain a good market for their product, and, as a first step, a meeting of growers and leading business men was called in Charles County during the summer of 1919. A skeleton organization was formed, contracts were drawn up, and meetings were held in every community for the purpose of signing members. A house-to-house canvass was also made, and as a result of the campaign for members records indicate that 80 per cent of the tobacco producers signed membership contracts. And now after 12 years, the association still includes 75 per cent of the growers with a total membership of 5,362 and last year did a business of $4,377,901.84.

The Maryland Tobacco Growers' Association is purely cooperative. It is a farmer-owned and farmer-controlled, nonstock corporation. Its members have only one vote regardless of the quantity of tobacco they produce and market. The membership contact is continuous and provides that as long as a member produces tobacco he will market it through the association. The member, however, has a right to cancel his contract by giving six months' notice to the association of his desire to do so. Thus far, the organization has never attempted to enforce the fulfillment of a contract by recourse to the courts, but has followed the policy that if they could not lead the tobacco farmer, they could not drive him.



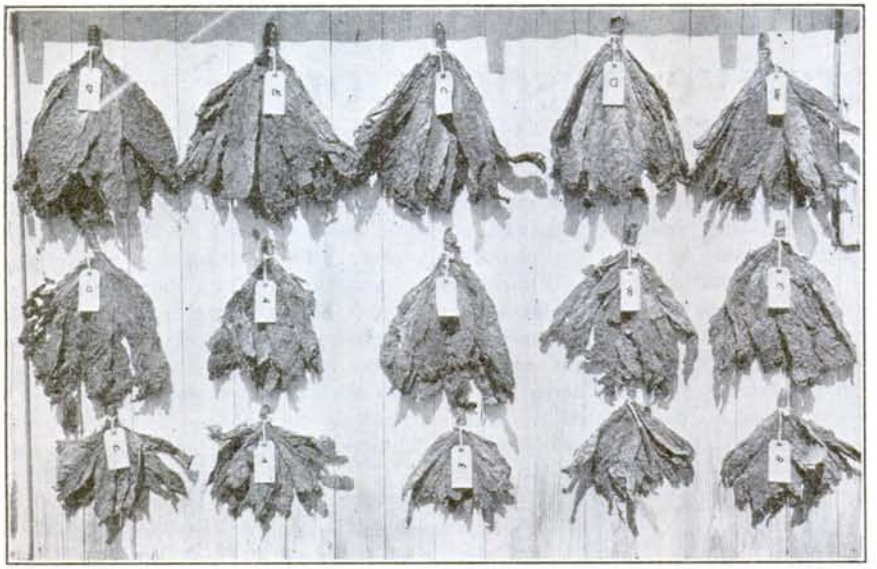
Better facilities for curing and conditioning the tobacco are encouraged by the association as part of its program to improve the quality of the product. This tobacco barn has ventilated sides

The method of selling Maryland tobacco is by a bidding system, the only market where this tobacco is sold being in Baltimore. All handling and processing of the tobacco is done by the growers, as the crop is air-cured. The farmer packs his crop into hogsheads, having a net weight of approximately 650 pounds, and ships it to the warehouse in Baltimore. These hogsheads are consigned to either a commission merchant or to the Maryland Tobacco Growers' Association. They are not delivered to the sales agency, however, but to the State Tobacco Warehouse for official sampling, which is guaranteed to represent the tobacco in the hogshead. These samples are then delivered to the proper sales agency. The guarantee is secured by a reclamation fee, which is paid by the State. For this service the State makes a flat charge of $3 a hogshead, which covers all expenses except insurance. The sales agencies place the samples on the floor for sale to the highest secret bidders. Thus the hogsheads of tobacco are delivered to the manufacturer in the original cask packed by the farmer, which is an unusual custom in the tobacco trade, as most tobaccos are processed in some form between grower and manufacturer.

Advances are generally made to members after the crop is harvested, and an applicant is required to file a statement of assets, including his tobacco crop. This statement is considered, together with an applicant's moral responsibility to pay his debts, in deciding the amount of the advance. It is seldom that more than 50 per cent of the value of the crop is advanced.

The organization grades the tobacco of its members very carefully and endeavors to get the highest price per grade. It always reserves the right to reject any and all bids. The grower has the right to file a written request demanding that his tobacco be held for a certain price, but generally the sale is left to the discretion of the salesman. It is the general policy to sell each year's crop when it comes to market, as one attempt to carry one year's crop over to the next season proved disastrous to the association and, in the opinion of the manager, has probably been the greatest factor in hampering its more rapid growth.

Approximately 70 per cent of the tobacco sold by the association goes to domestic buyers, including all the largest



The program of the Maryland Tobacco Growers' Association includes educational work in grading the product. The grades of tobacco were shown in an exhibit at the Marlboro Fair

cigarette manufacturers, and the remaining 30 per cent is taken by the French Government. Buyers appreciate an orderly market, where there is no rapid fluctuation in price, and where they can get large quantities.

Members of the Maryland Tobacco Growers' Association have had the benefit of the highest market prices for their tobacco. Records show an average price of 23 cents a pound since the formation of the association, compared with an average price of a little more than 7 cents prior to that time. Members have also had the advantage of up-to-date and reliable information concerning market requirements as to grades, packing, and deliveries. In addition, the cost of selling tobacco for members is 50 cents a hogshead less than is charged by any of the commission houses on the market.

Another valuable service rendered to members is the cooperative buying of fertilizer, lime, grass seed, and other miscellaneous articles. Considerable saving is realized on purchases and the growers obtain better grades of goods, since such items as fertilizer and lime are bought according to recommendations of the Maryland Extension Service.

The association has always advocated the production of high-quality tobacco and urged its members to seek and follow information available from extension workers. Thus, the closest cooperation has always existed between the extension service and both officials and membership of the association.

The Maryland Tobacco Growers' Association, in cooperation with the Maryland Extension Service, conducts each year a series of county-wide meetings, followed by community meetings at which the latest and best information is given regarding the production and marketing of tobacco. These meetings are well attended by both members and nonmembers. In fact, nonmembers are strongly urged to attend, and most of the promotional work is carried on in this way.

California Trains Leaders in Parliamentary Procedure

The development of leadership through county organization training meetings has proved most satisfactory in California, where 18 counties held such meetings in 1930. Three members of the executive committee in each farm home department center and the project and local leaders attended the all-day county meeting. The program included discussions on duties of officers, committeemen, and members; what constitutes a good farm home center meeting; relationship of the organization of farm people to the extension service; care of children at meetings; the making of a community program of work; the setting of goals; and ways and means of securing reports.

Part of the program was devoted to group discussions in which was decided what the duties and function of each officer would be—the chairman, secretary, and project leader. Demonstrations of a well-conducted meeting were given, which formed the basis for discussion on parliamentary practices. As a result of these county meetings, home demonstration agents report: (1) Meetings conducted in more businesslike way, (2) more accurate information relating to the existing farm organizations, (3) self-confidence gained by center committees and project leaders, (4) members take more responsibility, (5) better attendance at meetings, and (6) better reports.

Dairy Record Keeping Expanded

New York State is emphasizing the value of dairy records as a means of meeting the present low prices in the dairy industry under the leadership of C. G. Bradt, supervisor of dairy record clubs. It was felt that many economies in the production of milk might be brought about by production records on the herds of New York dairymen. To meet lower milk prices with lower production costs seemed a sound business principle.

The goal of 50,000 cows in record-keeping service in 1931 has already been passed with 50,426 cows now on record. This number includes all cows in advance registry, herd test, dairy herd-improvement associations, and dairy record clubs. This is an increase of 10,426 cows since February 1, 1931.

In this New York State campaign for more cows on test the dairy herd club or the "mail-order plan" has been coming to the front. Since the first of the year the number of cows enrolled in this type of record service has just doubled. The number of counties offering the dairy record club to dairymen as a part of their dairy program has increased from 21 to 44.

The dairy record club seems to be reaching many dairymen to whom the dairy herd-improvement association has no appeal for one reason or another. There are other dairymen who prefer the association. The principal thing which the extension worker is interested in is that the dairyman keep some kind of records on his herd. Since both types of service are good, the extension specialist has been explaining both and then letting the dairyman select for himself the service which meets his needs best.

By having two types of record service to offer dairymen in New York it is found that more records on dairy cows are being kept and, more important still, larger numbers of dairymen are adopting improved practices which are leading to lower production costs and more profitable herds.

Eliminating the necessity of a prospective cooperator signing his name by typing it on the return card so that all the cooperator has to do is to mail the card if he desires to participate in a project has increased the receipt of return cards from 6 per cent to 21 per cent for David Meeker, county agricultural agent in Clay County, Mo.

Forces Making Farm Life Attractive

K. L. HATCH,

Associate Director, Wisconsin Extension Service

THERE are five forces at work at the present moment to increase the attractiveness of the farm home. Here they are: (1) Power, (2) transportation, (3) leisure, (4) beauty, and (5) a steady job.

The most important thing to be done in America right now is to insure to the willing worker a steady job—a job that he can hold without fear of losing it. The one place where this is afforded with more certainty than anywhere else is the farm operated by its owner. With a roof over his head, with plenty to eat and a good place to live, a farm, right now, looks mighty attractive to him. This insurance of a steady job is the strongest single force that to-day is adding to the attractiveness of farm life.

The Transforming Force of Electric Power

The advent of power in the farm home, particularly in the form of the electric current, is an added inducement to life on the farm. With power easily obtainable in the form of the electric current, running water wherever it is needed, a bathroom in the house, a power washer, a vacuum cleaner, a mechanical refrigerator—all these and many lesser devices—become available. These certainly help to make the farm attractive.

The Influence of Good Roads

Next comes improved transportation. Good roads, passable at all seasons of the year, are being rapidly extended to rural residents. This development should and will continue. With automobile transportation over a surfaced road to every farmer's gate it is, or soon will be, easy for the farmer to go anywhere he chooses at all seasons of the year. Better roads are daily adding to the attractiveness of the farm.

Finding Time for Leisure and Recreation

The adoption of better methods, the use of machinery, and easier and quicker means of transportation enable the farmer to do more work in less time. All these things are time savers; but what use will the farmer make of the time thus saved? He may, if he chooses, use this time for his own profit, pleasure, and recreation. Leisure should follow the introduction of improved methods and labor-saving devices. Wholesome and pleasant recreation affords the best use of leisure thus gained and makes farm life much more enjoyable.

Beauty Adds Value to the Farm

The value of the natural beauty so abundant in the country has a strong appeal to every normal man and woman. No other place can be made quite so beautiful as a country home. Beauty is the cheapest and most attractive possibility of the countryside. Trees, shrubs, and flowers enhance the value of the rural home and make life in the country highly desirable.

Ability to Pay Essential

Power, transportation, leisure, beauty and a steady job—all these may be had on any American farm when and where the ability to pay for them permits. Even with their restricted purchasing power during the past few years farmers have been acquiring these things at a rapid rate. The desire for good roads, electric power, leisure, and recreation, and a more artistic farm home has often developed the ability to pay for these things. If one really wants something earnestly enough he usually finds a way to get it. Incentives like these may and do lead to the adoption of farm practices that do increase the earning power of the farmer and enable him to have the things he so much wants.

Helping to Increase Farmer's Net Income

The extension work of the Wisconsin State College of Agriculture centers around efforts to increase the farmer's ability to pay for those things that make country life most attractive. His roads, his schools, his home, and his opportunity for enjoyment of the better things in life must be kept abreast of those of other occupations. If his economic position falls below that of other classes he can not take advantage of opportunities enjoyed by them. The extension service was created for the purpose of maintaining the farmer's economic, social, and educational level—a goal never to be lost sight of.

Let it be frankly admitted that this is a period of surplus crops and low prices. It must be remembered, however, that the so-called "economic depression" has not been confined to agriculture alone, but has been felt by every other occupation throughout the entire world. Over these conditions neither the Wisconsin farmer nor the agricultural college worker has any measure of control. The problem has baffled the best brains in this and every other country.

Nearly 90 per cent of the income of Wisconsin farmers comes from the four following sources: Dairy products, cattle and calves, hogs, and poultry, of which milk constitutes by far the largest item. The farmer can improve his net income in one or more of several ways. In times of falling prices, like the one through which we are now passing, there are four ways open to the farmer who

(*Continued on page 170*)

The County Agricultural Agent

There are 2,100 of him in America. I see him going out on horseback in Texas counties so vast that he takes tentage and stays out four days or a week. I see him in New England town meetings, big and trig in his Sunday blue, laboriously getting over the idea that democracy is more a matter of works than of politics. Running potato demonstrations on Massachusetts fields with corner drug stores. Jumping into Illinois ditches to see if tile is properly joined. Showing Arkansas farmers how to get at the gist of market reports. Stumbling and blushing a little as he introduces a dress-form specialist to Florida farm wives. Playing handball with the boys at a county club camp in Oregon. Slipping the Michigan club youngster who likes to read his old copy of Kipling as a birthday present.

I am not a bit ashamed that for a number of years I took the Government's money as one of the 1,200 "subject-matter specialists" who help get him the facts and back him up.

—Russell Lord in Men of Earth.

Improvement Cutting in Pennsylvania Farm Woodlands

THE value of better farm woodlands has been brought home to many Pennsylvania farmers in eight counties during the past five years with an intensive and specialized campaign described by F. T. Murphy, State extension forester. The entire plan was aimed to create a desire for information in woodland management among owners. It was realized that constructive, sustained efforts in woodland management lacked the appeal of such enterprises as planting trees and must therefore be presented to the farmers more skillfully to obtain the action desired.

The counties to carry on the campaign were chosen with care not only because of the need for better woodlands but also because of the diversified uses and markets for rough timber in the locality. Only the most favorably located counties were considered and those in which sufficient preliminary demonstration work had been given so that the subject was not entirely new to the woodland owners. Beginning with two counties in 1926, the work has been extended to include eight counties in all.

The program was continued in each county for three consecutive years, after which a rather rapid tapering off of the volume of work was permitted. Beginning in August of each year, after getting the project approved by the executive committee of the county agricultural extension association, a detailed plan was drawn up designating the time and character of all work. A gradual increase in intensity culminated with the field demonstration meetings (usually November or December). After the demonstrations a fairly rapid decline in activity was scheduled, practically closing all action by early spring.

Henry Gumble is satisfied with his improved woodland in Pike County, where W. H. Davis is county agricultural agent

All of the familiar aids were used in creating interest. A series of four to six letters on colored paper with special printed headings was sent out to a selected mailing list.

Enrollment cards, on which farmers could indicate an intention to improve their woods, were put into the hands of all those on the mailing list. In practically every county where the program of work was put on the first year from 50 to 100 farmers signed up to improve a portion of their woods. Perhaps 75 per cent carried out their plans as indicated on the cards. Others not signing up gleaned enough information from circular letters and other subject-matter aids to do a very satisfactory job in their woods.

Second-year results showed almost a 100 per cent increase in those signing up or following the lessons brought out in the project. Many of these were substantial farmers, not easily changed to new practices, who were willing to start on the project after a year to think it over.

Third-year results, as a rule, showed small increase in enrollment, but have proved very much worth while in keeping up the enthusiasm of those enrolled.

The returns from improvement cuttings in the counties have varied considerably. There are those who realized as much as $100 per acre gross return for their thinning operations. Others made only a labor return.

One fact which has been emphasized by the campaign, observed Mr. Murphy, is the futility of anything which conflicts with economic conditions and practices. For instance, a farmer can not be induced to take out weed trees and use them for fuel, when he burns cheap gas or coal. Drastic changes in cutting methods were often necessary to meet such conditions. In one place an effort was made to get farmers to thin out young dense stands of white pine. A few began but were quickly discouraged. To overcome this a delay in cutting operations until the largest trees could be sawed into lumber was advised. At that time a return of $10 to $50 per acre could be obtained with a benefit to the woods at the same time.

Forces Making Farm Life Attractive

(*Continued from page 169*)

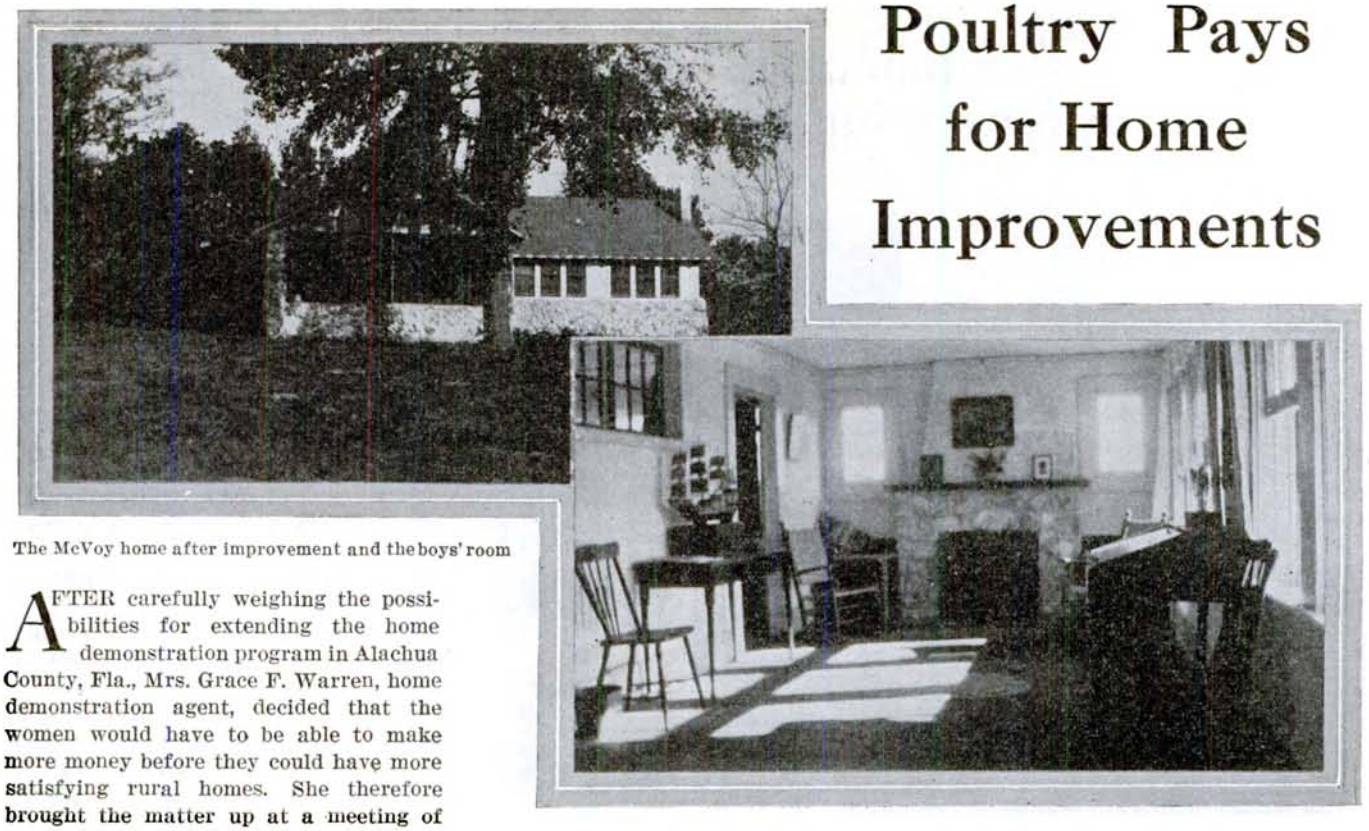
would improve his net income: (1) He can market his goods more efficiently and thus secure for himself a larger share of the consumer's dollar; (2) he can produce quality goods which sell at a better price; (3) he can produce more economically—in other words, he can cut his costs of production; (4) he can adopt a better system of farm management.

If he does any or all of these things, he strengthens, I believe, his ability to pay for life's satisfactions and at the same time increases his opportunity for the enjoyment of leisure.

Nine women in attendance at farmers' week at the College of Agriculture of the University of Arkansas, claimed the distinction of having belonged to a home demonstration club for the greatest number of years. These women all began their club work as soon as home demonstration work was organized in their county and have been active ever since, many of them dating as far back as 1915 and 1916 when canning demonstrations were conducted in the counties.

Seven of the eight children in the Getz family of Carbon County, Pa., are 4-H club members and last year four of the brothers each produced more than 400 bushels of potatoes per acre.

Poultry Pays for Home Improvements



The McVoy home after improvement and the boys' room

AFTER carefully weighing the possibilities for extending the home demonstration program in Alachua County, Fla., Mrs. Grace F. Warren, home demonstration agent, decided that the women would have to be able to make more money before they could have more satisfying rural homes. She therefore brought the matter up at a meeting of the senior council, and it was decided to coordinate the poultry and home improvement program. This was several years ago, and now the results can be seen by anyone throughout Alachua County.

One good example of the success of the combination is the really beautiful and attractive home of Mrs. E. C. McVoy, made possible by her flock of from 1,000 to 1,500 fine chickens. She has an attractive roadside sign which results in numerous sales at the door, and she also supplies private homes and boarding houses in Gainesville with eggs, broilers, and fryers. She has built up considerable trade in this way.

The improvements on her house have been made gradually, as that is the way poultry money comes in. First, running water, a bathroom, and a home light plant were obtained, and two screened sleeping porches and a small screened front porch were built. The house was sealed with beaver board, closets and shelves were built, and old ones were repaired. The next summer a larger front porch was added, the living room was remodeled, and the sleeping porches were inclosed with windows. The two older McVoy boys did most of the work, but were aided and encouraged by Mrs. McVoy and the youngest son. The next summer the boys built themselves "bachelor quarters" of study, sleeping porch, and bath, and "We are not through yet," declare the McVoys.

Ten home demonstration club women in Alachua County are hatching and selling baby chicks to make money for home improvement. Some of the things these women have been able to do with poultry money in one year are: Remodel an old room into a completely equipped bath room; buy and install a sink and two drain boards, build in a china closet, and buy two congoleum rugs; a third woman had new ceilings put in the living room and the front porch; a fourth woman bought an Axminster rug for the living room; and others reported buying a kitchen cabinet, a refrigerator, and a good radio to make the home more convenient and attractive.

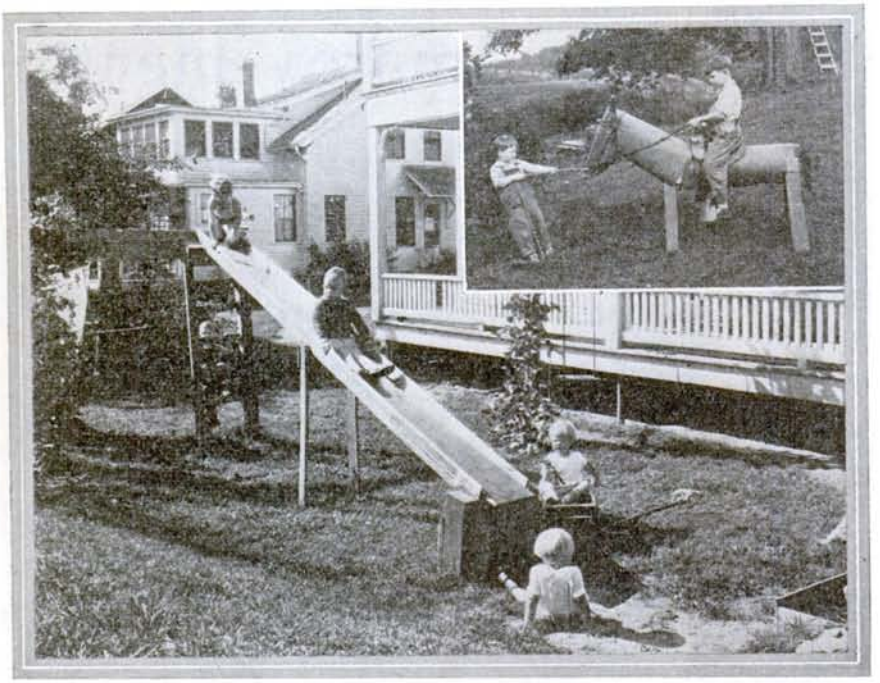
Maine Dish-Washing Demonstration

A systematic time saving, and sanitary method of washing dishes is being demonstrated to their neighbors this year by almost 400 women in nine Maine counties. The method includes scraping and stacking the dishes on the right-hand side of the sink, working from right to left, and instead of wiping the dishes, drying them by draining after pouring boiling-hot water over them.

In the morning of a mid-day meeting, the county home demonstration agent shows a film strip on properly and efficiently washing dishes under the different conditions which are found in two Maine homes. One home has very simple equipment, in fact below the average, and the other has modern equipment. After the noon meal is served at the meeting, the agent gives a demonstration by slowly washing the dishes used by five people and giving the reasons for each movement which she makes. After this, the remainder of the dishes are washed by volunteers using the same method. As the final step, the women present are asked to enroll as demonstrators to teach the system to their neighbors. This project was developed by Edna M. Cobb, Maine home management specialist.

At the annual short course held at the North Carolina State College in August 263 boys and 316 girls, representing 53 counties, were given training in subject matter, recreation, and other subjects pertaining to 4-H club work. In addition to the 4-H club members, 42 agricultural and home demonstration agents and club leaders attended the short course.

Child Development Program in Massachusetts



These playthings, to delight the heart of any child, were made at home as the result of work in child-development groups

TWO years of child-development and parent-education work in Massachusetts have shown steady progress in the increased attendance at meetings, the response to problems discussed showing that many of the mothers have already put into practice the ideas suggested, and in the increasing demands for a continuation of the study.

In the beginning, Mrs. Ruth D. Morley, specialist in child development and parent education, conducted one group meeting in each county. In counties that were not planning to carry the project extensively for a year or two, community groups were organized. Counties looking forward to a larger program in the immediate future adopted the plan of having one or more district or county groups which were called "representative groups" to distinguish them from community or leader groups. These representative groups were composed of one or two key women from each community who were to act as interpreters of the project and as possible leaders of the project later.

Fortunately, the women chosen as group leaders have been of a type to inspire confidence and have presented the work in a very satisfactory manner. The number of these leader groups varied in different counties from 7 to 25, depending upon the interest shown by the women in the county and the size of the program that the agent felt able to carry. The largest enrollment in any county was less than 350 since it has been the policy to allow the project to develop slowly rather than to strive for sensational growth.

A new departure in one county for the coming year will be to give new leaders a preliminary course of three meetings before they are given the responsibility of conducting a meeting themselves. As a means of following up the work with interested former group members, a county-wide meeting is being planned for fall and spring to discuss new developments, new books, and special problems.

Middlesex County plans to combine the child development, nutrition, and clothing work next year into one project "The Child in the Home." This project will take up the following subjects:

1. Understanding the child.
2. Living with the child.
3. Adapting the home to the child (play and play materials).
4. Child feeding.
5. Children's clothing.
6. Family cooperation.

The discussion which has seemed the most popular in these groups is that dealing with family cooperation. In presenting this subject, a series of seven simple problems which involved underlying principles was distributed to members of the group. Discussion groups of two to four members were formed. A limited time was allowed for discussion of each case by each woman in the small discussion group and the conclusion of each committee was then reported to the assembled groups and open discussion followed. As a means of summarizing the desirability of a family council, a large wall chart proved very helpful.

A great deal of stress has been placed on the need for play space and suitable equipment. Homemade playthings which have given the added interest and satisfaction of building something together have been successfully made.

One of the outstanding features of the group meetings has been the large number of young mothers present. Getting the young mothers to attend always presents many difficulties, and these have been overcome in different ways. In some localities arrangements are made to care for children at the meetings; in other communities the leaders have made personal visits to mothers who have been unable to attend meetings, and sometimes have given them definite assistance which has enabled them to get to some later meetings. A series of letters to mothers was sent out each month by different specialists. Much of this work has been done with foreign mothers.

Club Work Declares a Dividend

CLUB work is producing its own most effective leaders according to a study made in Kansas by C. R. Jaccard, district agent, and M. H. Coe, State club leader, which included 555 leaders in 53 counties.

Former 4-H club members compose 15 per cent of those now leading 4-H clubs and are proving to be most successful. The ideal type of leadership seemed to be a combination of adult judgment with the enthusiasm of junior leaders who have had club experience. The clubs with junior assistant leaders scored highest on every count and averaged 24 completions out of an average enrollment of 29.3 and an average club score of 106.5. The clubs under junior leadership alone scored next highest in this survey with an average club score of 68.5.

The farmer or farmer's wife who assumes club leadership largely because

of interest in club folks has done a wonderful work in developing these junior leaders.

Another interesting fact brought out is that community clubs scored about twice as high as project clubs.

Each club was graded on the following activities: Enrollment, completions, State and local exhibits, prizes and trips, demonstration teams, judging teams, and attendance at State round-up and at local camps. The leaders in this Kansas survey composed four general types: General farmers and farmers' wives, teachers and other professional people, breeders of purebred livestock, and merchants of small towns. Junior leaders were included since many of them are married, teaching, or in other ways come under the above classification. Later the junior leaders were separated to compare them with the other leaders.

Organized Discussion as a Teaching Method

Organized discussion of a specific problem is being used satisfactorily as a means of giving women instruction in clothing by local leaders, reports Edna R. Gray, Illinois clothing specialist. Miss Gray finds this system effective because the women reason things out for themselves and apply the same procedure to other problems. Taking part in the discussion she finds gives them confidence in themselves and stimulates their interest.

In conducting a meeting by this plan some clothing problem is suggested for the women to solve. They are given time to consider and discuss it, and then the specialist, county home demonstration agent, or local leader presents such helpful information as she may have.

A study of the selection of sheets begins with giving the women sheets made out of different materials and asking them which they would buy and why. Then the women are helped to spin a little yarn, told how weaving is done, shown weaves under magnifying glasses, and told of the characteristics of different fibers. At the end of the meeting each woman can make an intelligent selection of sheets for her needs and purse, knows why she prefers each one, and has enjoyed her day.

Churchill County, Nev., recently organized a county 4-H club council to coordinate the work of the 4-H club leaders in the county, make plans for county-wide events, and select the representatives of the county for state-wide events.

A Dairy County in the Making

AFTER the eradication of the Texas fever tick in Marion County, Miss., in the spring of 1928, County Agent R. M. Coman saw the possibility of a successful dairy county and inaugurated his program of better pastures, the production of abundant feed crops, and the introduction of purebred Jerseys.

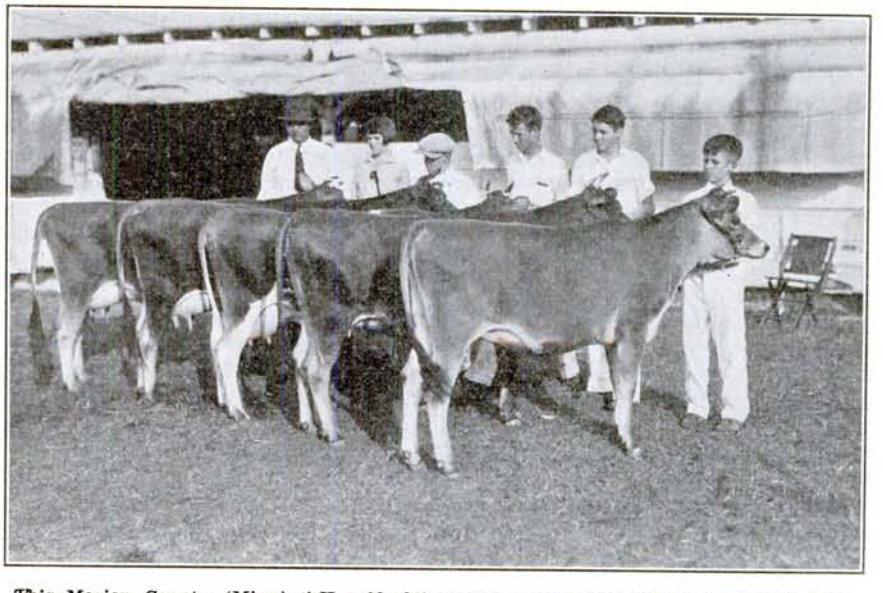
One of the progressive farmers was first persuaded to add a few good cows to his farming system, and with the help of the county agent, selected a carload of registered and high-grade Jersey cows and heifers, a number of which were sold throughout the county.

In November, 1928, a meeting of farmers was held to discuss the possibilities of a successful dairy industry. The extension dairy specialist emphasized the need of high-class, production-bred bulls with such good results that it was unanimously decided to purchase four bulls of good breeding and from dams with records of at least 500 pounds of butterfat at maturity. The purchasing committee spent considerable time and thought in selecting four bulls of excellent records and at the same time shipped in a carload of Jersey females. Eight of these heifers and two calves from dams purchased in this shipment were the beginning of the Marion County 4-H Calf Club.

The calf club has been one of the best methods of creating interest in dairying. The members meet regularly and are instructed by the county agent and extension dairy specialist in the judging, care, and management of dairy animals. The first year of the club, 1929, the club members won 32 ribbons and $333 in prizes at the Mississippi-Alabama and Mississippi State Fairs, and one of the members was chosen champion calf-club member.

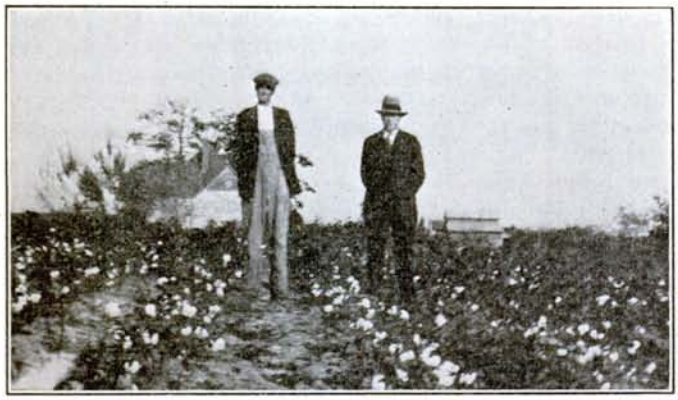
The calf club aroused a great deal of interest among both the young people and their parents, and the second year 22 members enrolled with 25 registered Jerseys. Again the club made a fine record with an undefeated county group and two undefeated individuals, although showing against strong competition at the Mid-South Fair, at Memphis, the Mississippi Fair and Dairy Association Show, and the Mississippi State Fair. Again one of the club boys was selected State champion, and Marion County began to win a reputation as a dairy county.

This year the calf club has 28 members, with 49 registered Jerseys. Three club heifers were selected as members of the State herd of eight animals to represent Mississippi at the Regional Jersey Show and National Dairy Show. Club animals are the foundations of high-class herds. The club members are trained through actual experience to feed, manage, and show high-class animals. One boy is now delivering retail milk from his herd. Adults are developing herds from the offspring of the four splendid bulls. Other bulls of still greater promise have been obtained. Pastures and feed crops abound. Marion County is moving forward with its dairy program.



This Marion County (Miss.) 4-H calf club group was undefeated at four 1930 fairs, including the Mid-South Fair and Mississippi State Fair

South Carolina Considers Fertilizers



A 2-year soil-building rotation demonstration, showing the check plot where phosporus and potash were applied but no cover crop had been grown, and on the right the plot where a cover crop had been grown and fertilizer applied

THE use of commercial fertilizer in South Carolina is almost universal. Nearly all of the 158,000 farmers in the State use fertilizer in some form. The average annual tonnage is 4.9 tons per farm, representing an approximate expenditure of $125 for each farm. The problem is not the use of more fertilizer but the economical and efficient use of fertilizer. When 30 per cent of the value of a State's main money crop is spent in buying fertilizer it would seem, says R. W. Hamilton, extension agronomist, that it is time to make some effort to reduce this item and make profitable selling easier.

In making a survey of the situation, it was found that much publicity had been given to the fact that additional fertilizer gives increased yields, but little study had been given to the possibility that these same yields might have been obtained with less fertilizer or greater yields with the same fertilizer by following farm practices that would improve the natural soil conditions.

The South Carolina Extension Service has been awake to this condition for years and had advocated the use of cover crops and animal manures, but such a program and method seemed to make little headway with the farmers, while the use of commercial fertilizers increased. This condition prevailed until five years ago, when the extension service initiated a definite program on the economical buying and efficient use of fertilizers which is now giving practical results.

The first step in the program was to establish two or more cooperative 2-year soil-building rotation demonstrations of 5 acres each, in each county. In addition to these actual field demonstrations the county agents arranged for fertilizer meetings during January, February, and March. Generally both the county agent and the specialist were present at these meetings to discuss soil needs and conditions, plant nutrition, and the whole question of buying and using fertilizer. Methods of community organization for cooperative buying were also explained. The specialist personally has attended from 60 to 100 of these meetings each spring while district agents and county agents hold others.

One of the most successful features of the program has been the cooperative buying of fertilizer materials. An example of this phase of the work will give a better idea of how the plan worked. Abbeville County started cooperative buying first as separate community projects following a series of meetings held by the county agent. The agent explained the necessity and advantages of cooperative buying and home mixing and outlined the method of organization. The community selected a purchasing committee consisting of three or five men to receive the orders of interested farmers. The total tonnage of each material was arrived at and bids requested from a large number of dealers, brokers, manufacturers, and importers. Bids were publicly opened and the most advantageous ones accepted.

The second year in Abbeville County the success of this plan was so evident that the various community purchasing committees organized a single purchasing committee for the entire county. Bids have been received on as much as 6,000 tons of materials and a saving of from $6 to $9 per ton of mixture has been made.

It is interesting to note, says Mr. Hamilton, the average price per ton of fertilizer used on cotton as given in the 1931 Yearbook of the United States Department of Agriculture.

State	Average price of fertilizer per ton			
	1927	1928	1929	1930
North Carolina	$24.00	$29.00	$28.00	$28.00
South Carolina	22.00	27.30	26.90	26.00
Georgia	23.00	29.70	29.40	29.20

The entire table in the Yearbook shows that South Carolina is paying less per ton for cotton fertilizer than any other cotton-producing State. The active campaign in South Carolina to cut down the largest single item in the cost of production, Mr. Hamilton feels, has certainly had its part in this result.

Growing Cossack Alfalfa Interests Wyoming Dry-Land Farmers

Discovering a farmer who was getting excellent results even in dry years by wider spacing of alfalfa, G. G. Clark, county agent of Campbell County, Wyo., and D. R. Sabin, State extension agronomist, decided to use the farm as a demonstration for influencing the practices of other farmers. A tour was organized in 1930 and another in 1931. At the latter gathering more than 125 were present, with many farmers driving more than 100 miles to attend the meeting. Many farmers are already using the wider spacing and more will adopt the system at their earliest opportunity because of the attention focused by the extension service on an improved practice worked out by a successful local farmer.

Agents Compete in Exhibits Contest

A MINIATURE extension exhibit contest held in connection with the annual agents' meeting last summer in Texas brought forth 43 booths set up by county and home demonstration agents to portray the progress and results of particular lines of demonstrations in their home counties. A joint exhibit of the "extension way of killing and curing pork to fill the meat requirements of the 4-H pantries" won first place in the contest which was decided by ballots for first, second, and third choices, with only extension workers allowed to ballot. Madge Wagner and Knox Parr, agents in Knox County, won first. Ribbons were given the high 10 in the balloting.

Other winning exhibits showed the spread of self feeders for hogs, types of sanitary toilets and the extent to which they had been built in the county, how a farm living room had been improved, changes wrought by girls' bedroom improvement, the extent of manufacture and sale of American cheese by home demonstration club women, the building of 26 modern poultry houses as the result of one demonstration, what modern meat-curing methods had meant to the people of one county, and how the butchering and canning of 300 beeves in a county had filled hundreds of farm pantries with cheap meat.

The contest was an innovation, and judging by the crowds of agents who spent time studying the booths, the heavy vote, and the lively demand for photographs of the best exhibits, the experiment was highly successful. As explained by the extension editors who had the contest in charge, the object was to focus attention on the county and community fair exhibit as an effective means of reaching the public with graphic stories of the results of demonstration work. Plain educational exhibits were frowned upon as lacking in the punch that comes from the addition of the portrayal of progress in the spread of ideas. Most of the contestants followed this lead, although some contented themselves with strictly educational booths that gave ideas but no indication of the extent of their acceptance and use. The most common fault noted was the inclusion of too many words in legends or so many objects that attention was diverted from the main theme.

There were 25 exhibits by home demonstration agents, 16 by county agents, and 2 joint exhibits by both agents. The booths were made of gray beaver-board walls resting on lumber and beaver-board floors supported by saw horses, and placed in the lobbies of Guion Hall on the campus of Texas Agricultural and Mechanical College at College Station. The booths measured 24 inches wide in front, 15 inches in the rear, 12 inches deep, and 12 inches high.

The extension way of killing and curing pork to fill the 4-H pantry was the winning exhibit in the miniature exhibit contest. This exhibit booth, 24 inches wide in front, 15 inches wide in rear, and 12 inches high, was prepared by Madge Wagner, county home demonstration agent, and Knox Parr, county agricultural agent of Garza County. The exhibit was realistic to the point of having smoke curl up from the family pork barrel

North Country Products Have Good Sale

Marketing home products typical of the north country in which they are made is proving profitable in Marquette County, Mich., according to the home demonstration agent, Dorothy Coburn.

Among the best sellers are the balsam pillows made in three sizes of natural monk's cloth with a conventional design cross-stitched in green. They are filled with a standard amount of needles from the balsam tree. The inner muslin container allows for refilling when the fragrance is lost. These make an attractive souvenir of the north country and 135 were sold during the 1930 tourist season.

Finnish woven rugs of an unusual design are also popular and beautiful.

"Our aim," says Miss Coburn, "is to keep the 'home quality' so that their appeal is unique and to provide quality at a cost within the reach of the average tourist at the same time returning a fair wage to our workers."

Canning Bulletin in Spanish

A new bulletin on canning has been prepared for the use of the Spanish-American women and girls of New Mexico who are in the home demonstration and 4-H clubs. The bulletin was prepared by Fabiola C. de Baca, district home demonstration agent in New Mexico and is written entirely in Spanish.

Anna Swenston is the 16-year old editor of the Roberts County Club Pep, a 4-H club paper which is published by and for the 4-H club members of Roberts County, S. Dak. The paper is financed by advertisements and 300 subscribers, who each pay 25 cents a year for the paper. Miss Swenston gives full credit for the success of the paper to the staff of reporters scattered over the county.

Aids Farmers to Combat Horse Parasites

Local campaigns to control bots, stomach worms, and large intestinal roundworms of horses are being sponsored by Dr. E. M. Nighbert, extension veterinarian, and Fred D. Butcher, entomologist of the U. S. Department of Agriculture. These specialists point out that the winter months are an especially opportune time to rid horses of these injurious pests.

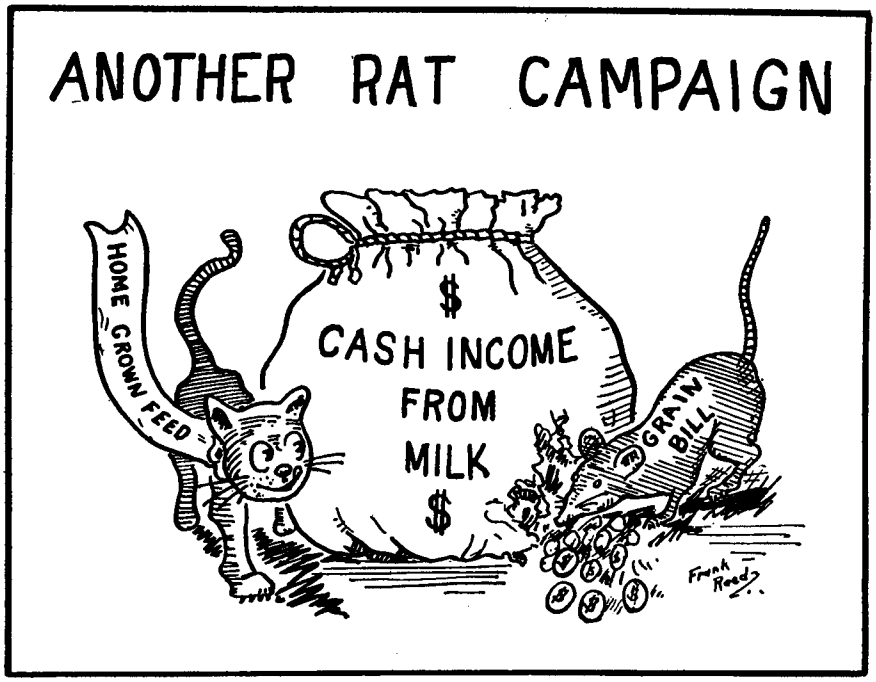
The recommended procedure in planning this work and in treating horses successfully is described in a mimeographed statement just issued by the department. It is being distributed to county agents, other extension workers, and veterinarians, as well as to horse owners who have requested assistance in dealing with this troublesome problem. Copies of the statement, entitled "Control of Bots, Stomach Worms, and Large Intestinal Roundworms of Horses," may be obtained on application to the zoological division, Bureau of Animal Industry, United States Department of Agriculture.

4-H club week, which was celebrated at State College, Pa., during the week of August 10–15, had an attendance of 1,187 folks. Seventy-seven delegates from 28 counties attended the leadership school which opened Monday. Fifty-seven counties sent represenatives either to the leadership school or to club week which formally opened on Wednesday.

Model Home Playground

A home-equipped playground was prepared and used to illustrate family recreation at farm women's week at the Michigan State College this year. The equipment recommended consisted of a rope swing, a light ladder, three planks of assorted lengths and widths (one side of the longest plank was waxed for sliding), large wooden blocks, 12 feet of rope, a hammer, a wagon, a shovel, a washtub, five wooden boxes of assorted sizes, and a sand box of waterproof canvas swung in a wooden frame. This type of sand box can be moved indoors or it may be used as a wading pool. The total cost of material used was $17.10.

The chamber of commerce in Saline County, Mo., arranged a tour of the livestock work which the local 4-H club boys and vocational agricultural students are doing, and brought 46 business men into contact with this type of extension work.



Mats of this cartoon to support the New Hampshire dairy extension program were sent to newspapers in the State during a state-wide campaign for reduced production costs. The cartoon was adapted from one entitled "$200,000,000 Destroyed Every Year by Rats," used by the department in rat-control campaigns

EXTENSION SERVICE REVIEW

Issued monthly by the EXTENSION SERVICE of the United States Department of Agriculture Washington, D. C.

C. W. Warburton, *Director, Extension Work*
C. B. Smith, *Chief, Office of Cooperative Extension Work*
J. W. Hiscox, *Chief, Office of Exhibits*
Raymond Evans, *Chief, Office of Motion Pictures*
Reuben Brigham, *Editor*

The Extension Service Review is published in the interests of workers and cooperators of the Department of Agriculture engaged in extension activities. It contains official statements and other information necessary to the performance of their duties and is issued free to them by law. Others may obtain copies of the Review from the Superintendent of Documents, Government Printing Office, Washington, D. C., by subscription at the rate of 50 cents a year, domestic, and 75 cents, foreign. Postage stamps will not be accepted in payment.

4-H Music Test

THE 1931–32 national 4-H music achievement test will begin with the National 4-H club radio program on Saturday, December 5, 1931, and end with the radio program on Saturday, July 2, 1932.

The central theme for this year's music achievement test will be "learning to know America's music." The topics for the several broadcasts will be America's Indian music, December 5; America's Negro spirituals and songs, January 2; America's patriotic music, February 6; America's hymns and religious songs, March 5; America's country dances, April 2; America's favorite songs, May 7; America's favorite composers, June 4; and final national 4-H club music achievement test, July 2. The last program of the series will include an identification test. 4-H club folks will again be honored by having the United States Marine Band play for the 1931–32 music achievement test. Annotations relative to the compositions or composers will be prepared and broadcast by R. A. Turner, field agent, Central States. Copies of these annotations will be sent to all State club leaders and to others specifically requesting them.

The national 4-H club radio programs, "Always on the first Saturday of each month," are broadcast over the National Broadcasting Co.'s chain of stations during the national farm and home hour, 12.30–1.30 eastern standard time; 11.30–12.30 central standard time; 10.30–11.30 mountain standard time, and 9.30–10.30 Pacific standard time.

Any State, any county, or any local 4-H club may coordinate its musical program for the year with the 1931–32 national 4-H music achievement test.

The county extension agents have the information relative to the musical compositions to be used during the year, or, this list may be had by requesting from the Office of Cooperative Extension Work, United States Department of Agriculture, Washington, D. C.

·ACROSS ·THE · EDITOR'S · DESK·

What Does It Cost?

WHAT does it cost a county to maintain an extension service? A good deal of thought, all down the line, is being put on the answer to this question at the present moment. Murl McDonald, assistant director of the Iowa Extension Service, sends in some interesting data on how the tax dollar in a county is expended. According to his figures, the cost of maintaining an extension service in an Iowa county is less than one-third of 1 cent out of each dollar paid in taxes. In terms of the individual family and farm, it costs 63 cents per family and 83 cents per farm. It is, also, he notes, the equivalent of one-fifth of the insane fund of a county and one-eighth of the poor tax.

Doubtless the same modest cost to the county of maintaining an extension service is true in other States. As adjustments continue to be made in county budgets, however, it is evident that the continuance of the work in any county is going to depend very largely on the record that the extension service in that county has made for itself.

Whether the cost of maintaining a service is much or little weighs much less apparently than whether in public opinion the service is vital to the revival of profitable business conditions and to the increase of farm incomes or the development of new sources of income. The measuring stick that is being applied to the extension agent at this time appears to be more and more that of whether or not his service is aiding enough farmers to pay their way out of present financial difficulties to justify his employment.

That Sabbatical Leave

A YEAR ago the department advised State directors of extension that it would give consideration to applications for sabbatical leave for extension workers where cooperative extension funds were involved. In this first year 26 applications were approved. Of these, 14 were made by county extension agents. Ten States were represented. The length of leave ranged from one and one-half months to a year. Certainly, no wild rush for more knowledge is indicated here. Yet, on second thought, I wonder if the showing is not excellent after all. This year, and last, have hardly been a time for leaving one's post of duty. What, with droughts, low prices, and close economies in so many counties, it would have been rather surprising if many extension men and women had found it advisable to take such leave even though it might be due them. Still it is a matter which none of us can well let wait indefinitely. What additional training may mean to us in the way of larger opportunities is a matter, I think, which each of us has to weigh and to act on in the not too distant future. Time flies.

He Wants To Know

ACROSS his desk, John Inskeep of Oregon City, county agent for Clackamas County, Oreg., told the editor of the REVIEW some things. It was a warm afternoon in last August but the heat wasn't bothering me at all as John proceeded. He spoke straight from the shoulder. "What interests us county agents," said John, "is what other agents are doing and thinking. That's the stuff we want. We are the boys that are looking appropriating boards and the public in the face right now. When one of us in Illinois or Alabama or anywhere else does a piece of work well, we'd like to know what he did and how he did it. Furthermore, we'd like to see what the other fellow looks like. Run his picture in the REVIEW. Let us see what kind of a fellow he is."

John Inskeep is right. The search is on for more stories of extension jobs done in the counties that are worth knowing about. And, remember, we want to see what you look like.

They Go To The People

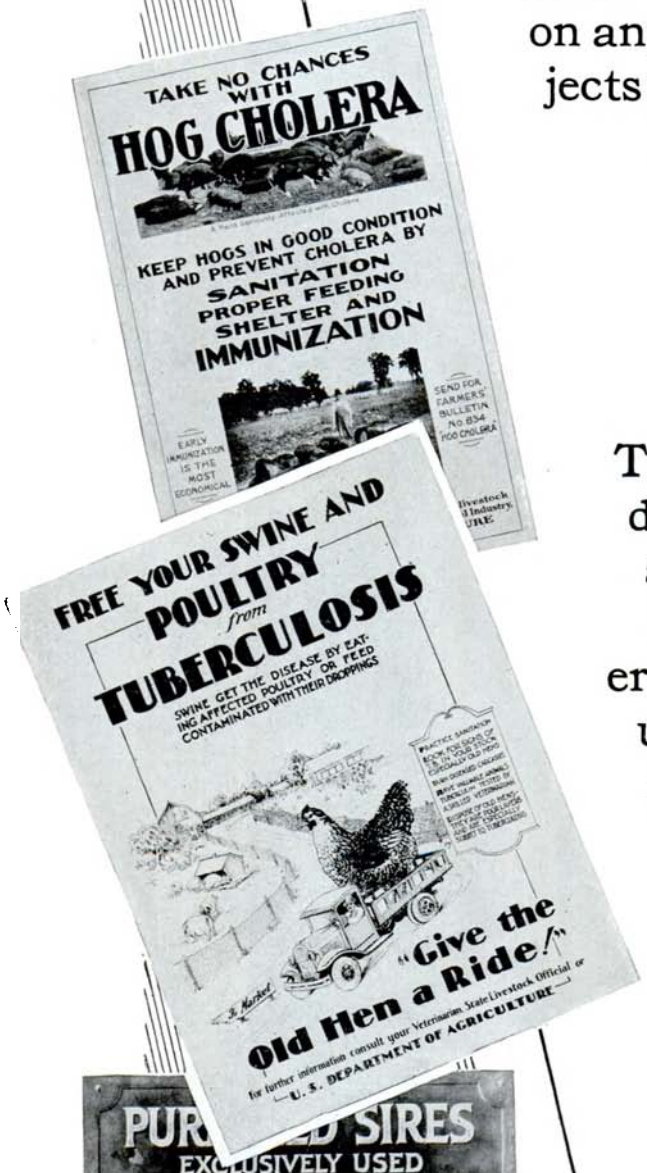
NORTH CAROLINA is taking a new way to win the support of its people to its balanced farming program for 1932. The annual extension conference will not be held. In its place, Director Schaub is arranging for a series of 10 sectional conferences to be held in December and January. Leading farmers and business men of each section are being invited to these conferences. Together with the county extension agents of the section and representatives from State headquarters, they will discuss the situation and work out the program that seems best to suit their needs. I take it that we will all watch with keen interest this plan for getting the extension forces and the people unitedly at work on a sound localized program. It may even mean that we have reached a time in some instances, at least, when the ends of an annual conference will be better served by holding in its place a series of sectional conferences such as Director Schaub proposes.

He Pictures The County Agent

RUSSELL LORD, in his new book, Men of Earth, gives us a series of striking pen pictures of the county extension agent. They are pictures that put heart in you. They quicken the pulse and stir fires of enthusiasm and ambition that you may have thought dead from the practical grind of the years. They bring out in clear relief the practicalities as well as the ideals of extension work.

Men of Earth deals with the many types of farmers that make up the moving panorama of agricultural progress. You'll find them all, from the east, north, south, and west—very human men and women, each working out his portion of the farm problem. You'll not agree with everything that Lord says about extension work and the farm situation. You'll probably want to argue some of his contentions with him. He'll not object to that, I know. That's what he wrote the book for—to stir up thought and yet more thought on the business of agriculture and what can be done about it.

R. B.



CAN you use expert information in simplified form on any of the following subjects:

Control or eradication of livestock diseases and parasites.

Breeding, feeding, and management of livestock.

How to meet consumer demand for livestock products.

Inspection activities.

The Bureau of Animal Industry has developed these and other livestock subjects in the form of bulletins, posters, and charts for educational use. The information and service of the bureau are always at the command of extension agents who wish help on special animal husbandry problems. Write to the Department through your State extension director.

BUREAU OF ANIMAL INDUSTRY
United States Department of Agriculture
Washington, D. C.

Extension Service Review

VOL. 2, NO. 12 DECEMBER, 1931

THE EXTENSION NEWS STORY KEEPS THE PUBLIC INFORMED

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 192 FOR PRICES

In This Issue

LEADERSHIP—doing for others—as one of the goals for older club members, is stressed by President R. W. Thatcher of Massachusetts State College, in the first of a series of contributions on 4-H club work by the presidents and deans of the land-grant colleges. "That we have not altogether failed in attaining this goal," says President Thatcher, "is proved by the fact that about one-half of our 900 local leaders last year were older club members." Salute, George L. Farley!

"IT BECAME to them a fascinating game of making lovely out-of-door pictures," is the charming way in which Essie M. Heyle describes the widespread effort of Missouri rural women to make their homes and home surroundings more attractive. Contests, tours, demonstrations, score cards, and news items—these were used with telling effect in winning the enthusiasm and willing aid of all the members of each cooperating family.

ALABAMA'S FARMERS planted nearly 2,000,000 pounds of winter legume seed, principally hairy vetch and Austrian peas, in 1930. J. C. Lowery, agronomy specialist, estimates that planting these legumes added 1,000,000 bushels to the State's corn crop this year. He tells how the county agents of Alabama in a 10-year soil improvement campaign rolled up this score.

ANOTHER COOPERATIVE with a record of business handled that is impressive is the Inter-State Milk Producers Association of the Philadelphia area. In 15 years its membership increased from 3,494 to 28,512 dairymen. In 1930 the returns to members for fluid milk marketed was more than $29,000,000.

Contents

DIRECTOR W. W. Long of South Carolina found in 1925 that only 25 per cent of the State's cotton crop was being used by South Carolina's mills. For the five years following cotton-growing contests were held all over the State. In these contests over 4,000 farmers took part. The result was that a crop was developed that met more nearly the requirements of local mills and gave a better margin of profit to South Carolina's growers.

On the Calendar

THE AMERICAN SOCIETY for the Advancement of Science and the American Phytopathological Society will hold their annual conferences in New Orleans, December 28 to January 2.

Washington, D. C., is to be the meeting place for the American Farm Economics Association, the American Economics Association, the American Sociological Association, and the American Statistical Association, all to be in session December 28 to 30.

Annual State extension conferences are to be held in St. Paul, Minn., December 14–17; in East Lansing, Mich., December 15–18; Honolulu, Hawaii, December 14–18; Blacksburg, Va., December 14–19; Fargo, N. Dak., December 12–16; and a State economic extension conference at Lincoln, Nebr., December 15–18.

The Agricultural History Society will meet in Minneapolis in conjunction with the annual meeting of the American Historical Association and other historical societies December 28–30.

4-H POULTRY CLUB MEMBERS in five New Jersey counties have undertaken a carefully planned cooperative egg marketing project. J. C. Taylor, assistant extension poultryman, outlines in interesting detail just how these boys and girls are proceeding to conduct their business operations.

WHEN CONNIE BONSLAGEL of Arkansas steps on the starter, there is immediate and concerted action on the part of home demonstration forces of that State. A tremendous surplus of peaches was going to waste on Arkansas farms this summer. The word was given out to save them. The answer was the organization of 334 community canning centers, and on Arkansas pantry shelves there are today over 3,000,000 quarts of home-canned peaches.

CERTIFICATE.—By direction of the Secretary of Agriculture, the matter contained herein is published as administrative information and is required for the proper transaction of the public business

Extension Service Review

VOL. 2 WASHINGTON, D. C., DECEMBER, 1931 NO. 12

Needed—A Land Policy

ARTHUR M. HYDE

Secretary of Agriculture

WITHIN the past few years millions of acres of farm lands in the older sections of the Nation have been abandoned or have become tax delinquent. Numerous farms have been subjected to foreclosure. Many irrigation and drainage districts have fallen into financial difficulty. We have been brought face to face with the problem of extensive areas of submarginal land. Something akin to a new public domain is coming into existence—defunct farm lands and cut-over forest lands on which private owners are no longer willing to pay the taxes. Tax delinquency is due largely to excessive taxation or to forms of taxation which make unprofitable to private owners the operation of such lands for such modest uses as nature equipped them. Due to abandonment and tax delinquency the towns dependent on such lands find the foundations of their property undermined. Counties are shorn of a large part of their revenues. The costs of schools and roads in such areas are met with increasing difficulty by the sparse population which remains.

We have proceeded on the assumption that all cultivated land is destined to be used in the production of food and fiber, and that the sooner it could be put to this use the better. Ours has been a policy, not of land use, but of land exploitation.

We have offered our lands to homesteaders; we have hung them up as bonuses to soldiers; we have opened new areas with lotteries and advertised them with brass bands. All this we have done on the assumption, never seriously questioned, that the Nation needed to bring more land under cultivation.

Aids of Technology

Our traditional policy of unlimited agricultural expansion is now confronted with certain rude facts which can not be ignored. Our agricultural plant is already too large. There is little hope of achieving balance through an increase in population. We have limited immigration. The rate of increase of our population is rapidly declining. Within a generation our population probably will reach a stationary figure at around 150,000,000, perhaps a little more, but quite possibly less. Advances in technology will probably suffice to keep pace with this increase in population. This outlook differs materially from the prediction in

Arthur M. Hyde
Secretary of Agriculture

1900 by Sir William Crookes that by 1931 the world would face a wheat famine. He took no account of advances in technology or of the decline in the birth rate.

Far from selling wheat at famine prices, what agriculture now needs are more game reserves, more airports, more and larger golf courses, more city farmers with their larger acreages and their smaller production.

No State in the Union has ever made a success in its land policy. Our older States intrusted their forest resources in the eastern half of the United States to private ownership. Individual owners can not be expected to consider the interests of the public in such matters as watershed protection, preservation of scenery, provision for recreational privileges, and particularly in maintaining permanent stock of timber for those numerous smaller communities whose prosperity depends on a continuous supply of timber to furnish part-time employment to farmers, important raw materials for local industries, and local markets. Some of those same States are now trying to undo their early errors, and are finding the effort both difficult and costly. The Nation has time to stop waste and erosion of natural resources before it is finally too late.

Improving Standards of Living

In former days, when public services consisted mainly in the provision of a small log schoolhouse and a few months of the time of an unskillful, but enthusiastic, pedagogue, the sporadic and unsystematic occupancy of the land was not of very serious consequence to the public interest. Nowadays, however, an adequate rural standard of living includes good roads, telephones, adequate schools, and numerous other services which, when furnished to a scattered population, are impracticable or exceedingly costly.

Both the States and the Federal Government need to formulate an effective program for the future use of these submarginal areas; to determine whether they shall be devoted to uses which their endowment will support, or to the more ambitious uses which have failed dismally to support an American standard of living.

In many areas farms are submarginal, not because of the barren character of the land but because conditions have produced farms of a size and type of organization unsuited to economic conditions. In some areas a program of consolidation is called for; in others, of subdivision. In some parts of the Great Plains, for instance, where the farm family must subsist upon the income produced from the farm, larger units seem

87121—21——1

to be desirable. The ownership of the lands, however, has been diffused through the operation of our earlier land policy, among numerous small landholders, many of them absentees. In areas adjacent to industrial centers, where the farm income can be increased by occasional employment in industry, smaller units would be practicable. Each State should take the lead within its borders of formulating its own program of reorganization.

These emergency problems point forcefully also to the need for a redefinition of a national-land policy. Almost from its inception the Department of Agriculture has been pointing out the need for a national policy of land use. In the domain of lands for forest use, and for game preserves, the department has partially translated its ideas into action. In these fields we now have a sound national policy.

Rural Land Problems

A proper national-land policy will not solve immediately all the problems of agriculture. It is no panacea, and it will require time to show material results. Some readjustments can be furthered in the present emergency. It is of importance, however, that we weave some such set of objectives into the fabric of a long-time national policy of land utilization, and put that policy into operation as rapidly and as generally as possible, for uneconomic use of the land—some of it vicious, much of it unwitting—lies at the very root of our rural problem.

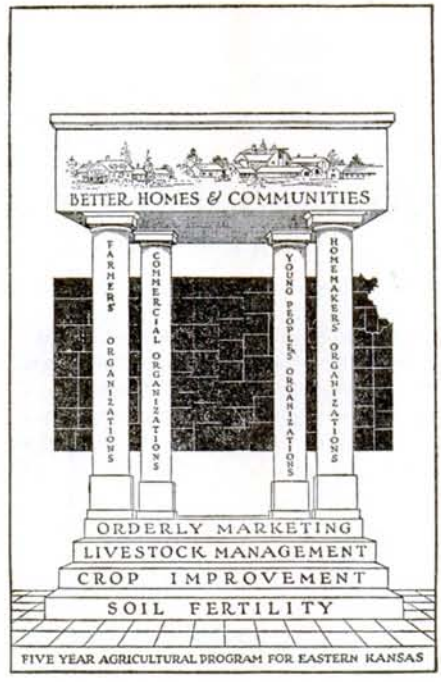
To fulfill these objectives will require both private and public effort. The Federal Government, the States, and the counties, in conjunction with the owners and users of land, will, by the nature of things, have to cooperate.

The States have exclusive authority over tax legislation. State and local agencies largely determine the location of schools and roads. Some States have already developed specific policies for State forests and parks. The Federal Government is concerned through its traditional interest in conservation and in the development of sound agricultural policy. Its important functions will be to act as a coordinating agency.

Economy of Production

The present depression will be a fruitless era indeed if we fail to utilize its lessons. This Nation has incomparable resources in land, labor, and capital. No less important is the intelligence with which these assets are utilized. The individual farmer will have to show resourcefulness in meeting changes in world economic conditions. He needs to adopt every economy of production. He needs to recognize handicaps, natural or economic, that foredoom him to failure. But it is no less vital that the Nation, in the interest of a profitable agriculture and a balanced national life, shall promote a wise utilization of our resources. The present policy of planless agricultural development should be replaced without delay by a program based upon such a utilization of our land resources as will yield greater economic and social values, will stay erosion and soil depletion, will preserve and conserve our land inheritance, and limit our agricultural plant to such size as will supply the Nation's needs, without the ruinous blight of overproduction.

Eastern Kansas 5-Year Program



FIVE YEAR AGRICULTURAL PROGRAM FOR EASTERN KANSAS

A 5-YEAR program for the agricultural and industrial development of eastern Kansas planned by the State extension service was recently introduced through an all-day celebration, farm products utilization day, at Lawrence, Kans. More than 15,000 people from all of the counties in eastern Kansas were on hand early in the morning to hear the prominent speakers scheduled and to view the many agricultural and industrial exhibits placed in South Park. The city, through its chamber of commerce and other interested organizations, had planned weeks in advance to make the visitors welcome.

The program started with the window displays ready at 10 o'clock. Seventeen windows had been decorated by the women's farm bureau units to show a more thorough and profitable utilization of farm products in Kansas homes.

At 11 o'clock the long parade of bands and floats started at the Kansas River bridge and led the crowd to South Park, 15 bands representing Kansas communities and approximately 40 floats taking part in the colorful spectacle. There were girls' bands and boys' bands, and a mixture of the two, all in resplendent uniforms. The floats were designed to show the progress of Kansas agriculture and industry, and the close harmony in which all farm, commercial, and industrial organizations are now working.

At noon, lunches of Kansas products were served at cost in South Park. Milk was given away free by the Lawrence dairies and creameries.

The 5-year program as announced at this meeting for eastern Kansas will take into consideration the type of agricultural production and industrial development best suited to the region and the most profitable under present economic conditions. This includes better farm management, terracing, legumes, insect control, year-round gardens, profitable corn, swine, and beef production, well-managed farm poultry flocks and dairy cows, well bred and culled.

Consumers' demands at home and abroad will be an important factor in the development of the program. Special recognition will be given to Kansas industries of all kinds that are efficiently processing, marketing, and distributing agricultural commodities.

A more systematic and thorough use of Kansas products in the home will also be emphasized. This part of the program will be of interest to home makers in towns and on the farms alike. The result should be a more desirable type of home life throughout the State.

Both afternoon and evening programs included such speakers of national prominence in agriculture as Senator Arthur Capper; Gov. Harry H. Woodring; Edward A. O'Neal, president American Farm Bureau Federation; and other leaders taking an active part in the agricultural and industrial development of Kansas.

More than 40 Kansas industries and organizations loyally supported the day's activities through the purchase of exhibit space and the preparation of attractive displays.

More Attractive Homes in Missouri

ESSIE M. HEYLE

State Home Demonstration Agent, Missouri Extension Service

EIGHT years ago a rural woman from Indiana, a seat mate on a train, piqued me by remarking, "You people in Missouri don't love beauty, do you?" When startled I began to defend Missourians, the woman continued, "Just look at those farm homes, not a shrub or flower in the yard." A more careful observation forced me to realize that the stranger's indictment was all too true. Many communities showed no interest in beautifying home grounds, and others where the interest was present showed the need of guidance in where and how to plant. A little survey of home grounds on 900 farms in one of our best counties brought to light that only 2 per cent had done any foundation planting.

In the last seven years, considerable attention has been given to making homes more attractive, both outside and inside, and a fine piece of work has been done by the project leader, Julia Rocheford. Gradually an attitude of mind has been developed so that many farm families feel as did the old darky mammy who, when told she had a lovely garden, said, "Why, surely, Honey, I lives here." Bankers, business men, and State extension workers who travel through the country often remark that they can tell where more-attractive-homes work has been done by the appearance of the farmsteads.

Whole Family Interested

An attempt has been made to instill the feeling, as the English express it, of being "house proud," in men as well as in women. This is done by always presenting the matter of making the farmstead more attractive at night meetings when the whole family can attend. Since the men and older children have a good deal to do with bringing shrubs in from the woods, planting those obtained from neighbors or nurseries, and keeping the yard neat, it is important that they be equally as interested as the mothers in having their homes present an attractive appearance.

Home-improvement contests sponsored by chambers of commerce, newspapers, or by women's clubs have been instrumental in stimulating interest and getting results. It is believed that contests which feature community or club rather than individual achievements accomplish better results and leave less animosity. Another advantage of community contests is that churches, schools, and community buildings as well as farmsteads are improved. Many contests have been held in which clubs divided their membership into two parts, and the members on the side which increased its score most were entertained at a dinner by the side which had lost.

Tours to Parks and Homes

Tours have been another important factor in creating interest and setting standards. Occasionally, tours have been held to well-planted town home grounds or to parks, but on the whole people seem to get more out of tours to country homes even when these may have less to show. Tours are particularly important in creating interest and stimulating desire when work is being done on the improvement of rooms as these can not be seen by the passer-by as can the grounds.

The use of score cards by home makers at club meetings or by judges on home visits have been effective in stimulating interest and desire in making improvements because it has shown home makers exactly what they needed to do to make their grounds or rooms more attractive. Mabel McMahon, the Saline County home demonstration agent, spent about two months scoring about 500 individual home grounds five years ago, which she rechecked this year. Usually neighbors went about with her. She feels that the personal visit and suggestions given in connection with the scoring have resulted in so many more improvements that the time was well spent.

Newspaper publicity, particularly when there is as large an amount of it as can be obtained when a contest is being sponsored, is invaluable. The setting of 100 per cent goals in a few definite things each year that will make the home more attractive and the custom of having an annual exchange of shrubs, bulbs, and seeds are also of great help in creating and maintaining interest and getting a larger percentage of adoption of practices.

A serious problem in connection with getting an adoption of practices in a more-attractive-homes project is the fact that most farmers have little money to spend except for the necessities of life. That much can be accomplished when there is desire, knowledge, and willingness to work even though there is little or no money to spend has been continuously emphasized. People have been encouraged to transplant native shrubs and trees which can be found in abundance almost all over Missouri. Annual exchanges have been established so that women share what they have with each other, and propagation has been taught and practiced. One of our fine orchardists, experienced in propagation, has a standing offer to propagate all the shrubs that the people of his county will plant around any schoolhouse. An excellent example of the cooperation of a commercial firm is that in Pettis County, where a florist has for two years made trips to every community to teach propagation. Some pooling of orders has been done, so that women have been able to buy shrubs at a very low price when ordered in lots of 100.

Rearranging Furnishings

The problem of making rooms attractive at low cost is not so easily handled. Discarding useless or unattractive bric-a-brac, calendars, and the like, rearrangement of furnishings, rehanging of pictures and curtains, replacing of meaningless pictures with good colored prints from magazines, attractively arranged bouquets of flowers that add a needed color accent, however, do effect marked improvements at no cost. Refinishing of furniture, upholstering and putting in cane or rush bottom seats have been taught as a means of making useful the fine old furniture, often discarded, which can be found in many homes or neighborhoods. The making of rugs which are inexpensive but sturdy; good-looking footstools; waste-paper baskets and magazine racks; and the use of inexpensive or dyed fabrics for curtains, covers, and cushions have been taught. Care has been used to collect illustrative materials which show good design and color in inexpensive paper and fabrics, but on the other hand, emphasis has needed to be given to the fact that it is economy to pay for good paint and varnish.

Agents Shop with Women

The problem of getting furnishings, particularly, such as wall paper, fabrics, and good but inexpensive print pictures, is a difficult one for the farm woman with her limited choice in stores in small towns. Necessarily agents and specialists find themselves involved in trips to homes, shopping trips with women, and the sending back of samples, even when demonstration rooms are not involved. Even when as little as possible of this is done because it verges on the personal-service idea, some time must be allowed for it when a house-furnishing project is undertaken, because long-range advice as that given at meetings is often danger-

(Continued on page 180)

Marketing 4-H Club Eggs in New Jersey

POULTRY club members in New Jersey are now grading and packing quality eggs in attractive 4-H club packages, reports J. C. Taylor, associate extension poultryman. The egg carton used is a standard 2-row carton with a blue lining and a blue filler distinctive enough to impress the purchaser with the fact that the eggs in such a carton are always quality eggs. The principal object of this retail marketing plan is to demonstrate to the boys and girls the principles of packing and selling eggs at retail according to established grades, and to teach them the important factors that affect the interior quality of eggs. The retail method of marketing was chosen because most of the poultry-club members in New Jersey retail their eggs at roadside markets or retail routes.

All the eggs packed in the 4-H carton meet the requirements of the United States extra grade or better. Two grades of eggs are sold, large eggs which are marked with a blue seal on the carton and medium eggs marked with a red seal on the carton. All eggs must be candled and weighed and meet the requirements of quality, uniformity, and cleanliness. Each carton is sealed with a red or blue label containing the statement "Guaranteed if seal is unbroken." This protects the club member against any unscrupulous buyers. For the customers' protection there is a space on each label for the producer's number. This identification system makes it possible to trace any complaints to the club member selling the eggs.

Any boy or girl who is a member of a junior 4-H poultry club in New Jersey is eligible to use the State 4-H egg carton in marketing eggs. Before the club member is granted the privilege of using the carton he must make application through the county club agent on the form provided. In making application, the club member agrees to follow certain rules of grading, reporting of production and sales, ordering of cartons, and other rules that are necessary for the success of the marketing plan.

The presentation of a carton of large eggs to Governor Larson officially opened the project

The monthly report of club members using the State 4-H carton contains a monthly record of egg production of the flock from which eggs are sold in the carton. In addition to this record, the report requires a definite record of sales made in the 4-H carton. This record of the number of dozens of eggs of each grade sold and the price received will help in determining the success of the marketing plan in comparison with other methods of marketing. Club members are required to report the name and address of their customers, by weeks, on the monthly report. Through this phase of the report it is planned to obtain some definite data on consumers' demands for quality products and also to provide a means for the inspection of grading by club members.

The presentation of 1 dozen large eggs packed in a State 4–H carton to Gov. Morgan F. Larson at the Trenton Inter-State Fair by August Dietrich, a member of the Gold Medal Poultry Club in Mercer County, officially opened the project for retailing 4–H club eggs in the standard State 4–H carton. Since the opening of the project club members in five New Jersey counties have enrolled and are now selling eggs in these cartons. The five counties are Cumberland, Gloucester, Mercer, Middlesex, and Salem. Other counties that have organized poultry clubs are planning to enter the project at a later date.

More Attractive Homes in Missouri

(*Continued from page 179*)

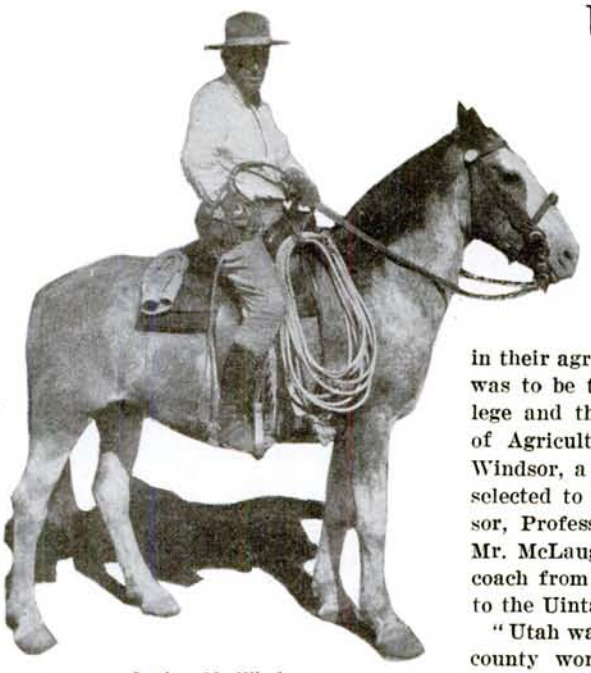
ous and one would prefer to have as few regrets as possible when money for spending is limited and women are groping so seriously for beauty.

One of the difficulties with house-furnishing work in many communities of Missouri has been inertia and a low standard for attractiveness. This was due either to the fact that the women thought the more attractive home was beyond their reach financially or because their attention had not been directed to the possibility of making their homes more attractive through visits to more attractively furnished homes than theirs. In many communities something to do with the hands offers the easiest approach. A woman who will not think out a color scheme for her room will be forced to make some decision in regard to it and to learn something about harmonizing color as she decides what color to use for her rug and what colors to combine with it. Demonstration rooms and demonstration homes have been found to be very useful in improving standards, since the woman can see the improvement that has been made and realize that it has been done with little expense. A county demonstration home in Cass County was particularly valuable in this respect, because it was a real home much like the others and the plans for it were made by the county council and carried out by the 30 clubs in the county under the supervision of the county home demonstration agent, Margaret Nelson. Each club knew of the plans, and each club contributed labor in carrying them out.

Last year there were 3,997 women who improved their home grounds for the first time and an uncounted number of others who continued to work on them. Some of these homes had women who had never planted a shrub or flower and the fascinating game of trying to make lovely out-of-door pictures has given them a new interest and pleasure. This interest continues and grows from year to year. Many of the women who started in the beginning have solved some of their problems of tying the house to the ground with foundation planting, planting attractive borders or corners, and screening unsightly parts of the homestead, and have gone on to new interests in developing perennial gardens, outdoor living rooms, and in making lily pools and rock gardens.

The number of homes reached in house furnishings was 5,105. This number includes those homes in which 2,997 rooms were improved, 4,339 rugs and small articles of furniture were made, and 2,443 pieces of furniture refinished or repainted. Statistics can not express, however, the pride and satisfaction the rural families are feeling in their homes as a result of their efforts to make them more attractive.

Utah Pageant Portrays Early Extension Work



Luther M. Windsor

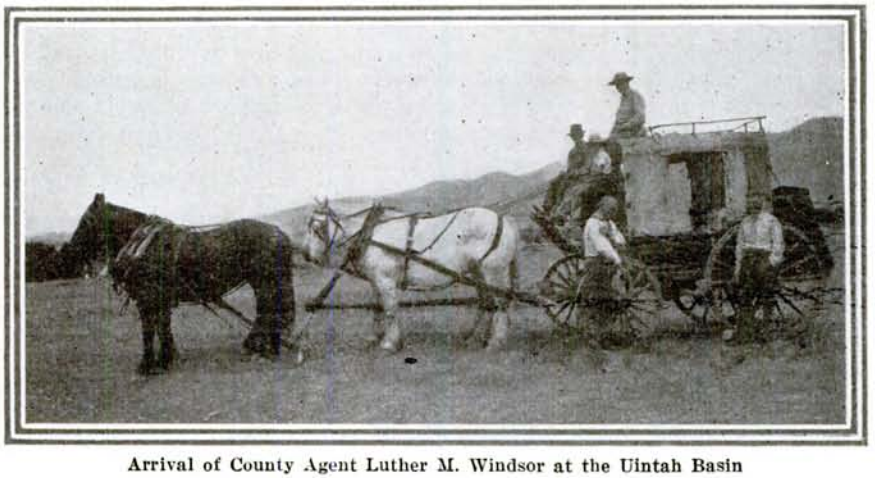
IT IS not generally known that to Utah belongs the credit of appointing the first county agricultural agent outside of the Southern States, says W. A. Lloyd, in charge, western section, Office of Co-operative Extension Work. This and other early extension activities formed the basis for one of the interesting events in connection with the Western States Regional Conference at the Utah Agricultural College in Logan this summer, the staging of an historical pageant in the college stadium under the direction of the local chapter of Epsilon Sigma Phi.

Luther M. Windsor, Mr. Lloyd states, began work as county agent for Uintah County March 1, 1911, 15 days before the district work was started in Binghampton, N. Y. The facts surrounding the work in early Utah, Mr. Lloyd gives as follows:

"In February, 1911, President John Widtsoe, of the college; L. A. Merrill; E. D. Ball, director of the experiment station; and W. W. McLaughlin, representing the United States Department of Agriculture, met at the college and decided to co-operatively place a person permanently in Uintah County to help the farmers in their agricultural problems. This man was to be the representative of the college and the United States Department of Agriculture in this district. L. M. Windsor, a graduate of the college, was selected to fill this position. Mr. Windsor, Professor Merrill, Doctor Ball, and Mr. McLaughlin made the trip by stagecoach from Price over poor desert roads to the Uintah Basin.

"Utah was also among the first to start county work with special reference to extension work with farm women. Home demonstration work began in Utah under the leadership of Gertrude McCheyne in Sanpete County, and on July 28, 1913, Amy Lyman, now Mrs. M. C. Merrill, wife of the Chief of the Office of Publications, Washington, D. C., was appointed home demonstration agent. She worked largely the first year on the elimination of the fly and the proper disposal of garbage and sewage."

Mr. Lloyd says of the pageant, "In the beautifully situated Utah field with the misty majestic mountains surrounding Cache County as a background, and a gorgeous sunset painting the twilight shadows with a glow of radiant beauty, the Utah chapter reenacted many of the scenes of those early pioneer days when the stagecoach, the horse, the bicycle, and the 'Model T' were the usual travel accessories. Participants in the pageant were the original workers, including Luther M. Windsor, now with the Utah Agricultural College; Mrs. Amy Merrill, formerly Miss Lyman, now of Washington, D. C.; W. W. Owens and J. C. Hogenson, still connected with the Utah Extension Service. John T. Caine, III, now with the International Livestock Exposition; W. H. Olin, now with the Denver Rio Grande Railroad; and Ben Eldredge, retired, of Salt Lake City, who were participants in the early happenings in Utah, were in the audience. The realistic setting, the stagecoach, automobile troubles, meetings, and old-time extension methods were faithfully depicted."



Arrival of County Agent Luther M. Windsor at the Uintah Basin

Sure Farm Relief

"Sure farm relief" suggestions are made by A. H. Tedmon, county agricultural agent in Arapahoe County, Colo., in a circular to farmers of his county. Mr. Tedmon's program is as follows:

1. Milk a few good cows; feed recommended rations.

2. Fatten one pig for every two adult members of the family; cure the meat properly.

3. Keep at least 100 good hens, correctly housed and fed.

4. Raise a good garden; water from windmill if possible.

5. Plant cash crops only, which show little or no surplus.

6. Grow all your own stock feed.

7. Butcher fat cows and steers; trade meat with neighbors.

8. Raise your own living; keep your roof tight.

9. Get down to earth and do the best you can *to-day*.

10. Drive a horse until you can afford to buy gasoline.

LOW FEED COSTS have so far restored the popularity of horses that an old-time colt show was added as a new feature of the Peoria County (Ill.) Farmers' Institute this year, reports County Agent J. W. Whisenand. There was one class for draft colts and another for all-purpose colts with prizes of $10, $5, and a ribbon in each class.

Aims in 4-H Club Work in Massachusetts

ROSCOE W. THATCHER

President, Massachusetts State College

I DO NOT know that Massachusetts has any unique program for doing its 4-H club work.

In developing the State extension program over a period of years it has been the policy of the college to give equal attention to the three phases of extension work, and 4-H club work has grown along with the others.

County Club Workers

There are 14 counties in the State and 13 of them carry out the 4-H club program. One of these counties has 4 full-time club workers, 1 has 3, 8 have 2, 2 have 1, and in the other a Smith-Hughes teacher supervises the work. This gives us a good corps of workers to reach our large population of boys and girls.

Massachusetts, being on the whole an industrial State, has many children without interest in either agriculture or home economics. Western Massachusetts is somewhat rural, while eastern Massachusetts is decidedly urban. Some of our eastern counties are popular summer resorts and our young people find much gainful employment in the summer season in activities in no way related to 4-H club work.

Part-Time Farmers

The last census showed 60,000 part-time farmers in the State—men who work in our industrial centers but who own homes with small areas of tillable land in suburban centers. Club work has enrolled many young people from these homes. Almost every organization dealing with young people is found at work somewhere in the State. Therefore, club work takes its place with the others and has no special field of its own.

This wide variety of home wants and needs naturally calls for a large number of projects. To-day we have 22 different project activities carried on in a larger or smaller way in various sections of the State. The list includes canning, clothing, food, dairy (calf or milk production), garden (vegetable or flower), lunch box, forestry, field crops (corn or potato), handicraft, poultry, rabbit, room improvement, and music.

But boys and girls the world over are more or less alike, and with this thought in mind we have gone out with a program that has in it certain fundamental appeals. The same appeal does not reach all our members, nor do we try to reach all members by the same appeal. In some cases it is money; in others, home beautification. To some, achievement is the force that drives them on, but back in the minds of all club leaders in Massachusetts is the desire to help the 4-H members to grow to be worth-while men and women.

HIGH tribute to 4-H club work was paid by President Raymond A. Pearson, of the University of Maryland, and chairman of the executive committee of the Association of Land-Grant Colleges and Universities in a radio talk on 4-H Club Achievement Day program over a national network of 54 radio stations, Saturday, November 7. President Pearson made the following statement:

"The land-grant institutions are realizing more and more that 4-H club work is a training school in rural achievement and leadership. During only a few years this branch of extension work has grown to be of major importance. Though the movement is still young, some of the first members who are now in colleges or are adults in other environments give much of the credit for their success to the instruction and discipline that they received when they were in active club work."

Leadership, doing for others, is one of the goals to which we strive to bring our older club members. That we have not altogether failed is proved by the fact that about one-half of our more than 900 local leaders last year were older club members.

Older Boys and Girls

Our work with older boys and girls has recently taken on renewed activity. For several years we have had 4-H service clubs in several counties. These organizations have met perhaps twice a year and have reviewed the club work of the county. There seems to be a desire on the part of these clubs and others recently formed to become more active and the members express a desire to go into their respective communities and organize groups of younger boys and girls.

The active interest of the directors of the Eastern States Exposition in 4-H club work has done much to strengthen our program. The support given by the exposition together with generous contributions by the Society for the Promotion of Agriculture has built up dairy and poultry exhibits which have reacted on the work in these projects throughout the State.

Brockton Fair directors have been most generous in their support of our work and have contributed money for use as scholarships.

Club Camps

Interest in camps and camp life is growing rapidly in the State. There are three camps which draw members from all parts of the State—Camp Field at Brockton Fair, Camp Vail at Eastern States Exposition, and Camp Gilbert at the State college. Camp Gilbert includes delegates from the counties and local leaders. This year for the first time a training camp for junior leaders was established, opening one week before Camp Gilbert and continuing through the week of the State camp.

A unique feature at the Brockton Fair is a lunch counter run by 4-H club members, the profits of which are made a part of a fund. The interest of this fund is lent to worthy 4-H club members toward normal school or college expenses.

A lunch counter is also a part of the Camp Vail exhibit at Springfield, and the profits of this counter help defray the expenses of the camp.

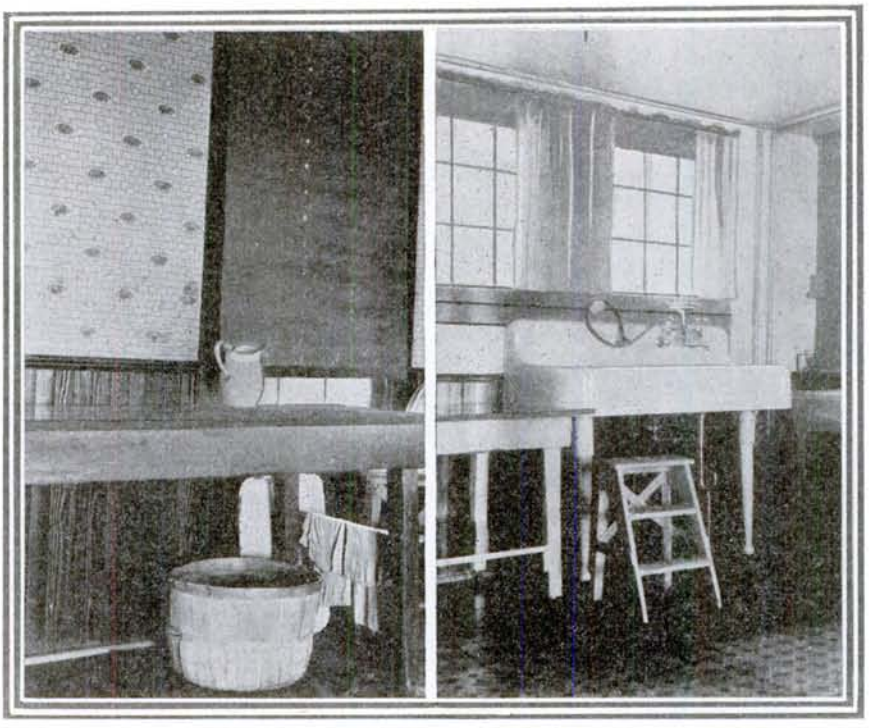
Several counties have already established camps and several others are considering doing so.

Training for Citizenship

Club work in Massachusetts is seeking to work out a program which will develop the boys and girls who enroll by training all four of the H's—head, heart, hands, and health. Those conducting the work seek to cooperate with other organizations similarly interested, all for one end—training for citizenship.

Delaware Home Makers Modernize the Kitchen

THREE years of kitchen-improvement campaigns in New Castle County, Del., have left a trail of convenient and attractive kitchens throughout the county. Seventy-three women have entered the wife-saving kitchen contest conducted each of the three years and have followed the suggestions made by the home-demonstration agent, Mrs. Kate Henley Daugherty, while 200 other home makers report that they have used some of the suggestions received through circular letters, meetings, news articles, or radio talks. In almost every home the agent visits now there are sanitary garbage cans with foot pedals to lift the lid where a pan or open slop bucket was used three years ago. The walls are more sanitary and cheerful now with buff and ivory gloss paints or oil cloth coverings in place of cheap wall paper or smoky gray or blue paints. Water systems have been added or improved. Better arrangement of equipment, correct working heights, and more sanitary floor coverings are encountered in many more homes each year as the agent goes about her work. The light in the kitchens has been improved by adding new windows or glass to doors, and in some homes electricity has been installed.



Corner of a kitchen before and after improving

News and Radio

In getting the first campaign under way, a five months' publicity campaign was started, using all weekly and daily papers in the county, radio broadcasts from WDEL of Wilmington and a series of letters illustrated with cartoons mailed to 1,400 farm women. At the same time a series of five kitchen meetings was held in each of the organized home-demonstration clubs. Different phases of kitchen improvement were discussed, and proper finishes and equipment were illustrated at each meeting. The wife-saving kitchen contest was then inaugurated and proved to be a very popular feature.

The second year of the campaign the agent sent out another series of seven letters to her mailing list. Each of these letters gave very definite subject matter on some particular phase of kitchen improvement, and each carried an appropriate cartoon illustration at the top of the page. The first of these letters was on the importance of running water and a sanitary waste disposal; the second, on correct heights for working surfaces; the third, on natural and artificial light; the fourth dealt with color and types of finishes for walls and woodwork; the fifth, proper shelf spacing; the sixth, convenient arrangement of equipment; and the seventh, on labor-saving devices. These letters were mailed out at intervals of two or three weeks.

Progress Reports

During the second campaign no kitchen meetings were conducted in the clubs which had been given the work the previous year, but all new clubs had kitchen programs and announcements of the second contest. Reports of progress of work were made in all clubs from time to time.

Whenever the agent was invited to address a parent-teacher association, a federated club, or a grange organization, her topic was always "kitchen improvement." "And, as usual," says Mrs. Daugherty, "the men in the audiences were always quicker to see the advantages of kitchen improvement than were their wives." Whenever she could enlist the cooperation of the contestant's husband, a more convenient kitchen was the result. One way in which Mrs. Daugherty succeeded in getting the husbands interested was by inviting the contestants and their husbands to a Sunday afternoon tea at her home. After serving refreshments, she invited them to inspect her kitchen in which she says she had tried to demonstrate the principles advocated. Her State leader, Mrs. Helen McKinley, also invited them to visit her kitchen the same afternoon, and the husbands went home with new ideas in which to assist their wives toward a wife-saving kitchen.

The third year's campaign consisted of another contest conducted almost entirely by means of circular letters and newspaper publicity. News stories also contained reports of result demonstrations started in the two previous campaigns.

Contest Conducted

Prizes were given the winners in each contest, but the contestants became so interested in their improvements that they lost sight of the prizes long before the contest was over, and each contestant declared that her improved kitchen was prize enough for her. Each achievement day, however, found the contestants' husbands on hand to hear their wives make the reports on their kitchens and rejoice with them over the honors which they received.

Beautifying Maryland's Countryside

LOVELY rock gardens, lily pools, hedges, and well-placed borders of perennial and annual flowers are making rural Maryland lovelier than ever, declares Edythe M. Turner, district home demonstration agent, who has worked on the home demonstration project in flower gardens for the last two years. This year, the second year of the project, 2,460 people in 15 counties signed up to carry the work under project demonstrators. The complete statistical results are not yet available, but garden parties, flower shows, and garden tours have been common in Maryland. The Baltimore County flower show had more than 1,000 entries brought in by group members and about 600 people attended the show in the afternoon. Harford County held 2 all-day tours, with 100 women attending the first and 125 the second.

The first year's work in 1930 emphasized annuals, and in preparing for this project a training school for home demonstration agents was held in three centers.

A flower show in Baltimore County, Md.

Every agent came to the meeting with a plan of some home maker's grounds. She had seed catalogues, color crayons, jars of various types of soil and fertilizer, commercial fertilizer, spray material, and a simple exhibit of good garden tools had been obtained by the district agents. At these training schools the specialist gave instructions.

Instruction to Leaders

In order to clear up any doubt of how the work might be carried in the counties, this question was taken up early in the day. It was agreed that the project demonstrator plan should be used, that the enrollment for the project would be limited to two persons from each group, club, or organization in the county, and that letters were to be sent out to all members of these organizations explaining the idea of the project and asking if those within the group felt the need for help on any problem in beautifying home grounds. If so, they were to select two capable women to represent them who would come into a near-by center to receive instruction from the home demonstration agent.

As the training school had been held in advance of the program-planning meetings in the counties, the agents were able to discuss the work with this group. Fifteen counties voted to carry the project. The agents in these counties had 175 organizations respond to the first letter. The groups understood from the letter that the two representatives chosen would receive help and suggestions and then carry out the ideas in their own grounds and gardens in 1930. The following year, after proving themselves, they would act as project demonstrators for the group and present the same work to the people in their neighborhood.

Individual Problems

The first year 270 project demonstrators enrolled and 177 carried out all the practices given in the first year's work in spite of the drought of 1930. This was evident when 240 rural women sat down and drew plans of their home grounds to carry to the first meeting in order to check and see if their grounds were laid out to the best advantage. The groups at these meetings were small, so individual problems could be considered by the agent. When some plan proved too great a problem for the agent she mailed it to the landscape specialist, who indicated the suggested change. Two hundred and four women reported moving flower beds from the center of lawns.

One feature of the first lesson roused much enthusiasm—that of making a plan of planting to obtain the maximum effect from color and height of plants. Two hundred and sixteen women worked out color schemes, using as a guide the list of annuals the specialist had prepared which told of the color of bloom and the height of plant. Although some gardens were effective in 1930, this plan of planting has been most successful in gardens of the rural women enrolled in the project demonstrator groups this year.

Soil Improvement

Perhaps the practice that should rank first was that of soil improvement. One hundred and sixty-five women report that they added organic matter, plant food, or changed the character of the soil by adding sand or sifted coal ashes.

In November, 1930, the training schools for home demonstration agents were again held at three centers in the State and two days were allotted. The first morning each agent stated the problems she had met and gave definite ideas. Problems were listed and considered later.

A discussion on training project demonstrators to present the lessons to their local group proved interesting. This method was new in the State and the project was the first in which the project demonstrators assumed all responsibility for teaching the groups. The agents planned to visit as many of the groups as they could to check on the way the project demonstrators gave the information. Each agent was given mimeographed material prepared by the district agents on suggestions for project demonstrators to follow at local meetings.

Illustrative Material

How much illustrative material to prepare and what type to ask project demonstrators to make was another question considered. All the home demonstration agents had brought the material they had used at the training schools. New ideas, including clever ways of illustrating a good practice to adopt, stimulated everyone to improve weak spots in some of their own material. The subject matter on annuals was revised by four of the

(*Continued on page 185*)

Alabama's 10 Years of Soil Improvement

A CAMPAIGN for winter legumes to improve the soil in Alabama has now been under way for about 10 years. Looking back over the work the accomplishments speak for themselves, according to reports of J. C. Lowrey, Alabama agronomy specialist. For years the extension service had been advising the planting of winter legumes for soil improvement from one end of the State to the other, but there seemed to be two principal obstacles in the way of increased planting—seed was difficult to obtain and the many legumes recommended rather confused the farmer.

Back in 1921 there was some reference to winter-legume work in the annual report, but it was in 1922 that the work took on a more definite and serious aspect. Field demonstrations were planned in communities throughout the State that farmers in every section might see the effects of winter legumes on the crops. In 43 counties about 3,000 farmers planted some kind of cover crop to be turned under for soil-building purposes.

To overcome the confusion of the many legumes recommended the efforts were concentrated on one legume, hairy vetch, which experiment station records showed to be the most dependable winter legume for soil-building purposes. In recent years, Austrian peas have become more popular, particularly because of the more available seed supply.

Seed Supply

A serious problem has always been the matter of seed supply. The active cooperation of the Alabama Farm Bureau Federation during the last 10 years in the cooperative buying of seed has been of great help. Various attempts at seed production have been made, but these in the main have not been successful, although Austrian peas give promise for seed production. The most valuable step in the winter-legume work has been in regard to Austrian winter peas. The Alabama Farm Bureau sent representatives to Oregon in 1929 to arrange with the growers to supply Alabama with seed. In the summer of 1930 and 1931 this organization had its representative in the producing area in Oregon to aid in shipping.

The result was a supply of seed of better quality than ever before received and at a very great saving to the farmers. In 1930, notwithstanding the drought and financial depression, 1,125,600 pounds of Austrian winter peas and hairy vetch were purchased cooperatively by the farmers, about 80 per cent being Oregon Austrian winter peas.

Increased Plantings

The low price of cotton in 1926 caused some decrease in the amount of hairy vetch being planted; but the faith farmers had in winter legumes is shown by the fact that in 1927 the planting of hairy vetch was almost double that in 1926. In 1927 about one-third of the seed was bad, resulting in no germination at all on large areas. In the face of these two reverses, the planting went from 790,649 pounds in 1927 to 1,127,096 pounds in 1928.

A survey in 1927 by county agents showed an average increase of 22 bushels of corn per acre when planted after a good crop of winter legumes. Cotton following winter legumes was increased an average of 356 pounds of seed cotton per acre. The money value in each case was approximately the same.

Soil Builders

Various means have been used to encourage the general use of winter legumes. A unique scheme which proved popular was the political campaign of Gen. Hairy Vetch for soil builder with all the cards, posters, and strong campaign articles of any regular candidate. The campaign literature read, "Vote for Gen. Hairy Vetch and Col. Austrian W. Peas, candidates for soil builders of the county, subject to action of progressive farmers of the county." The platform contained the following points: (1) We add nitrogen to the soil, (2) we add humus to the soil, (3) we double corn yields, (4) we increase cotton yields, (5) we help to prevent erosion, and (6) we make cultivation easier.

Fundamental in all the work has been the tour, carrying farmers to the field where he could see for himself what winter legumes can do and the policy of keeping the idea before the farmers 12 months of every year. Posters, quarter to page advertisements in local papers, signs in windows, in fields of corn after winter legumes, handbills, editorials, letters of testimony from farmers, letters from bankers to their customers, talks at luncheon clubs, exhibits in county agents' offices, and special articles in farm papers and dailies have all been used to promote the winter-legume work. A farmer growing winter legumes to produce sufficient corn for the farm is now the demonstration.

A Campaign for Winter Legumes

Winter legumes planted in the fall of 1930 added more than 1,000,000 bushels to the 1931 corn crop.

From 1919 to 1930 winter legumes increased the corn crop 5,661,480 bushels, worth $5,661,480. This includes only the first crop after turning the legumes.

From 1919 to 1930 nitrogen equivalent to 42,461 tons of nitrate of soda and humus equal to 1,415,370 tons of stable manure were added to Alabama soils by winter legumes.

In 1930 there were 1,884,717 pounds of winter-legume seed planted in Alabama.

Beautifying Maryland's Countryside

(*Continued from page 184*)

agents and the new work on herbaceous perennials was given by the specialist.

In an informal way the four lessons were considered. Illustrative material which the agents might find helpful was used, and bulletins, mimeographed lesson sheets, outlines, suggestions for illustrative material, and diagrams of various types of gardens were given the agents.

By January the 15 counties had the groups interested in the flower-growing project organized. The review lesson on annuals was taken up in the morning at the training schools. In the afternoon the project demonstrators received the second year's work on perennials. A few project demonstrators in various counties dropped out, but in others they returned 100 per cent strong for all the meetings.

When the agents met in October for the third-year training school, reports of the practices adopted were summed up in cold figures. These never express the real accomplishment of a project—the enthusiasm of the agents and women over a piece of work well done.

87121—31——2

Improving South Carolina's Cotton Crop

W. W. LONG

Director, South Carolina Extension Service

IN 1925 in a conversation with a leading cotton manufacturer of South Carolina relative to the character of cotton produced in the State, he made the observation that the cotton produced in South Carolina had greatly deteriorated in the past 10 years, forcing the manufacturers to purchase large quantities of their supplies in Texas, Oklahoma, Arkansas, and Mississippi. We then realized the economic loss to the State as a result of this condition. Immediately a survey by questionnaire was made of South Carolina cotton mills. Practically 100 per cent of the mills responded, giving the astonishing information that 75 per cent of the cotton raised in the State was exported and only 25 per cent was used by South Carolina mills. The questionnaire also gave the information that a large percentage of the mills used cotton of $\frac{15}{16}$ to $1\frac{1}{16}$ inches.

Improving Staple

After much thought and discussion as to the method of attacking the problem, it was decided that the extension service of Clemson College, the agricultural college of the State, would inaugurate a movement to improve the character and increase the length of staple, also to increase the yields per acre. To stimulate interest we thought it best to offer prizes. Naturally we turned to the Cotton Manufacturers Association. The executive committee gave us a most respectful hearing but their initial offer amounted to only $300.

Ambrose Gonzales, publisher of the State newspaper at Columbia, hearing of the project, then sent for me. After considerable discussion, he said, "The economic loss to the State is too great not to make some effort to correct it. How much money will you need?" I stated $2,000. He replied, "I will furnish it, but where it is coming from I do not know." This fine spirit passed away before his confidence was proved and his brother, W. E. Gonzales, generously provided the $2,000.

Project Financed

The 1926 contest was surprisingly successful. It was then that the South Carolina Cotton Manufacturers' Association readily agreed to finance the project, and this they have done most cheerfully for the past four years. Immediately at the close of the 1926 contest much interest was manifested and cooperation was given by the newspapers, banks, merchants, and other interests. County contests were conducted by some of the cotton mills, as well as by the merchants and bankers.

Requirements for Entry

Requirements for entry are simple. No entry fee or other payment is necessary. Briefly the requirements are as follows:

1. That only a variety of seed known to produce normally lint of 1-inch staple to be used.
2. That 5 acres of land in one body constitute a contest plot.
3. That accurate records be kept by the contestant of all labor and material costs.
4. That any staple produced in the contest having less than 1 inch be penalized 2.5 per cent of total weight for each one-thirty-second under 1 inch, before yield be considered for award, all staple less than fifteen-sixteenths inch in length be disqualified.
5. That estimates of yields and calculations for deciding final standing be made by the South Carolina Extension Service.

Summary of 5-year average, 1926–1930 records

Average cost of production per acre	$48.15
Average yield lint per acre—pounds	545
Average cost per pound of lint—cents	7.06
Average yield seed per acre—pounds	996
Average per cent of lint all varieties	35.6
Average length of lint all varieties—inch	1
Average profit per acre	$48.54

Premium Value of Cotton Received

The cost of production per acre in 1930 was $8.12 less than in 1929. This reduction is almost entirely accounted for by the difference in cost of picking. In 1929 it cost $15.94 to pick the average yield of 1,329 pounds of seed cotton at $1.20 per hundred; in 1930 it cost $7.19 to pick the average yield of 1,439 pounds of seed cotton at $0.50 per hundred, or $8.75 less per acre. Production costs other than picking evidently increased somewhat in 1930.

The profit per acre for 1930 is the lowest for the five years of the contest, this being due to the extremely low price obtained for seed and lint.

There has been a marked improvement in the facilities whereby farmers receive the premium value of their cotton. This improvement will continue, for the mills in a great measure are seeing that the farmers receive the premium when deserved. Farmers must first grow the better quality cotton, know its value, and then demand that the full market value for quality be paid them.

The result of close spacing of rows and plants in the row again showed the wisdom of this practice. As a whole the contestants and farmers in general had more plants per acre in 1930 than ever before. This was a large factor in the high average yield obtained throughout the State.

The average width of row used in cotton planting in South Carolina has been materially reduced since the beginning of the cotton contest in 1926. This is shown by the comparison, in per cent, of the number of plots having each row width for 1926, the year the contest began, with the row width on the same date for 1930.

Factors of Yield

In the first year of the contest many farmers thought that the only thing necessary for a large yield was a large amount of fertilizer per acre and that the contestant using the largest amount would make the highest yield. Actual results have shown that fertilizer is not the major factor of yield. Rainfall or climatic conditions, fertility of soil, stand or number of plants per acre, and insect infestation are factors of greater importance in yield than fertilizers. Contestants have realized this and the amount and kind of fertilizer used on contest plots averages about what would be profitable for general cotton production, this being, in pounds of plant food per acre, 20 to 48 pounds of phosphoric acid, 18 to 48 pounds of ammonia, and 12 to 24 pounds of potash.

In 1930 the use of the 1–1–1 sweetened poison mixture for boll-weevil control was more widely practiced than in any previous year. It proved most effective in reducing the early-season infestation and in a majority of cases it was the only control measure necessary, for hot, dry weather later in the season kept boll-weevil damage to a minimum.

In 1926, the first year of the contest, 54.6 per cent of lint produced on contest plots was seven-eighths inch or less. In 1930 only 8.55 per cent was seven-eighths inch or less. The production of $\frac{15}{16}$ to $1\frac{1}{16}$ inch staple by the contestants has

increased as follows: 1926, 40.8 per cent; 1927, 61.9 per cent; 1928, 78.3 per cent; 1929, 79.8 per cent; and 1930, 87.85 per cent.

During the five years of the contest more than 4,000 farmers have entered 5-acre plots, and 95 per cent of these plots have been planted with pedigreed or improved seed. Each contestant has become a source of good planting seed.

The publicity given the contest by the press of the State, field meetings, banks, cotton mills, and others has impressed upon farmers in increasing numbers the wisdom of using good planting seed.

The effect of this use of seed producing better staple is becoming more and more apparent in the cotton crop of the State.

According to reports of the United States Bureau of Agricultural Economics, a higher percentage of South Carolina's crop was of desirable lengths than of any other Southeastern State in 1928, 1929, and 1930, the percentage in that State being 33.3 in 1928, 34.3 in 1929, and 48.0 in 1930.

In 1930, in South Carolina, 96.6 per cent of the cotton crop was tenderable as compared with 58.5 per cent for Alabama, 83.1 per cent for Georgia, 85.7 per cent for Oklahoma, and 90.2 per cent for Mississippi.

Marked progress has been made during the past five years toward growing the type of staple consumed by South Carolina mills, but the goal has not yet been reached. With increasing foreign competition in growing the shorter staples and with the prospect for continued low prices, it is imperative that South Carolina farmers continue (1) to improve the quality of cotton by using improved seed, (2) to reduce the cost of production by the use of labor-saving machinery, and (3) to increase the yield per acre by applying those methods of cotton production that have proved to be successful.

ABOUT 50 MEMBERS of the college 4-H club at Winthrop College, S. C., are in the midst of their season's activities, according to Lila Evans, interstate secretary. The 4-H loan fund already has about $50, and the club plans are to offer a scholarship to club girls who wish to come to college next year, so that many plans for entertainments, lunches, and money-making schemes are under way. The club girls are preparing for leadership, and plan to assist their extension agents in every way possible. The club through Miss Evans asks for news of other college 4-H clubs and their plans for the coming year.

The Month's Best News Story

WHAT styles do extension agents follow in their newspaper work? Do they furnish the editor a group of straight news items or do they cover extension activities in a column? What extension matters make real news? In the belief that actual examples are of the most help to all of us in answering these and similar questions, we are planning to run in succeeding issues, the best news story that we receive on an extension activity or event in a county as published in a local newspaper and forwarded to us by a county extension agent during the preceding month. Mail your clippings addressed to Editor, EXTENSION SERVICE REVIEW, Extension Service, U. S. Department of Agriculture, Washington, D. C.

The following story was written by R. B. Kiely, county agricultural agent, Boulder County, Colo., and appeared in the Longmont Times. There are two reasons, in particular, for selecting this story to start the new series: (1) It qualifies as news from the standpoint of the editor of the newspaper publishing it, and (2) it tells in the first paragraph the essential facts of who, where, when, what was accomplished, how it was done, and why, giving details in succeeding paragraphs.—EDITOR.

IT PAYS to use sanitation measures in raising hogs successfully, according to the demonstration just completed on the ranch of Frank Carroll, located 5 miles north of Longmont. By keeping premises and sows clean before and after farrowing, Mr. Carroll was able to raise 100 per cent of the pigs farrowed this spring, less those which were crushed the first three days. Sixty-five pigs from 14 sows, growing them to market size and not a runt among them, was the result of using clean quarters and alfalfa pasture. These pigs averaged 210 pounds at six and one-half months, topping the Denver market on the days delivered. Not one pig was lost from disease. This is a record which few farmers can boast.

Using the same system this fall he saved 109 pigs from 14 sows, making an average of 7⅘ pigs to the litter. Comparing these results with those of 1929, with insanitary conditions existing, 21 pigs were sold out of 42 saved after farrowing, and of this number 5 were runts.

Sanitation Measures Used

Being disappointed with results for the first year, Mr. Carroll enlisted the help of Dr. E. N. Stout, Bureau of Animal Industry, United States Department of Agriculture. He was informed that the trouble was due to disease caused from insanitary hog lots, and that it would continue as long as the same premises were used. Doctor Stout advised using this new system which has proved a success with other growers.

Following instructions, Mr. Carroll decided to build new hog houses, erecting them to face the south, in order that the pigs could get plenty of sunshine, and scattered lime on the ground around the houses. Before placing sows in these new quarters they were washed well with warm water and soap. After farrowing the pigs were kept in these quarters for two or three weeks, depending on the weather. They were then turned out on alfalfa pasture, where they had clean ground to run on and plenty of fresh water. By using this method pigs were kept free from worms, as they were not allowed to run on ground infested with eggs. It is during this period of growth that pigs contract diseases due to worms, and as a result they become runts or die.

The average size of the spring litter was small, averaging 4½ pigs per sow, but this was due to conditions over which this system had no control. One sow lost her litter by farrowing prematurely, and two farrowed one each. It is not the number farrowed that counts so much as the number grown out and finished.

Demonstration Important to Hog Growers

This demonstration should be of interest to many farmers in this county, and especially those who have had trouble in raising hogs. They can be raised on the same ground for a few years, but eventually disease will cause serious losses. It is not necessary to build new hog houses should you care to use this system; use boiling lye and water and lime in your old houses and on the ground. Growers in this county desiring to use this system should communicate with the county extension agent, who will be glad to call and explain it in detail. With very little expense and work your income will be increased in raising hogs.

County Agents Apply Science to Local Problems

FOR 15 years or more a "mysterious disease" had affected some of the cattle in Door County, located in northeastern Wisconsin. The animals afflicted showed symptoms of extreme emaciation, stiffness in the front quarters, swollen joints, harshness of coats, dull eyes, and perverted appetites. The owners reported that the legs and ribs of such animals were easily broken and that the animals chewed and ate raw bones with eagerness.

Deficiency of Phosphorus

Experiment station workers, upon investigation, found the disorder to be due to a phosphorus deficiency in the feeds consumed by the animals, especially the forage crops, as pastures and hays. As the soil in that territory was underlaid with limestone, making it probable that the forage was of normal lime content, the use of phosphorus applied to the soil in a rotation was suggested as a means of enriching the legume hays and pastures with that element.

Another problem of farmers in this section of the State was the poor yield of clover and alfalfa even where the soils were of limestone origin and where liming was practiced.

Suspecting that in this case, as with the livestock malady, a lack of sufficient phosphorus might be the cause, B. F. Rusy, county agent of Door County, and G. F. Baumeister, county agent of Shawano County, and J. N. Kavanaugh, of Brown County, planned and cooperated in carrying out a county-wide soil-testing service in their respective counties to determine whether their suspicions were well founded.

Soil Analyzed

The campaign plan of testing was used. It was supervised by Robert Amundson, assistant county agent leader, and the actual testing carried on under the direction of C. J. Chapman, soils extension specialist of the Wisconsin college of agriculture. In each of the counties the township was used as the unit where soil analysis meetings were held in the town hall, or when more convenient, in cheese factories, schools, churches, and even in garages.

Cards were mailed out notifying the farmers of the date and place of testing, asking that soil samples be brought in from each of the poor fields. As testing was to go on in several townships simultaneously, the services of agents in near-by counties were solicited.

By the use of rapid available phosphorus and acidity tests, the results could be obtained while the farmer waited and many times such intense interest was displayed by farmers in watching the color reactions of the test that many of them remained for hours to assist with the work and to find out how their neighbors' samples reacted.

In Shawano County, Mr. Baumeister reported that the testing served 500 farms and that 1,500 soil samples were tested for both lime and available phosphorus content. In commenting upon the results of the work in his county, Mr. Baumeister writes: "A summary of the results of these tests shows that 44 per cent needed lime and 72 per cent needed phosphate, some of the samples being so low in available phosphate that only a very faint phosphate reaction was obtained. The county-wide test revealed the astonishing deficiency of phosphate and suggested that in the past probably too much emphasis had been placed upon the need of lime."

County agent testing soil at a soil-analysis meeting

As for Door County, County Agent Rusy reported: "At one meeting which I personally attended in the extreme north section of the county, 62 farms were tested and not a single reading for phosphate was obtained. Phosphate application in Door County can be almost a broadcast recommendation. Almost three times as much phosphate fertilizer was used in the county this year as had ever been used in any one year, due, no doubt, at least in part, to these meetings."

In Brown County, where five townships were covered in the test, County Agent Kavanaugh reported: "Soil from 318 farms was tested. Seventy-six per cent showed a phosphorus deficiency and 33 per cent showed a need of lime."

Through the more extensive use of phosphates in these counties following these tests surer catches of legumes and much better yields are being reported. The problem of poor yields of legumes in that section had been solved.

The testing plan used in these counties, sometimes referred to as "soil-testing clinics," proved so effective that the plan has subsequently been carried out in Adams, Fond du Lac, Green Lake, Lafayette, Manitowoc, Outagamie, and Wood Counties. Kenosha County is using the mail-order plan of testing, Kewaunee County has the soil samples brought to schoolhouses for testing, while in Oconto County the county agent is engaged in a farm-to-farm testing service for those who request it. A number of other county agents have definitely planned local testing work in the counties this winter.

Every-Day Buying

There was a demand in Livingston County, Ill., for information along the line of buying the every-day foods. To fill this need, Anna Searl, home demonstration agent, planned a 4-month project.

The subjects to be taken up were fancy groceries, lesson on staple groceries, fruits and vegetables, and canned foods.

The foods and nutrition specialist, Grace B. Armstrong, conducted two training schools for local leaders, and the home demonstration agent presented the other two lessons. Staple groceries included the study of the actual products, and samples of each were given the local leaders for illustrative material. In the study of canned goods they made very definite use of various grades of commercial packs by opening cans and discussing uniformity, color, size, and quality. At least 300 women report having made use of this information. Fancy groceries included a study of extracts. This created more discussion than any other phase, and many bottles of vanilla were brought out for identification as to whether it was genuine or imitation. The fact was emphasized that a woman might safely buy either, but that she should know when she was buying imitation.

The discussion of fresh fruits and vegetables was well illustrated by the use of the products on the market at that time. One of the local fruit stores lent fruits and vegetables as they were needed from day to day.

Philadelphia Dairymen Market Cooperatively

FIFTEEN years of satisfactory service to the dairymen of the Philadelphia area is the record of the Inter-State Milk Producers Association. The organization was started in 1916 because of the very unsatisfactory conditions confronting the producers who shipped fluid milk to Philadelphia. To relieve these conditions a number of the leading producers got together and after considerable planning and experimenting evolved the Inter-State Milk Producers Association with a membership of 3,494 dairymen from the counties around Philadelphia.

About the same time there was appointed by the governors of the States of Pennsylvania, Maryland, and Delaware a committee known as the "Governors' Milk Commission," with Dr. Clyde L. King as chairman, which was charged with a study of the fluid-milk situation in the Philadelphia milk shed.

Methods Studied

The findings of the committee were quite helpful to the association, since they involved studies of both production and distribution methods and recommended certain programs for the economical handling and distribution of fluid milk.

From its first year's membership with 3,494 dairymen enrolled the association grew to a membership of 28,512 in 1930. It has greatly increased the original productive area to a territory embracing practically the entire southeastern section of Pennsylvania, the southern half of New Jersey, Delaware, the Eastern Shore of Maryland, and a few counties in West Virginia.

Records show that the volume of fluid milk marketed by the association in 1930 aggregated 812,871,164 pounds. The 1930 production aggregated a money value to the producer of approximately $29,257,000. During this same year the weighted average selling price for all of its members' milk for the year 1930 was $3.527 per hundred pounds f. o. b. Philadelphia.

Basic Quantity Established

The basic and surplus selling plan adopted in 1919 has proved a successful policy of the association to stabilize the production of fluid milk, based on an estimated consumptive demand.

Under its provisions the producer established what was termed "a basic quantity" during the months of October, November, and December, the period which was then decided to be the average monthly consumption period, and the average production so established was the producer's "basic quantity," for which basic prices were to be paid. Milk shipped in excess of this basic quantity was to be considered as surplus milk, and was to be paid for at the average price of 92-score butter, New York City, for each particular month.

In its first year of operation approximately 35 per cent of the milk produced by members of the association fell into the surplus class. But, producers soon adjusted themselves to these conditions and in later years the percentage of surplus milk fell as low as 10 per cent.

This plan has continued in satisfactory operation to the present day, although modifications of the original provisions were adopted from time to time to meet the current existing conditions in the market.

The association has placed the marketing of fluid milk on a uniform basis of measurements. Check-testing methods, as to butterfat content of milk and the weights of milk delivered, have been established and have been regularly checked upon and are maintained by the field and test department of the association. By a systematic effort, this same department obtains new members for the association and performs many other field and laboratory duties.

Records of Shippers Kept

The association, through its own records and through those of the quality control department of the Dairy Council, maintains at its offices in Philadelphia a most complete individual record of every shipper of fluid milk in its production area. It maintains also, through its statistical department, not only the productive rate of milk by its own members but also general information as to marketing conditions and the trend of production and consumption in general.

Every effort is thus maintained to keep its leaders fully informed on current production conditions and marketing methods, not only in its own territory but in the whole country.

Back of the Inter-State Milk Producers' Association and its officers stands a democratic, self-governed, and loyal body of milk producers, confident and determined that dairy farming in that district shall be an occupation offering those who engage in it advantages and a standard of living equal to those enjoyed by any other group in society.

A review of the activities of the first decade the association operated shows that each year a new phase was developed. In 1917 it was building membership, in 1918 organizing the market, in 1919 balancing production, in 1920 telling members market facts, in 1921 spreading the story of milk, in 1922 improving the quality of products, in 1923 checking the testing and weighing, in 1924 safeguarding the quality, in 1925 developing market records, and in 1926 developing the selling plan still further.

Extension Agents Assist

Members of the agricultural and home-economics extension staff of the Pennsylvania State College have assisted the Inter-State Milk Producers' Association in educational activities.

Specialists have frequently addressed local and district meetings of the organization on general economic and management topics aiming to aid in appreciation of the production and marketing problems of the farmer.

County Programs

The regular county extension programs usually have a direct bearing upon the interests of the milk producers. The assistance given through these programs covers problems of breeding, feeding, management, milk-house construction, remodeling of dairy barns, essentials of clean milk production, sanitation, the value of milk as a food, and marketing. Dairy herd-improvement and bull-association work brings the extension service into contact with members of the interstate association. News stories on dairy and related information are contributed to the Inter-State Milk Producers' Review, the association house organ. Assistance has been given through the staging of annual milk shows in some counties.

FOR THE BENEFIT OF NEEDY FAMILIES, 7,357 No. 2 cans of Brunswick stew, soup mixture, beans, apples, and pears were canned during the month of September, under the supervision of Mrs. R. T. Stennett, home demonstration agent at Chickasaw County, Miss. The canning work was done at the fair grounds with groups of five to eight families, each group sponsoring one or more needy families. One thousand and ninety-two cans were allotted for relief work in Houston, 2,105 cans for Oklahoma, and 4,161 cans for individual families in the county.

Arkansas Bumper Peach Crop Now on Pantry Shelf

THE bumper peach crop in Arkansas presented something of a problem, but the home demonstration agents, nothing daunted, set out to save it for the food supply of the farm families. Now as winter comes on there are about 130,000 bushels of Arkansas peaches on the home pantry shelves as plain canned peaches, to say nothing of the thousands of bushels that have been dried and made into preserves, jams, butters, conserves, marmalades, pickles, pastes, fruit juice, and vinegar, states Ruby Mendenhall, Arkansas extension economist in food preservation.

Reports from the home demonstration agents in the 50 counties in the State employing agents show that the housewives in 102,629 Arkansas homes have canned 3,104,810 quarts of peaches in sirup and have made 670,637 pints of various other peach products. In addition to this, 79,883 bushels or 559,184 pounds of this delicious health-giving food have been dried and stored for winter.

Club Girls Assisted

During the peach season the home demonstration agents alone gave 295 demonstrations on ways of conserving this fruit. When the demands for help were so great that the home demonstration agents could not meet them a corps of well-trained 4-H club girls and club women assisted. These local leaders in food preservation gave demonstrations and served in the capacity of supervisors in many communities. At a meeting of the Union County home demonstration council early this spring a general plan of organization for a peach-canning campaign was made and as the season advanced this plan was carried out. Home demonstration club women in Union County gave a total of 100 demonstrations in canning peaches. In Greene County 20 demonstrations in canning peaches were given by club women who have served as local leaders this year.

In order to get volume canning done under trained supervision, 334 community canning centers were set up in the State. These were generally supervised by home demonstration agents or trained leaders from the home-demonstration clubs.

Canning Kitchen

The home demonstration agents and the Missouri Pacific Railroad in Cross and St. Francis Counties, working cooperatively, set up a canning kitchen adjoining the exhibit room at the Crowley Ridge peach festival, which attracted a great deal of attention. The two home demonstration agents and two 4-H club girls gave demonstrations in canning peaches throughout the day. Comfortable seats were provided and groups of from 50 to 75 attended each demonstration. More than a thousand men and women attended these demonstrations during the day.

Women from 10 counties in Arkansas, 3 in Tennessee, 1 county in Mississippi, and 1 county in Louisiana registered and requested instruction on peach canning.

Many outside agencies have aided greatly in some way in the peach-conservation program in the State, including the American Red Cross, railroad companies, chambers of commerce, mills, plantation owners, curb markets, county council members, social-welfare bureaus, newspaper men, and business men.

4-H Cooperation Enterprises

THE Rock School 4-H garden and home-making clubs which were organized in Ulster County, N. Y., about a year ago have proved that cooperation works. During the first year they earned and spent as clubs more than $300.

This money was spent for five enterprises. Each one of the 32 members received help in securing his or her uniform. The clubs paid the expenses of every member for one of the week-end camps held in Ulster County. A bus was hired and the clubs made a 155-mile trip to Schenectady and back, where they broadcast one of the weekly 4-H programs over radio station WGY. The county fair is held 30 miles from their school, so the clubs arranged transportation for all the members. Their most recent achievement is the organization of a drum corps with both boys and girls as members. The drums, fifes, and bugles have all been bought from club funds.

Money Raised

The money was raised by giving three entertainments, four suppers, selling chances on a green and white quilt made by the girls, and selling clam chowder. Besides this success in cooperation enterprises the clubs have done excellent project work. In addition to the required foods work in first-year home making, each girl made an average of two dresses, an apron, a uniform, and a pair of pajamas. The home-making club won first in the Ulster County 4-H singing contest with 47 clubs in competition and won second in the eastern New York contest. At the county fair they won 93 prizes totaling $113.75.

Boys Grew Vegetables

The boys all took a garden project which they completed creditably. Their vegetable and handwork exhibits won 34 prizes totaling $37.50 at the county fair and one second prize at the State fair. Together the clubs won a $5 prize for the best showing at the Ulster County rally day. They also are proud of a 97 per cent completion for the first year.

As one of their community activities 90 pheasants were liberated in the community by the seven members who cooperated with the conservation department.

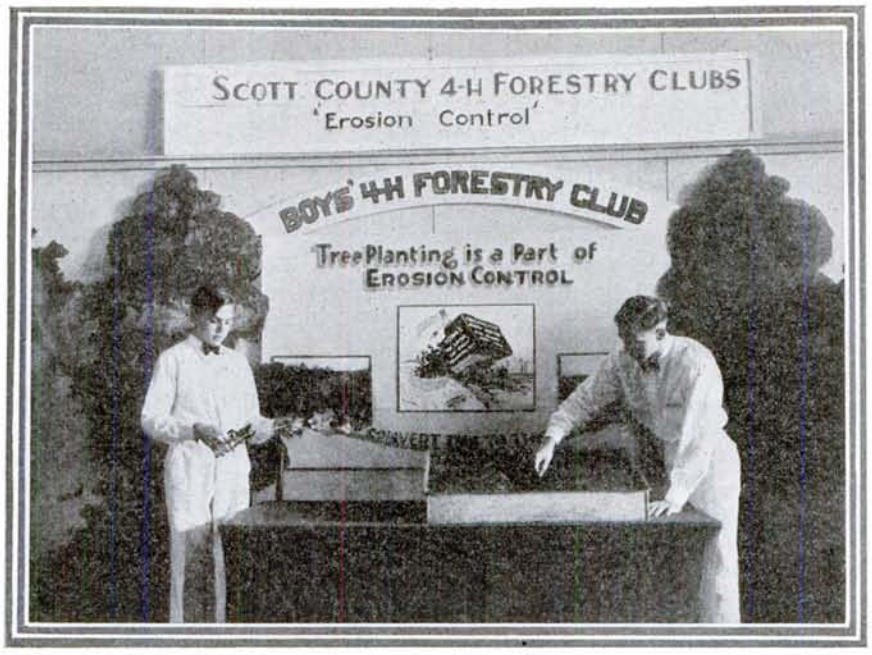
Home Makers Parade

Rural women of Knox County, Tenn., invaded Gay Street, the busiest street of Knoxville, October 8, with a parade of more than 30 clever and attractive floats depicting various phases of rural life and home making.

The parade was viewed by 20,000 people, who were much interested in the various floats portraying home demonstration work. This march through town, which was led by mounted police and a large fire-department truck with siren sounding, preceded a fall home demonstration club rally day program at the University of Tennessee Farm.

Inez Lovelace and Emma Ree Crooks, home demonstration agents, assisted the various community home demonstration clubs in planning the parade and rally.

COUNTY AGENT G. C. ELLISOR, of Houston, Tex., recently wrote to the department for a copy of the radio talk given by County Agent George E. Boltz, of New Philadelphia, Ohio, on Making the Rural Home Attractive. He says they are finding the radio programs of the land-grant colleges and universities very interesting. It seems the world is not so big nor the folks so different as they might be.



Iowa's 4-H Forestry Club Winners

KENNETH Rueffer and Grover Hahn, of Scott County, putting on their winning demonstration "Tree Planting is a Part of Erosion Control." They won first place over all other agricultural demonstrations at the Mississippi Valley Fair. Then they took the booth and demonstration to the State fair and competed against teams in poultry, livestock, dairy, and apiary work, winning first place in demonstration and third place for the booth. Another team, demonstrating windbreak tree planting, won first place for their booth and third place for the demonstration. A third team, demonstrating tree planting for erosion control, won second place in the State championship contest. "Perhaps the greatest demonstration coming from this work is that forestry does have a rather definite place in Iowa's agricultural program," says I. T. Bode, extension forester.

Metal Plate Marks Home of 4-H Club Girls

"4-H Club Member Lives Here" is what metal plates recently placed in front of the homes of 75 Hillsborough County, Fla., 4-H club girls announce.

Allie Lee Rush, home demonstration agent, is awarding the plates to girls whose productive club work comes up to the 4-H club standard. There are about 200 girl club members in the western part of the county, and by December Miss Rush hopes that every member will have qualified for a plate.

To get a plate a girl must be carrying on at least one productive project in addition to her sewing and cooking projects. If it is a garden, it must have the proper number and variety of vegetables, or, if she is raising poultry, the girl should show a good record and end the season with at least 20 good pullets.

FOR THE FIRST TIME every county in Illinois this year carried on girls' 4-H club work, according to Mary A. McKee, girls' club specialist. McLean County led the State with a total of 500 girls carrying on some definite project in home making.

National 4-H Club Radio Program

Saturday, January 2

America's Negro Spirituals and Songs

Old Black Joe_____ Foster.
Deep River_____ Burleigh.
Swing Low, Sweet Chariot.
Golden Slippers.
Nobody Knows the Trouble I've Seen.
Bandanna Sketches__ Cameron White.

Meeting an Emergency

When a large section of the negro district of Columbia, Tyrrell County, N. C., was burned on October 17, the colored people lost their clothing as well as their homes and furniture.

With cold weather coming, it was apparent that something had to be done at once, so working with the welfare department, Georgia Piland, home demonstration agent, secured donations of clothing and odds and ends of cloth which might be used by the destitute for covering this winter. Miss Piland then met with the negro women and organized a sewing class of 15 to make new garments and work over the material which had been donated from various sources.

Two sewing machines were carried to the local school building and Miss Piland gave enough of her time to direct the making of the garments.

In the meantime, the office of the home demonstration agent was thrown open to receive donations of food, clothing, or any supplies that might be used by the destitute sufferers. The welfare committees of the county's home demonstration clubs, the churches and Sunday schools, as well as the town of Columbia, rendered valuable service by the donations made.

The 4-H Clubs at the National Dairy Exposition

500 4-H club members from 31 States attended.
24 States represented in cattle-judging contest.
21 States represented in dairy-production demonstrations.
9 States represented in dairy-utilization demonstrations.
13 States represented in poultry demonstrations.
232 head of cattle exhibited by club members.
Junior, senior, and grand champion female Guernseys in open class shown by club boys.

Missouri Agent Uses Enlarged Pictures

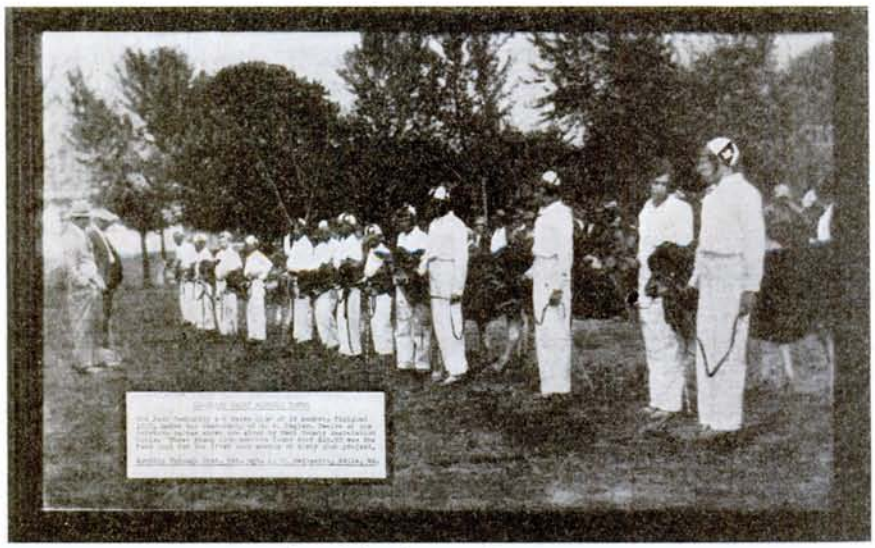
IN a 3-county district in the Missouri Ozarks enlarged pictures of local demonstrations have been found effective in spreading the influence of L. F. Wainscott, district extension agent. These enlargements, tinted, framed, and supplemented by an explanatory legend, are displayed in banks, farmers' exchanges, and community center meeting places throughout the three countries, telling their story of extension work in terms of local results.

Forty-eight of these enlargements, each 11 by 20 inches in size, are continually at work in Mr. Wainscott's district and have proved very effective in keeping the extension program before the people at all times, clearly interpreted through the activities of local groups and individuals. This is considered especially important by Mr. Wainscott in a district which measures 90 miles from corner to corner.

Obviously, in an area of such wide expanse, the extension agent finds it impossible to visit each community with sufficient frequency to keep alive the local activity and interest in extension work. It was this problem that Mr. Wainscott sought to solve when he initiated the use of framed enlargements of local extension pictures.

Early in 1928, this agent selected 24 of his best original negatives and sent them to the State extension office at Columbia to be enlarged by the university photographer. The pictures were taken in the district; they were local, new, and most of them showed individuals or groups whose names and activities would prove interesting to the public in their respective counties. The subject matter in this first set of enlargements represented 4-H club work, community organization, dairy herd improvement, soil improvement, better crops, fruit growing, canning, and clothing work.

A local carpenter was engaged to make and stain the frames, which were very simply constructed of white pine. The frames were thus obtained at a cost of 75 cents each and were glazed for an additional 25 cents each. The bromide enlargements, as obtained through the university photo service, cost 65 cents each. This latter figure is a low price, due to the fact that the entire lot of 24 could be handled in one order.



One of the framed enlargements

The enlargements were tinted, the legends typed and inserted under the glass, and the hangers were attached in Mr. Wainscott's office without additional cash cost to the local extension organization.

When fully ready for use the pictures were distributed throughout the district, the agent placing each one personally, obtaining consent for the use of wall space in bank, office, or store, and enlisting the interest and cooperation of owner or manager in explaining the picture and extension work to persons noticing it or inquiring about it.

In the regular course of his rounds over the district Mr. Wainscott thus placed all of his first order of enlargements and kept them rotating at intervals of two to six months. By frequently exchanging new pictures for old he kept the interest of his cooperators and the public from lagging.

So great was the interest in these enlargements that a second group of 24 subjects had to be added in 1930—about 18 months after the first pictures were distributed. An unexpected difficulty had interfered to some extent with the plan of rotating the first set; several cooperators liked certain pictures so well that they refused to give them up. They would say: "Yes; you can leave me another picture if you want to do so, but I want this picture to stay right where it hangs."

Kansas Radio Broadcasters Have News Letter

A radio news service for the 370 broadcasters providing the program for station KSAC has been inaugurated by L. L. Longsdorf, radio program director and extension editor in Kansas. These mimeographed sheets contain comments from the listeners on the various programs, station news, research studies showing the importance of radio as an educational force, and any other items of interest to the broadcasters. The service was begun in July as a monthly publication and has already proved its worth in maintaining the cooperation and enthusiasm of the large number of college people taking part in the station programs.

EXTENSION SERVICE REVIEW

Issued monthly by the EXTENSION SERVICE of the United States Department of Agriculture Washington, D. C.

C. W. Warburton, *Director of Extension Work*
C. B. Smith, *Chief, Office of Cooperative Extension Work*
J. W. Hiscox, *Chief, Office of Exhibits*
Raymond Evans, *Chief, Office of Motion Pictures*

Reuben Brigham, *Editor*

The Extension Service Review is published in the interests of workers and cooperators of the Department of Agriculture engaged in extension activities. It contains official statements and other information necessary to the performance of their duties and is issued free to them by law. Others may obtain copies of the Review from the Superintendent of Documents, Government Printing Office, Washington, D. C., by subscription at the rate of 50 cents a year, domestic, and 75 cents, foreign. Postage stamps will not be accepted in payment.

·ACROSS·THE·EDITOR'S·DESK·

Wise Use of the Land

SECRETARY HYDE has called for a national policy for the use of land. I have not seen in many months a statement of more significance to agriculture or to extension workers. Putting the matter briefly, this is the situation as the Secretary sees it. Ours has been a policy not of land use, but of land exploitation. It is vital that the Nation in the interest of a profitable agriculture and a balanced national life, promote now, before it is too late, the wise utilization of land. Each State should take the lead within its borders in formulating its own program for the reorganization of the use of its lands. In this effort the Federal Government, the States, and the counties, in conjunction with the owners and users of land will have to cooperate.

Here is a broadening of extension activity, indeed. How to grow this crop or that and how to market it cease to be the only important questions to be answered. In their place, there comes to us as the first problem, how shall this or that tract of land be used? Shall it be farmed at all? If so, ought it to be operated in a small or a large unit of acreage in order to provide a satisfactory living? Just how are we going to bridge the gap between what most of us as extension agents are now doing and what it appears we will have to do in the future? Some of us already have crossed over into the new field. How was it done? What does it take in the way of training and information to do it? Tell us.

She Doesn't Find the Time

A HOME demonstration agent writes, "My time is so filled up with just putting across projects that I never seem to get around to reporting to the papers on what we have accomplished." Truly, I sympathize. Yet, what shall we do about it? Just say we haven't the time and let it go at that? May there not be some reasons why we *should* find the time to report to the papers on what we are doing? For instance, isn't it true that we are public officials? Aren't we being paid our salaries from public funds? Doesn't our public, seeing it pays the bill, appear to take a good deal of interest in what we are supposed to do and how we are doing it? And, doesn't this same public read its local newspapers rather regularly? So, if we are meeting and talking about their problems with 400 or 500 people in the county from month to month, might it not be well to keep the other 1,500 to 2,000 who may be interested in the same problems informed about what we are saying and doing? Perhaps one project less and a few news stories more would net us just as much, after all, in results accomplished. Who knows? And, think of the lessened wear and tear. Might it not be worth trying?

Some Contests Teach

RAY TURNER, in a story he tells, gives point to the contest as a teaching method. Douglas Curran, a Wisconsin 4-H club boy, found himself and his calf at the losing end of a line of 24 club members and calves entered in the competition at the local community fair. "How do you happen to be here?" Douglas was asked. "I didn't know I had such a poor calf," he replied. He had gotten the lesson of the contest. He had a poor calf. It took something beside what he had had and given to make a good calf.

Of course, the story has a happy ending. Ray doesn't tell any other kind. The next year Douglas started with a better calf. He did a better job at showing and feeding it. At the community fair his calf placed fourth instead of last. To-day, some years later, he has a herd of 8 fine cows.

I take it that the moral is plain. Some contests teach. Others don't. Make them teach or leave them alone. Does anyone want to argue the point?

Specialists, Do You Agree?

C. L. CHAMBERS commented to me the other day on the story we ran in November on home gardens in the South. Said he, "That story doesn't tell half of what it should about McKay of Mississippi and how he makes the home garden work in the counties contribute to the appreciation and esteem in which the home demonstration agents doing this work are held. He makes his biggest contribution by holding instruction groups of agents in neighboring counties at which he gives them all the information and training in answering questions that he can. Then, if he goes into a county and attends a local meeting, he keeps in the background and lets the home demonstration agent do the demonstrating and answering of questions. She becomes recognized as the home garden authority in that county and not he. Probably, he will discuss the meeting with her after it is over and will suggest ways in which her handling of such meetings can be improved. The point is that in every county he visits he leaves the home demonstration agent more capable and anxious to serve efficiently as the local home home garden specialist.

"And, that to my mind," concluded Chambers, "is the way every extension specialist ought to function."

What Must I Do?

A COUNTY agent in a cotton State visited one of his farmers not long ago. The day before this farmer had sold five bales of cotton. In return he received a check for $149. He showed the agent this check. He showed him, also, a tax bill, a notice of a mortgage payment and interest due, and various other bills, obligations amounting in all to several hundreds of dollars and all unpaid. "What," said the farmer to the agent, "must I do?" "You are paid your salary," he continued, "to advise me what to do. These bills have to be paid. What must I do?"

The cotton States are not the only ones of which such a story might be told. The same question, "What must I do?" is being asked agents by farmers in 2,000 counties right now. Each agent in his own way is doing his best to help each farmer asking the question to answer it. I think we could not do better than to use space in the REVIEW for answers that agents are giving to this question. Let's have 200 to 300 words on a typical situation of this sort that a farmer in your county has put up to you and your answer to it.

R. B.

OBSERVE THE BICENTENNIAL

ANNIVERSARY OF THE BIRTH OF GEORGE WASHINGTON

The United States George Washington Bicentennial Commission will tell you how. Here are the titles of some of their pamphlets that provide information helpful in planning local celebrations:

George Washington activities for 4-H clubs.

Honor to George Washington—Sixteen booklets presenting authentic facts about different phases of Washington's life.

Program pamphlets—Twelve programs divided into 48 subtopics describing the personality, character, and activities of George Washington.

Handbook of George Washington appreciation course, containing the outstanding events and achievements of George Washington.

Tree-planting book, giving suggestions for a program and telling how to plant trees and shrubs.

Pageant or play catalogue.

Father of the Land we Love—Song written by George M. Cohan to commemorate the 200th anniversary of George Washington's birth.

These publications and other material are available for the use of extension workers

Write for complete list of pamphlets to the

UNITED STATES GEORGE WASHINGTON
BICENTENNIAL COMMISSION
WASHINGTON BUILDING
WASHINGTON, D. C.

Plan for a George Washington Year in 1932

U. S. GOVERNMENT PRINTING OFFICE: 1931