Extension Service Review

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WELL-MANAGED AND PROFITABLE FARM WOODLAND

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In This Issue

LAST MONTH Secretary Hyde discussed the need of a national land policy. This month the REVIEW carries the full text of the recommendations of the National Land Utilization Conference held in Chicago, November 19 to 21. As each line of activity proposed in these recommendations is developed, it is practically certain that extension agents will be looked to as the local authorities on land utilization policies. Unquestionably, if they are fully informed, they may have much to do with shaping local attitudes and opinion regarding the application of the recommendations of the conference within their counties.

NEW HAMPSHIRE seeks to establish a reputation for clean and attractive roadside markets, tea rooms, and overnight cabins. At a series of conferences the roadside operators discussed ways of improving their establishments and business methods. Director J. C. Kendall outlines the progress that operators in his State are making and how the extension service is assisting.

THERE'S BEEN a lot of loose talk over the country to the effect that the Federal Farm Board has squandered millions in loans to cooperative marketing associations. Extension agents will welcome the statement of Chairman Stone. Up to November 1, 1931, the board had financed cooperative marketing associations in the amount of 326 million dollars. These funds were used by the associations in merchandizing farm products, financing facilities, and paying cash advances to their members. Of this 326 millions, over 174 millions had been repaid to the board by the associations on November 1. The amount already repaid to the board is considerably more than half the total amount borrowed. Would any fair-minded person call this squandering the Government's money?

MISSOURI SHOWS the way in the use of cobblestones in constructing small buildings, such as milk houses, economically. According to R. W. Oberlin, extension specialist in agricultural engineering, the stones used in this type of construction require no special preparation.

On the Calendar

THE SOUTHERN AGRICULTURAL Workers will meet in Birmingham, Ala., the week of February 1, 1932.

Conferences for the forthcoming annual national agricultural outlook are be held in Washington, D. C., January 25–29, preceded by preliminary committee meetings during the week of January 18.

Annual conferences of State extension workers will be in session at Tucson, Ariz., January 11–15; Berkeley, Calif., January 4–9; Fort Collins, Colo., January 8–14; Bozeman, Mont., January 18–23; Corvallis, Oreg., January 4–9; Logan, Utah, January 14–19; Pullman, Wash., January 18–22; and Laramie, Wyo., January 11–25.

YOU'LL FEEL your depression wrinkles smooth out as you read Caroline Alston's story of how the farm women of Charleston County, S. C., are taking care of themselves and their families. Plenty of milk, eggs, and vegetables for their tables, a cash income in 1930 from poultry products alone of $47,000, nice looking places to live in, and, even a recreation camp of their own—that's the story. Of course, there has been a program. It's been a program of production, nutrition, marketing, and beautification—and Miss Alston has put in 14 years of hard work to make this program good.

EDUCATIONAL radio broadcasting becomes a unified cooperative project of the department and the States on January 18. Eventually, under this plan the States and the department in combination will service around 250 stations with localized agricultural and home-economics information.

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. 3 WASHINGTON, D. C., JANUARY, 1932 NO. 1

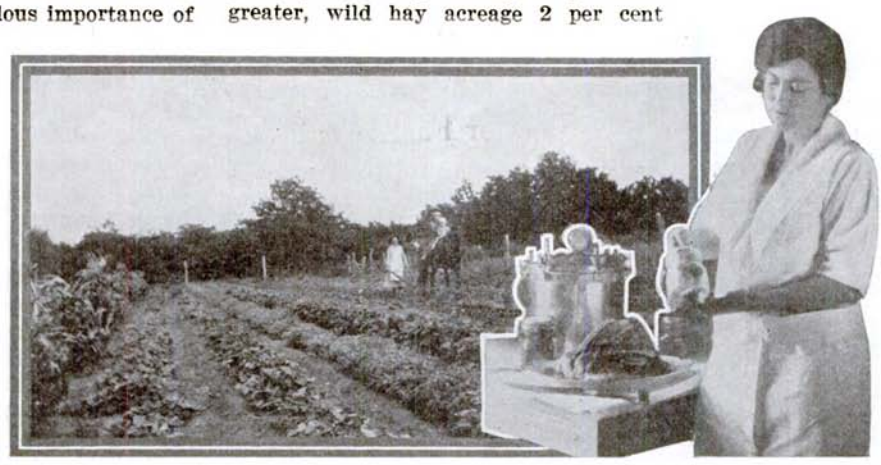
Farm People Are Working Way Out of Difficulties

D. P. TRENT

Director, Oklahoma Extension Service

NOTHING else has ever quite so forcibly impressed upon the minds of farm people the soundness of what is commonly known as a safe farming program as the conditions brought on by the drought in 1930. Throughout the country, and more particularly in the area affected by the drought, everything possible was done to emphasize the tremendous importance of providing ample food supplies for the family needs for the year, providing a liberal supply of feed for the livestock on the farm, and providing more than one possible source of net cash income. It is now possible to see what some of the results have been.

In Oklahoma an intensive and aggressive effort was made by extension workers, bankers, chambers of commerce, the Red Cross, teachers, and various other agencies to arouse farm people to the necessity of largely working out their problems with the resources available on their own farms and in their own homes. The program adopted and the plans followed were much the same as those in Arkansas, Kentucky, and various other States affected by the drought. The results in Oklahoma are probably typical of the results in the various other States and may be of general interest.



The whole family has taken a delight in the growing of gardens and in putting away liberal supplies of canned fruit and vegetables. Farm women in Oklahoma canned 157,963 quarts of meat at demonstrations

Farmers Provide Foods and Feeds

The crop acreage estimates of the Federal-State Statistical Bureau indicate that the total crop acreage of Oklahoma in 1931 was 1½ per cent greater than in 1930, the cotton acreage 17 per cent less than in 1930, the corn acreage the same as in 1930, oat acreage 41 per cent greater, barley acreage 50 per cent greater, rye acreage 50 per cent greater, wheat acreage 6 per cent greater (largely due to seeding for fall pasture), grain sorghum acreage 10 per cent greater, tame hay acreage 4 per cent greater, wild hay acreage 2 per cent greater, alfalfa acreage 8 per cent greater, Irish potato acreage 39 per cent greater (commercial potato acreage only 2 per cent greater), sweetpotato acreage 20 per cent greater, and while definite figures are not available the garden and home truck crop acreage was much greater than in 1930. These figures indicate definitely that farm people in Oklahoma have taken a firm grip upon the situation and are seriously and earnestly going about the job of providing for the food and feed needs on the farm.

There are also some general observations bearing upon this situation. As farm people have gone about the task of working themselves out of their difficulties, there has been a very evident improvement in morale and general state of mind.

There is evidence that they are seriously and earnestly studying the job as they have not done for many years. The attendance at farm meetings held by extension workers has been much greater than heretofore. The increased demands for information are indicated in the fact that in the first six months of 1931 the extension division of Oklahoma has distributed 343,000 bulletins and circulars dealing with various phases of farming and home making, compared with 187,000 distributed in the first six months of 1930. A very large percentage of the demands for informational material have been along the lines of gardening, canning, poultry management, home dairying, pastures, and legume crops.

Garden Contest Conducted

In the annual State garden contest which is conducted by the extension division through the county home demonstration agents, 5,284 farm women have enrolled this year, representing 3½ per cent of the total number of farms in the State. People who have traveled over the State have been amazed at the almost universal presence on the farms of large gardens of a variety of vegetables, well planned and well cared for.

There has been far less moving and shifting by farmers during the last year than at any time since the State was settled, indicating that farm people have

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determined to settle down and work out their salvation where they are. More land was plowed and carefully prepared during the winter months than ever before; the fields have been more carefully cultivated, and few fields are seen grown up in weeds and grass. Farmers are also taking much better care of the crops which have already been harvested and nowhere are oats, hay, and other crops seen going to waste in the fields.

Boys and Girls Assist

The farm women and the boys and girls are playing an important part in this process of rehabilitation. A representative of a large financial institution who recently drove over 14,000 miles in the State studying the agriculture stated that he was very forcibly impressed by the manner in which farm boys and girls have come home from college or from high school, put on work clothes, and gone into the fields to help with the farm work, and the extent to which farm women are taking a hand and working out the problem.

Food Products Canned

As a result of the special meat-canning campaign put on by county home demonstration agents during the early winter, more than 159,194 quarts of meat were canned by farm women and girls under the direct supervision of these agents and used for meeting the food needs of the families. The response to the special food-preservation campaign of the present season is far beyond anything ever before experienced and farm families filled their cellars with food in a way that will insure against any possible repetition of the hardships of last winter. Everywhere there is convincing evidence that farm people are working their way out of the situation.

We don't mean to say that all the agricultural problems have been solved, and we realize that some of these things are not in the cards of strict economics, but when farm people provide ample food for family needs and feed for the livestock they have accomplished the first essential toward restoring agricultural prosperity. A farmer who has fed his livestock liberally of home-grown feed out of bulging granaries and hay mows and has sat down with his family and partaken of a good home meal from his well-filled cellar and smokehouse can sit by the fire and smoke his pipe with some degree of peace and satisfaction even though the price of cotton and wheat may be ridiculously low and he may not have much cash in his pocket.

The agricultural problem will be solved, in time, and the biggest factor in the solution will be the thrift, frugality, determination, and good management of the farmers and their families on their own individual farms. There are very definite evidences that farm people are working their way out of the mire and doing it, in a sense, by their own boot straps.

Radio Correlation Gets Under Way

CORRELATION of Federal and State information broadcasting, with the United States Department of Agriculture and the State extension services sharing responsibility for building programs, will become a reality this month.

The new correlated agricultural syndicate service, which is a mimeographed program service to individual stations, will be formally inaugurated Monday, January 18, although it is already in operation in four States. At that time 19 State extension services—and perhaps from 1 to 5 more—will join with the Federal department in issuing news and information of particular interest to farmers in their States. With all reports not yet in, it is estimated that from 85 to 100 radio stations will be included in the starting set-up.

During the summer and early fall Alan Dailey, radio extension specialist of the Department of Agriculture, visited 33 States, to discuss the proposed plan for correlation and to assist in effecting broadcasting arrangements suited to conditions in each State. The remaining 15 States will be similarly contacted as soon as possible, so that the correlated system may be made operative on a country-wide scale during the coming year.

A Daily Program

The radio service of the Department of Agriculture, under the plan for correlation of agricultural syndicate services, will prepare seven minutes of material daily (six days a week) for radio presentation. This material will be sent each week to cooperating State extension services for adapting and supplementing. The complete program will be either 10 or 15 minutes in length, at the discretion of the States. The general plan was purposely so drawn as to permit of modifications to meet State conditions.

In most States the programs will also be sent by the State office through the county extension offices in cities where cooperating radio stations are located. Thus, the county agent becomes the direct contact representative with the station, and is given opportunity to further localize and supplement the information. It is also the general plan that members of the county extension staff present the programs in person as often as their duties will permit. In some cases, the county extension office takes one day a week for a strictly local program, with the State-Federal program scheduled for the remaining days at the same hour.

State Participation

The general proposal for correlation, submitted by C. W. Warburton, director of extension, and M. S. Eisenhower, director of information, also contemplates State participation in the network programs of the Department of Agriculture and in the home-economics syndicate service.

Two States have already joined with the Department of Agriculture in correlating the home-economics service and at least one other will begin this month. Five other States expect to start this year, but the starting dates are not yet definite. The great majority of States visited approved the proposal, but desired to postpone participation until a later date.

A Further Proposal

The proposal for State participation in the national farm and home hour calls for setting aside a daily 5-minute period for the use of State extension services. At this time the proposal is awaiting completion of the canvass of States to determine their desires. If a sufficient number are prepared to take advantage of this radio time, it is expected that the set-up will be made effective by next fall.

Western States are not concerned in this proposal as they are already furnishing material for the department's western farm and home hour network program.

The aim of the proposed plan, as submitted by Directors Warburton and Eisenhower, is to put on the air every day information from both Federal and State sources, designed to widen the influence of each State extension service among farmers and home makers. Eventually, it is expected that such a program will be broadcast daily from approximately 250 cooperating stations.

No Want on the Farms of the Carolina Coast

The history of home demonstration work in a county, just the everyday working away at a program for better living, may sometimes seem discouraging and dull, but the results through years of earnest and consistent effort are often amazing. Such is this story of fine homes and good living in a South Carolina county. We plan to continue this series, giving the stories of home demonstration agents in other parts of the country who have stayed in the same county for a number of years and whose work speaks for itself in the lives and homes of the people.—EDITOR.

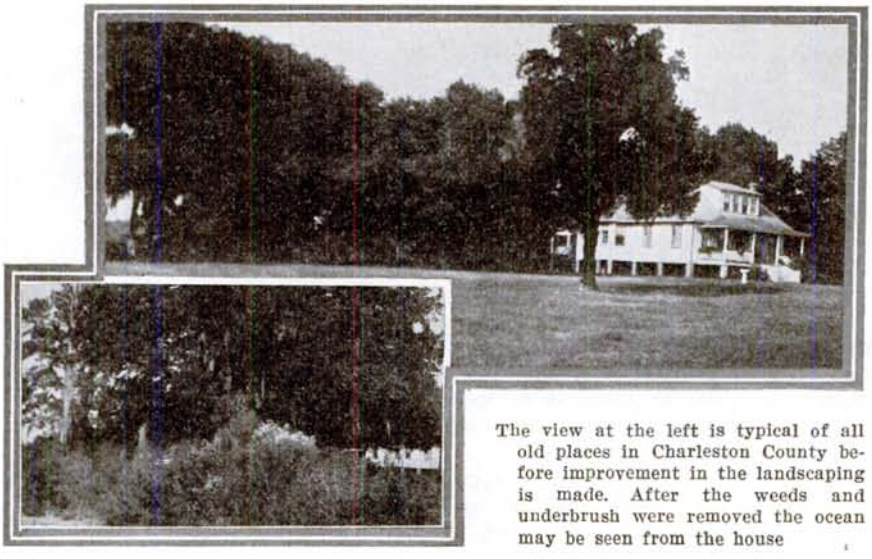
THE farm homes of the coastal marshes and sea islands off South Carolina have come into their own. A glance over the 14 years of work under the leadership of Caroline Alston, home demonstration agent, shows what can be done by working away at a well-planned program.

Charleston County is primarily a truck-farming section and last summer brought the greatest truck loss in the history of the county, but, as one woman put it, "Well, we haven't got any money, but we do have a nice-looking place." Money may be scarce, but there is no want among the farm folks of the marshlands. Practically every farm has its dairy cow, its year-round garden, and poultry flock, which means the top of the living for the family. Old stumps and underbrush have been cleared away, showing exquisite views of marshes and rivers, thousands of honeysuckle, woodbine, jasmine, Cherokee roses, wisteria, azaleas, camellias, smoketree, redbud, and other vines and shrubs distinctive to this coastal region have been planted and are being cared for on these farms.

Poultry Products Sold

Besides keeping a "nice-looking place" and insuring food for the family, these Charleston women sold more than $47,000 worth of poultry products last year, which did much to lessen the effects of their husbands' staggering loss in truck crops. Looking ahead, these women have established their own mountain camp, where each farm family can enjoy the benefits of a vacation at a higher altitude. This is a project very dear to the heart of Miss Alston, who plans to make it a training camp where the farm men and women can actually try out the satisfaction and comfort of beautiful surroundings and well-ordered living and maybe take some of these ideas and habits back to their farm homes in the lowlands.

Fourteen years ago when Miss Alston, a native of the county, was appointed home demonstration agent things were very different. As in every trucking section, all energies were concentrated on the production of commercial crops, the small activities of the home, poultry, dairying, and gardening were sidetracked or neglected altogether. These conditions prevailed over an extended period of years and resulted not only in great deterioration of the farms and reduced scale of living but in the lowered vitality and morals of the people. They acquired what has been called "the dreadful habit of poverty," a condition in which they eventually come to believe that their standards of living were normal. The vast majority were even satisfied with it.



The view at the left is typical of all old places in Charleston County before improvement in the landscaping is made. After the weeds and underbrush were removed the ocean may be seen from the house

Production for the primary needs of life seemed the most fundamental requirement, and this was tackled first. The family cow was one of the first projects undertaken and 10 years ago when the first report was made on this work, 132 milk cows were placed on farms. Then the cow most commonly encountered on Charleston County farms was the "cup cow," so called because she was said to give only a cup of milk at a milking, and many farms had no cow at all. Now practically every farm has its family cow.

Farm Program Adopted

As the women and girls became interested and adopted many of the suggestions in their own farm homes a more comprehensive program seemed called for. To fill this need, the 5-year model farm program including all the items in the basic program was adopted by the women of the county in 1925. That year 28 women pledged themselves to maintain a model farm with these requirements:

An all-year-round garden.

As many cows as were necessary to provide the family with an adequate amount of milk and milk products.

A flock of not less than 100 standard-bred birds.

A quart of milk served each child every day and not less than 1 pint served each adult.

Two fresh vegetables every day.

A surplus of poultry and dairy products for marketing.

Beautification of the home grounds.

In 1930, the last year of the 5-year program, 198 women were enrolled and 181 lived up to the entire pledge. This is about two-thirds of the women in the county. During these years, the size of the farm poultry flock increased from an average farm flock of 19 hens to an average farm flock of 131 hens. Last year the profit on poultry products alone was $47,000. These poultry flocks are almost no expense to the women, as the climate is uniform and they need little

(Continued on page 4)

Low-Cost Cobblestone Buildings

This milk house was built of cobblestones at a cost of $75

SATISFACTORY small farm buildings, constructed at low cost through the use of cobblestones, have been introduced on Missouri farms by the agricultural engineering specialists of the Missouri Agricultural Extension Service. In addition to the low cost, this type of construction offers ease of building, no necessity for paint on outside walls, fire resistance, and a fairly permanent structure.

In Jefferson County recently three milk houses were built of cobblestones to demonstrate the practical worth of such construction. The houses varied in size and cost of materials but each proved to be economical when completed. One of these, 8 by 10, was built at an estimated cost of $65, not including labor. One 10 by 14 cost $150, including a labor charge of $48. A third one, 12 by 20 and containing three rooms, cost $86 in cash.

The milk house illustrated is a typical example of Missouri cobblestone construction. This 12 by 20 house was built for a cash cost of $75 and contains two rooms—one to house a pump and gas engine, the other to use as a milk room for cooling and handling bulk milk. The floor is of concrete, and there is a cooling tank.

The stones used in this type of construction require no special preparation, says R. W. Oberlin, extension specialist in agricultural engineering who is in charge of this project. Most builders use the stones as they find them. The wide variety of colors and texture possible in cobblestone work lends it beauty and interest. Sorting stones for coloring and for sizes affords unlimited possibilities for varying the final effects.

Tools required are those generally found on the farm. No man need hesitate to undertake the work on account of inexperience. The laying of the rock is not a highly skilled operation and can be done by anyone with very little experience. Best results are obtained when the common building practices are followed.

Although the cobblestone type of construction was started originally as a method of providing satisfactory milk houses at small cost, Missouri farmers with a supply of rock have found that cobblestones merit consideration as a building material for many farm structures. Some of the more ambitious ones have built cobblestone poultry houses which cost less than wood construction and will last much longer. Others have built machine sheds, workshops, and garages, and some are planning dwelling houses.

No Want on the Farms of the Carolina Coast

(Continued from page 3)

protection. Green food is available all year, oyster shell abounds on every seacoast farm and every farm has a supply of peas, beans, and skim milk. The raising of ducks is also proving profitable. The ducklings, when 10 weeks old, can be turned loose to fend for themselves on the salt marshes where "fiddlers" abound. The ducks thrive on them and require little else except a small amount of grain. Twenty-one women are now raising ducks, and 26 have flocks of from 30 to 80 turkeys.

Camp Organized

Everyone was immensely pleased with the results of the 5-year program and felt eager to undertake something else. Miss Alston had it in the back of her head for a long time that a well-managed camp in a totally different climate and situation would do wonders for the folk in her county. The habits formed in two weeks of living at a beautiful and well-ordered camp might be taken back home to the low country to enrich the homes there. It seemed like a very ambitious scheme for the farm families were for the most part poor in money, but the idea stuck. The county was divided into nine sections and a meeting held in each section to talk over the proposition. Eight of the sections decided they were all for the idea and agreed to raise $100 apiece as a starter. The ninth area, Edisto Island, had already begun a club house on their own island beach and so did not join. In three weeks each of the other eight areas presented their $100 to the home demonstration agent. With this in hand, Miss Alston secured the gift from the Harmon Foundation of a beautiful site of 18 acres in the mountains. The Charleston County Home Demonstration Association was formed of representatives of each section to accept title to the camp and act as advisory board to the agent in the management of the camp. An artificial lake was provided by another friend.

Due to the shortage of money among farm families this year it seemed almost impossible to run the camp last summer, although an additional $500 was obtained by conducting tours through some of the old historic rice plantations. After many meetings and much talk it was decided not to build this year but to provide tents for the few who could make use of the camp and to operate the camp for boys and girls for 10 days. Forty children made the 300-mile trip to the mountain camp where they were provided a good well-balanced diet and beautiful, healthful surroundings. The effects of this practical lesson in nutrition and beauty can already be seen among the children and their parents, observed Miss Alston.

Looking back over the years much has been accomplished, but Miss Alston with her group of earnest home-demonstration women confidently looks forward to an even more fruitful future.

The Farm Board's Financial Operations

JAMES C. STONE

Chairman, Federal Farm Board

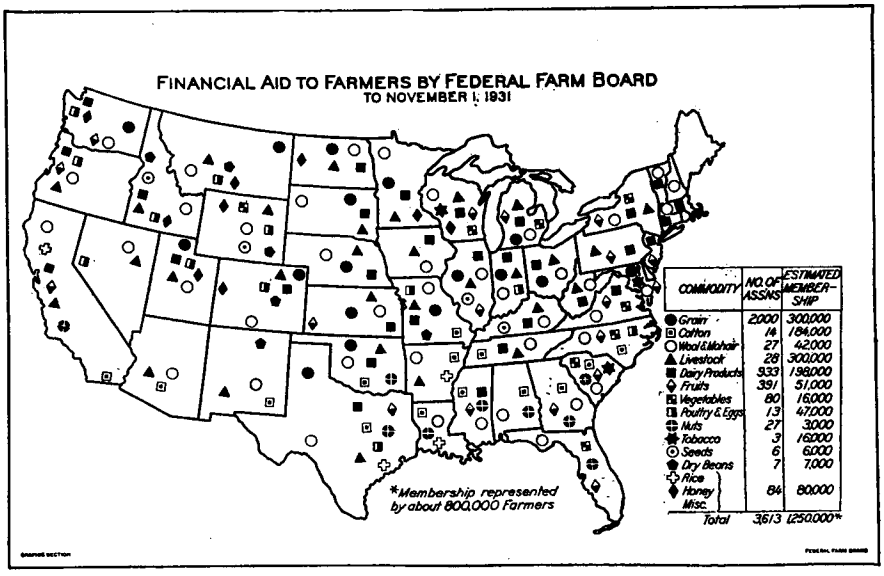
EXTENSION workers throughout the United States want to know the facts concerning what use the Federal Farm Board has made of the $500,000,000 revolving fund, the present status of the fund, and how the board plans to use this money in the future.

At the time the agricultural marketing act was passed in June, 1929, $500,000,000 was authorized by Congress to be used as a revolving fund and loaned to farmers' cooperative associations. On July 1, 1931, the last $100,000,000 of the $500,000,000 had been deposited in the Treasury of the United States to the credit of the revolving fund.

Loans Go To 45 States

Up to November 1, 1931, farmers in every State excepting three—Maine, Rhode Island, and Delaware—had been financially aided by the revolving fund through loans made to their cooperatives. This financial assistance reached farmers through loans from the revolving fund, which were made either directly or through central cooperative sales agencies with which they are affiliated, to 3,613 cooperative associations. These associations had an estimated membership of 1,250,000 which is represented by about 800,000 farmers, some being members of two or more organizations. This money was used to benefit producers of the following farm commodities: Grain, cotton, wool and mohair, livestock, dairy products, fruits and vegetables, poultry and eggs, nuts, tobacco, seeds, dry beans, rice, honey, and other commodities. (See accompanying map.)

Loans from the revolving fund are made to cooperatives to aid them in merchandising farm products and to help them in financing their facilities. In addition, loans are made to enable cooperatives to advance to their members, a greater share of the market price of a commodity delivered to the association than is practicable under other credit facilities.



Cooperative Loans Total $326,787,108.41

Up to the effective date of November 1, 1931, the Farm Board had loaned to cooperatives a total of $326,787,108.41. Of this amount, $174,824,441.11 had been repaid, leaving a balance outstanding of $151,962,667.30.

In emergencies loans were also made to stabilization corporations to purchase seasonal surpluses of agricultural commodities to prevent drastic declines in prices. On November 1, 1931, the Farm Board had loaned for stabilization purchases of cotton and wheat, $510,706,201.40, of which $229,357,305.64 had been repaid, leaving balances of $281,348,895.76 outstanding. Total loans to the Cotton Stabilization Corporation were $152,668,855.05, of which $58,806,156.82 had been repaid, leaving $93,862,698.23 outstanding. Loans to the Grain Stabilization Corporation were $358,037,346.35, of which $170,551,148.82 had been repaid, leaving $187,486,197.53 outstanding.

Status of Revolving Fund

The statement given below shows the condition of the revolving fund on November 1, 1931, including loans to cooperatives and to stabilization corporations:

Cash:	
Original deposits with Treasurer, United States	$500,000,000.00
Add: Interest collections	6,759,193.93
	$506,759,193.93
Total advances made	837,493,309.81
Less: Repayments of advances	404,181,746.75
Total advances now outstanding	433,311,563.06
Balance on deposit with Treasurer, United States	73,447,630.87
Less: Unadvanced portion of commitments made	23,934,807.54
Funds available for new commitments	49,512,823.33

Loans made by Farm Board to cooperatives up to November 1, 1931

Commodity	Net commitments	Total advances	Total repayments	Balances outstanding
Beans	$763,049.45	$763,049.45	$120,753.90	$642,295.55
Coffee	50,000.00	50,000.00		50,000.00
Cotton	202,211,117.82	195,225,669.72	111,165,304.18	84,060,365.54
Dairy products	18,283,912.89	14,008,019.71	5,272,410.64	8,735,609.07
Citrus fruits	3,300,000.00	3,154,862.00	785,812.66	2,369,049.34
Grapes and raisins	25,906,622.51	23,177,801.36	9,982,344.08	13,195,457.28
Other deciduous fruits	2,486,207.26	1,971,897.98	394,323.52	1,577,574.46
Miscellaneous fruits and vegetables	471,272.04	373,941.72	44,653.78	329,287.94
Grain	58,275,082.59	54,893,932.59	37,203,045.96	17,690,886.63
Honey	45,839.00	45,839.00	6,158.58	39,680.42
Livestock	9,039,704.26	5,454,704.26	1,790,515.72	3,664,188.54
Nuts	1,460,869.48	507,532.20	104,143.64	403,388.56
Potatoes	559,800.00	545,800.00	370,400.00	175,400.00
Poultry and eggs	728,000.00	636,400.00	178,447.52	457,952.48
Rice	1,473,538.61	1,287,707.15	552,206.82	735,500.33
Seeds	853,141.62	727,801.15	90,717.64	637,083.51
Tobacco	3,607,072.51	3,199,572.78	876,510.68	2,323,062.10
Wool and mohair	21,206,685.91	20,762,577.34	5,886,691.79	14,875,885.55
Total	350,721,915.95	326,787,108.41	174,824,441.11	151,962,667.30

(*Continued on page 6*)

A Missouri County Develops Its Dairy Industry

DURING the last six years Ralls County, Mo., under the leadership of County Agent William A. Rhea, jr., has been working on a definite plan to improve the dairy industry which had proved its worth. The results speak for themselves. The soybean acreage has increased from 7,954 acres to 10,229 acres, and the number of farmers growing soybeans has increased from 397 to 515; sweetclover pasture has increased from 137 to 1,484 acres, red clover from 1,250 to 3,200 acres; and the number of farmers growing alfalfa has increased from 170 to 258. The progress recorded in these 6 years also includes the use of balanced dairy rations on 69 farms as compared to 12 formerly, the adoption of silage feeding by 27 additional dairymen, feeding grain on pasture by 64, and feeding minerals by 26.

In dairy breeding Ralls County has made similar advancement, the number of registered dairy bulls in use on farms of the county having increased from 19 to 103, production-bred bulls from 4 to 31, and correctly built safety bull pens from 4 to 29.

The average annual production of butterfat per cow has increased from 251 to 276 pounds and that of milk from 4,865 to 5,363 pounds. There are now 19 dairy herd-improvement association members as compared to 8 in 1925. Members testing all animals in their herds for Bang's disease have increased in number from 2 to 15.

In the handling and marketing of their dairy products by approved methods, Ralls County farmers are also making progress, as shown by the fact that 53 additional dairymen are sterilizing their utensils, 21 have built modern milk houses, and 45 are cooling their milk and cream in the most efficient way.

Six distinct projects have been organized and actively promoted by the extension forces and volunteer leaders in Ralls County to further the dairy-improvement program:

1. Increase of legume acreage for pasture and hay, based on correction of soil acidity, the use of phosphate fertilizer, and good seed.
2. Maintenance of a dairy herd-improvement association within the county.
3. Organization of bull associations.
4. Development of the certified sire project.
5. County surveys to determine the status of various farm enterprises and their comparative earning capacity in different areas within the county.
6. Utilization of community spirit and local leadership to promote dairy improvement by communities.

The first dairy herd-improvement association in Ralls County was organized during the first year of the 6-year period covered by the report, namely 1925, and has been in continuous operation since that time.

The first cooperative bull association was organized in 1923, and has been in operation 8 years with 254 cows bred annually to 8 production-bred bulls. The owners have profited to the extent that this high type bull service has cost the members only $1 per year per cow.

Since 1925, County Agent Rhea has placed in the county 34 production-bred bulls from long-time record dams, whose butterfat records range from 450 to 850 pounds of fat. In addition to this number of bulls, the agent has record of 103 bulls being used in the county that are purebred registered sires of the different breeds of dairy cattle.

The first economic survey of Ralls County was made last year. It served the double purpose of affording a definite measurement of the results obtained to date in the dairy-improvement program, and of testing the adaptability of various sections of the county to the dairy enterprise by reason of soils, topography, and accessibility to the highways.

Throughout all of Mr. Rhea's work in Ralls County he has made constant and increasing use of the local leadership developed in a number of very successful community organizations. In addition to the officers and committee chairmen of these groups, Mr. Rhea used the soil-improvement school-district delegates, dairy herd-improvement association members, survey leaders, and all other possible local leaders in a coherent county-wide movement for improvement in all phases of farming business, including dairying.

In recognition of this excellent plan for building up a dairy section, together with the skill and hard work put into its execution, County Agent Rhea was awarded the sweepstakes award in the 1931 National Dairy Improvement Contest at the National Dairy Show in St. Louis.

The Farm Board's Financial Operations

(Continued from page 5)

The table on page 5 shows, by commodities, the net commitments, total advances, total repayments, and balances outstanding on loans made by the farm board to cooperatives handling various commodities, up to the effective date of November 1, 1931.

Balance Changes From Day to Day

Since this is a revolving fund, money is constantly being paid out and received and the balance changes from day to day.

On October 31, 1931, the Grain Stabilization Corporation held unsold cash wheat amounting to 160,681,672 bushels. In addition the corporation owned 27,348,000 bushels of long futures contracts, and coffee, received for wheat exchanged with Brazil, representing the equivalent of 2,718,936 bushels of wheat. The wheat is being handled in accordance with the corporation's announcement on June 30, 1931.

The Cotton Stabilization Corporation had on hand on October 31, 1931, a total of 1,310,789 bales. Corporation officials have pledged themselves to maintain this baleage up to July 1, 1932.

In administering the agricultural marketing act in the future and lending money from the revolving fund to cooperatives the board will continue to keep in mind its fundamental idea that true equality of agriculture with industry can be attained only by the development of cooperative organizations on a national scale, owned and controlled by the grower members. Such a nation-wide system of marketing the major farm products would give to farmers something of the same organized power in their markets and organized representation before legislatures and other bodies as are already possessed by most lines of endeavor.

Landscaping for Farm Homes

AMY KELLY

State Home Demonstration Leader, Kansas State Agricultural College

LANDSCAPING, yard improvement, home beautification, or whatever name it is called, has involved in it as a project all the educational principles that make for a successful demonstration. There must be a knowledge of line and design, of color, and of gardening and horticulture in order to make the landscaping project effective. Consequently, it is one of the later projects that is developed in a county program.

It is easy to maintain interest once it has been developed because of the concrete results obtained from the beginning.

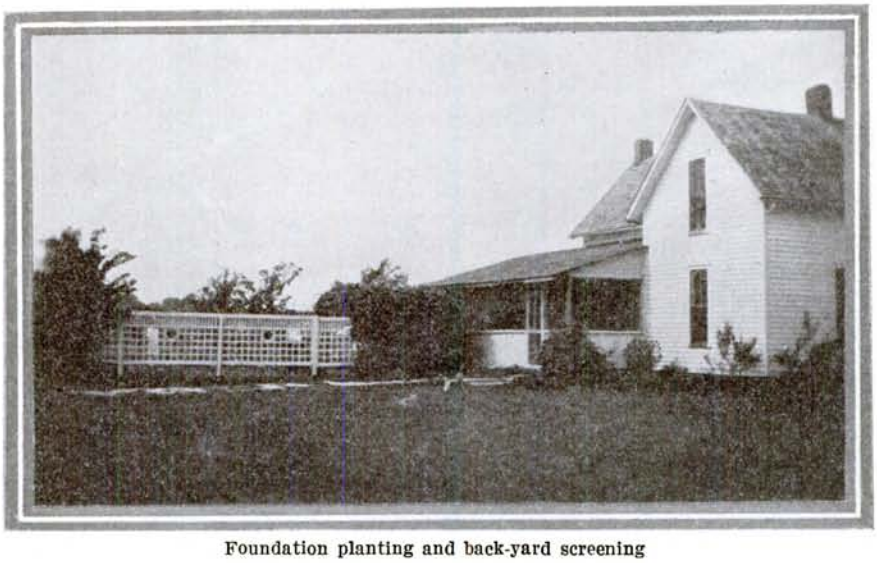
To us who have been in extension work for a number of years, it presents the ideal situation for a project, in that it involves the whole family—the farmer, his wife and his children, and leaves its imprint on the whole community.

Too often in extension teaching the main object has been practices adopted, disregarding fundamental principles, which are the basis for applying practices with discrimination and judgment. The landscaping project will result in a conglomeration of growing things unless the principles are first understood by the demonstrators.

Training Schools Conducted

In Kansas, many agencies have been used to present the principles of landscaping to the local cooperators. There have been training schools conducted by the specialists for the county agricultural and home demonstration agents. These agents in turn have held training schools for local leaders, who have presented the subject-matter material at the farm-bureau unit meetings. Specialists, county agents, local leaders have all assisted in securing demonstrators and planning with them the arrangement and selection of shrubs to be planted. Other people in the community have been present as plans were studied for improvements to be made.

As stated previously, the landscaping project is one of the last to be conducted in a county. Because of this fact the farm bureau workers are prepared for the abstract study of line and design and the artistic principles involved. Millinery, clothing, and household furnishings required the same study for the application of these theories of line and design as found in landscaping. The women discovered that they could not trim their hats satisfactorily until the principles underlying the reasons for trimming hats were understood. This handling of small pieces of cloth and making it into something attractive to wear gave them their first experience in acquiring artistic skill. The repetition of this study as mentioned appeared often in clothing and household furnishings, thus giving them an open mind toward principles underlying successful landscaping.



Foundation planting and back-yard screening

Landscape Garden Demonstrators

Mrs. C. J. Allen has been a member of the Montgomery County Farm Bureau for the past 10 years. She has been a member of a farm bureau unit that carried the millinery and clothing projects. She had one of the demonstration kitchens in the home-management project. Last year she requested that she be one of the landscape garden demonstrators. The accompanying picture illustrates how she has used one of the principles taught so much in landscaping—that of foundation planting. It shows, also, the screening of the back yard, the open space with just grass, and the inclosing of the yard necessary on the farm to protect fowls and stock.

Mrs. Minnie Heckman of the same county has used principles of landscaping too, by screening the barn and poultry house from the front view by the use of shrubs. She has increased the beauty of her yard by a side garden that contains flower beds, a rock garden, and a lily pool. Mrs. Heckman's back yard illustrates the fact that she studied her problem well before she began work on the garden.

If all the project work presented could show as definite a relationship between the underlying principles and the skill required to carry them out effectively as in the landscape project, it would not be difficult to place the proper evaluation on the educational program of the extension service.

Arkansas Adjusts to Cotton Acreage Reduction

Not more than 30 per cent of Arkansas' crop land is to be planted to cotton according to State legislation recently enacted. Under this restriction the acreage of cotton in the State next year will be less than 2,100,000 acres as compared with over 3,600,000 acres this year. Plans for the efficient use of this 1,500,000 acres of land thus to be released for other purposes than cotton production have been worked out by the Arkansas Extension Service on the basis of facts on supplies, demands, trends, and possible production presented at the Southern States Outlook Conference held at Memphis in November.

CAMPS for boys are held yearly at the Potschefstroom School of Agriculture, Union of South Africa, to give instruction in agriculture and to discuss improvement in club methods.

Recommendations of Land-Utilization Conference

THE following recommendations, submitted to the 350 or more registered delegates attending the Land Utilization Conference called by Secretary of Agriculture Arthur M. Hyde and the Association of Land-Grant Colleges and Universities at Chicago, November 19 to 21, were approved as the majority sentiment of the conference.

1. Administration of Public Domain

It is recommended that in order to obtain conservation and rehabilitation of the grazing ranges of the public domain these lands be organized into public ranges to be administered by a Federal agency in a manner similar to and in coordination with the national forests. Such public ranges should include lands withdrawn for minerals or for other purposes when the use of such lands for grazing is not inconsistent with the purposes of withdrawal.

2. Watershed Protection

It is recognized that throughout the Rocky Mountain regions and the Pacific coastal region hundreds of communities are directly dependent on near-by watersheds for their supply of water for irrigation and other purposes, and in many cases this dependence is interstate in scope, due to the watersheds being in one State, and the irrigation use in another State, and also due to the fact that the irrigation water of one State must often be stored in another State. Inasmuch as these facts can not be changed, due to the geography of the region, it is recommended that lands valuable for watershed protection should be administered under the supervision of the Federal Government.

3. Protection of School Lands

In the Western States, lands granted to the States for school purposes usually included either two or four sections in each township distributed over the major part of the State's area. Inasmuch as proper administration of land thus scattered has been impracticable, it is recommended that for the protection of the State in the interest of the school lands that remain efforts be made to have laws enacted which will permit the exchange of the present school lands for others equal in value, and that school land be collected in blocks of such sized units as to be economical grazing areas, thereby protecting the school lands for the continued benefit of the public schools.

4. Agricultural Credit

It is recommended that the Secretary of Agriculture call into conference representatives of various credit agencies engaged in making loans to farmers. This meeting should include representatives of Federal land banks, joint-stock land banks, Federal intermediate credit banks, State and National banks, and other financial institutions having a substantial volume of loans advanced to agriculture. The purpose of this conference should be to formulate a definite and coordinate program which credit agencies may adopt to assist in bringing about immediate readjustment in land utilization and farm organization.

5. Outlook Work

It is imperative that the program of outlook work of the United States Department of Agriculture and the State colleges be continued and expanded in order to provide a sound economic basis for planning the use of land for agricultural purposes, for determining the changes and adjustments of land use that will be required as economic conditions change and for determining desirable readjustments in areas devoted to agriculture as a vital part of the outlook program, we recommend the preparation and publication at frequent intervals of national and local outlook reports containing unequivocal and understandable statements representing the best judgment of National, State, and local outlook workers concerning the trend of supply and demand for the different agricultural commodities in the different parts of the country in the years ahead.

6. The Economic Inventory of Land Resources and Classification of Soils

The economic use of agricultural land is directly affected by topography, climate, texture and chemical properties, biological defects and location. These major factors usually determine the value of the land for production and taxation purposes. It is recommended therefore that a national inventory be made of our land resources, that soils be classified on the basis of their agricultural value, and that our land-taxation system and practices be readjusted accordingly. Sufficient information as to particular soil types is now available to permit prompt and effective initial action.

7. Homestead Interest

It is recommended that the several homestead acts be administered in the future with more careful supervision of land available for home making; that the lands opened for homestead entry be carefully classified at an early date and only those which after economic study promise a satisfactory standard of living be made available for entry. Lands classed as marginal or submarginal should be withdrawn from homestead entry and definitely added to the public range.

8. Taxation

In view of the necessity of a more equitable distribution of the tax burden, we recommend the following: First, the States take effective steps to revise their systems of taxation to the end that every person having ability to pay taxes would be required to contribute directly to the support of State and local governments through an income tax; second, that total expenditures should be held in check and reduced wherever possible without serious injury to essential service through consolidation of counties and other units of local government in order to prevent the new revenues from becoming merely an additional total expenditure; third, that greater coordination should be brought about between the Federal Government and the State in taxation to the end that each will rely primarily on those taxes that are relatively best suited to it from the standpoint of economic facts and administrative feasibility.

9. Land Development

It is recommended that land-development enterprises be licensed and regulated.

10. Regional Competition

Since no determination of the best use of any type of land can safely be made without careful consideration of economic and technical feasibility of the various proposed uses and the profits likely to be derived from each, and since use for farming is in question on much so-called marginal and submarginal lands, and changes in types of farming are called for on much of the better agricultural land we recommend that increased attention be given to a study of all the factors affecting the feasibility of land for agricultural use and the type of agricultural use best suited to each

specific kind of land. These factors include foreign and domestic competition in the production of all agricultural commodities and the development of methods of farming and types of equipment and their adaptability under various conditions, the feasibility of various forms of the organization of farms for production, and the various methods of operation as well as the outlook for the prices of various agricultural commodities.

11. Reclamation

It is recommended that the Reclamation Service confine its efforts to finishing projects already started and to rehabilitating deficient water rights on lands now cultivated and occupied, but that new lands or new colonization projects neither be undertaken through irrigation or drainage until they are justified by the agricultural needs of the Nation.

12. Use of Marginal Land

This conference has devoted careful consideration to a group of problems with which our country has never adequately coped, namely, the extensive area of land which is in use or tends to be used for purposes to which it is not physically and economically adapted or that is virtually not used at all. These lands include:

1. Occupied farm lands which because of technological or other changes in their competitive position are no longer capable of yielding a reasonable return to farmers.

2. Range and other lands that tend to come in or go out of farming under the stimulus of variations in the price or rainfall cycles.

3. Extensive areas of cut-over lands that are virtually idle.

4. A large acreage of other land in addition to the above, that tends to be pushed into use for farming when economic conditions do not justify such use.

5. The lack of a program for such lands consistent with the public interest has resulted in consequences such as numerous farm families struggling against hopeless obstacles, which we should no longer tolerate, an increasing number of abandoned farms, a rapidly growing area of tax-delinquent land which is being resold for the same uses under which it becomes tax delinquent, the wastage of soil resources through erosion or fire, the serious dislocation of the fiscal and institutional arrangements of units of local government through the disappearance of land from the tax rolls, a sparse and scattering population that can be supplied with adequate schools and roads only at great expense.

This conference urges and emphatically recommends that Federal and State agencies develop a coordinate program of land utilization for these extensive areas of idle or misused lands. We believe it to be a sound policy that before we undertake to retain or acquire land for public ownership, every reasonable effort should be made to remove the conditions that discourage forms of private utilization, not inconsistent with public welfare; plans for modifying such conditions should be an important part of a program for dealing with these areas. Among these conditions are the following: First, a good deal of farm or forest lands can not be utilized profitably by private individuals because of an impossible tax burden. Certainly, States and counties should not force themselves to take over such lands if a modification in tax burden would avoid this necessity. A forest tax law will frequently aid private owners to utilize lands for forests along sound lines. Second, in some forest, farming, or range and cut-over areas, the consolidation of scattered tracts into units of economic operation will facilitate profitable private utilization. Private forest utilization can be maintained in many cases by better provision of fire protection; the supply of planting stock, and for small holdings by such measures as cooperative management, cutting, hauling, and marketing.

> OUR Federal and State land policies have, in the main, encouraged the rapid transfer of public lands to private ownership with little regard given to the uses to which the land was best adapted or to the demand for its products. The economic and social difficulties in agriculture which are so widely recognized at present are in considerable degree traceable to the effects of these policies. It therefore becomes imperative for all groups connected with land use to cooperate in formulating new policies which shall be actively addressed, through adequate and unified organization and coordination to the intelligent use of all publicly and privately owned land and whether or not it be submarginal or supermarginal. The central purposes of these policies should be to develop and conserve our land resources in such manner as to provide adequately for our present and future needs. Any adequate land policy must provide for the preservation of soil fertility, must aid toward adjustment of production to demand, must provide for economic use of marginal lands, and in other ways must make for the security of agriculture.

13. Public Retention or Acquisition of Land

After every effort has been made to promote a sound type of private utilization there will remain extensive areas that are not adapted for private utilization or that, for one reason or another, should be under public ownership and management in order to prevent their misuse or for other reasons. With the exception of small areas acquired for special requirements, Federal land acquisition through purchase at present is confined to the following main purposes:

1. Forest lands for the protection of the head waters of navigable streams.

2. For growing timber (at present limited by appropriation and tacit understanding to the establishment of small areas of demonstration forests mainly in the South. The total program for this and the first-mentioned purpose is only about 15,000,000 acres).

3. Bird and game refuges under the administration of the Biological Survey.

4. National parks and monuments (except for the reservation of land from the public domain, these are being developed partly on lands contributed by non-Federal agencies).

State-land acquisition is confined mainly to the establishment of State parks and/or State forests; but the scope of this actlvity is not very considerable outside of New York, Pennsylvania, and the Lake States. There appear to be a number of important objectives in public acquisition, in addition to those mentioned, some mainly of local interest and others of broader application, as follows:

1. To withdraw from private-ownership tracts occupied by sparse and scattered population, in order to economize State and local expenditures for public service.

2. To provide for the permanent maintenance of local forests on which communities are dependent or may become dependent for part-time employment, markets, supplies of raw material for local industries, fuel, posts, and other supplies for farmers and other residents of the community, local refuges for game and other local centers of recreation.

3. To remove from private ownership lands that are periodically brought into temporary cultivation under the stimulus of high prices or favorable yields, but are incapable of permanently profitable utilization, in order to remove the unfair competition of such lands to the established farming industry, and to prevent the serious wastes, and hard-

ships incurred by their occupants after the temporarily favorable conditions have passed.

4. To remove from private ownership lands that can not be utilized profitably by private individuals or concerns without serious wastage of the soil through erosion or other causes.

The objectives already adopted should also be materially amplified. The policy of watershed protection both on the public domain and other areas should be carried much further, and a provision for reforestation appears inadequate to forestall an ultimate shortage of timber.

The immediate task is to deal constructively with the areas that are becoming tax-delinquent. There is very great variation at present in the policies followed in various States with regard to such lands. Only in a few States is existing policy in line with the requirements of a broad national land policy. Since the interests of the State and Federal Governments interpenetrate in the whole field of land acquisition, the Federal Government should take the lead in bringing about a definition and coordination of objectives with the States. Plans should contemplate a unification of policies for the disposition of tax-delinquent lands, as well as for other methods of acquisition.

We also recommend prompt coordinate Federal and State action in defining the principles, scope, and methods of public-land acquisition and administration, and in determining what lands should soon or ultimately be acquired and by what agencies.

14. Soil Conservation

Steps should be taken to outline and initiate a program of soil conservation whereby damage from erosion, leaching, increasing acidity, destruction of organic matter, deterioriation of soil structure, overgrazing, flooding, and alkali accumulation may be reduced to a minimum.

15. Land Classification

An essential basis of economic investigation in land utilization is adequate physical data in the form of soil surveys, topographic surveys, weather records, etc. Some of the regions of the country where land use problems are most acute are most inadequately covered by such surveys. There is obvious need for coordinating this survey work with the land utilization surveys aimed at the development of a program of land utilization. This economic investigational work must obtain basic information with regard to the numerous economic and social conditions that must be taken into consideration in the formulation of a land utilization program for a given area, such as the economic use for which the land is best adapted, tax burdens, local fiscal set-up of the area, and the relation of proposed changes in the use and ownership of land to fiscal and institutional arrangements. This type of research work should be carried out by the Federal and State agencies cooperating and would have to be much more adequately provided for. It is possible that in order to take care of the problem in States unable to make adequate financial contributions, some extension of the Purnell Act will be found necessary. The extent of the problems of idle lands and of the probable needs for public acquisition does not vary with the financial capacity of the various local and State governments to cope with them. Some of the States where these problems are most extensive are most lacking in financial resources. We should not permit a narrow theory of States' rights and obligations, under our system of dual sovereignty, to prevent an adequate provision for dealing with these problems wherever they occur.

We note with gratification the steps already taken by the State of New York in developing a program of land classification and acquisition.

16. Decentralization of Industry and Its Effect Upon Land Utilization

We recommend that a study be made of possible decentralization of industry and population from the point of view of land utilization.

17. Regional Conferences

In view of the influences of topography, climate, soil types, etc., on land utilization, and the need for enlisting regional and even local leadership in dealing with the many and varied phases of the subject, the committee recommends that the Secretary of Agriculture, in conjunction with the land-grant colleges, and other agricultural agencies, call regional land-utilization conferences throughout the country at such places and at such times as may best serve the purpose of cooperating with the committees proposed by this conference in initiating and consummating a sound and constructive national land use policy.

18. Creation of Committees

It is an accepted fact that the value and effectiveness of any plan depend upon the vigor and intelligence with which it is applied. To apply any plan effectively there must be adequate machinery. To that end we recommend the creation of two committees, one to be known as the national land use planning committee, and the other to be known as the national advisory and legislative committee on land use.

It is recommended that these committees be constituted and called together for organization as follows:

The national land use planning committee.—It is recommended that the membership of this committee consist of 5 representatives from the United States Department of Agriculture, 1 each from the Bureau of Agricultural Economics, the Bureau of Chemistry and Soils, the Bureau of Agricultural Engineering, and the Forest Service, and the Extension Service; 1 from the Federal Farm Board; 3 from the Department of the Interior, 1 each from the Reclamation Service, the Geological Survey, and the Land Office; 1 from the Federal Farm Loan Board; 5 from the Association of Land-Grant Colleges and Universities, so chosen to represent the different agricultural regions of the country.

It was also moved that the conference request the Secretary of Agricul-

THE EPIC of land settlement in this country is nearly complete. The day of the pioneer as a farmer is merging into the day of the farmer as an industrialist. The pioneer was a dynamic figure. His life story was replete with drama and human interest. The story which he has written across the map of America was heroic in determination, in courage, in accomplishment. Nevertheless, some of his effort was futile, some tragic. While in the aggregate his beneficent accomplishment is great, agriculture is to-day tasting the bitter disappointment which has followed some of his misdirected and overabundant energies.

We have come now to the time when we should write a new epic—the epic of adjustments, of regrouping, of retirement from cultivation of lands which the pioneer subdued, but which stubbornly refuse to yield to his grandchildren a reasonable standard of living, of development of parts of our great patrimony and of conservation of other parts; in short, the epic of conserving a hard-working, God-fearing, agricultural people—proud to be, as in fact they have always been, the mainstay of a great people, the nursery of a great race.

ARTHUR M. HYDE,
Secretary of Agriculture.

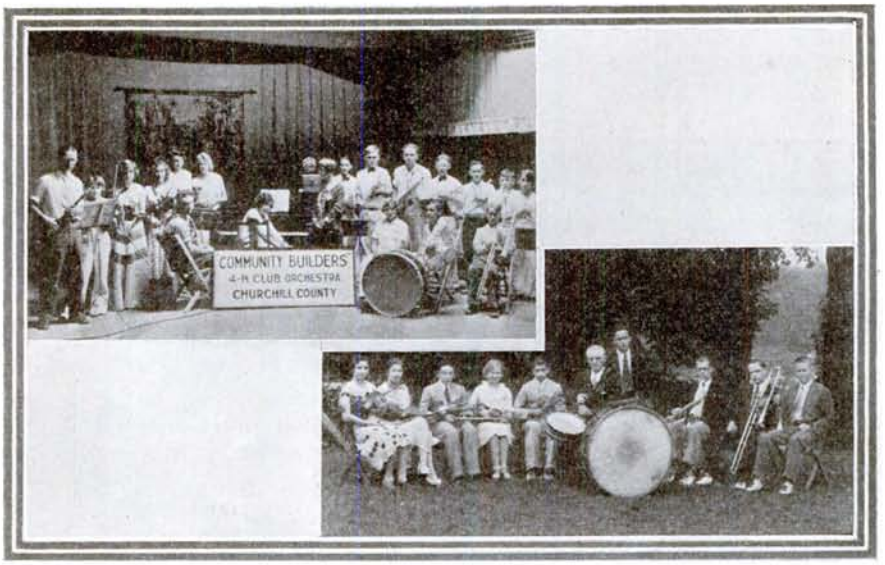
ture to make the appointments from the Department of Agriculture; that the Secretary of the Interior make the appointments from the Department of the Interior; that the chairman of the Federal Farm Board make the appointment from the Farm Board; the chairman of the executive board of the Association of Land-Grant Colleges and Universities make the appointments from the Land-Grant College Association; and the chairman of the Farm Loan Board make the appointment from the Federal Farm Loan Board; and that the Secretary of Agriculture be requested to call the committee together for their first conference and to permit them to organize; and further request that the call shall be made at the earliest possible moment.

National advisory and legislative committee on land use.—It is recommended that the following organizations shall appoint the number of persons named to comprise this committee, and that this committee as thus named or formed may add such numbers to it as it will deem advisable and helpful, and that the committee will be formed initially as follows: American Farm Bureau Federation, 5 members; National Grange, 5 members; National Farmers Union, 3 members; United States Chamber of Commerce, 1 member; National Cooperative Council, 5 members; American Bankers' Association, 1 member; National Association of Commissioners and Secretaries of Agriculture, 1 member; American Forestry Association, 1 member; American Agricultural Editors Association, 3 members; National Sheep and Wool Growers Association, 1 member; American National Live Stock Association, 1 member; American Railway Development Association, 1 member.

The personnel of the committee which submitted the above recommendations was as follows:

Cully A. Cobb, editor of the Progressive Farmer; Dr. William Peterson, director of extension, Utah Agricultural College; J. G. Lipman, dean and director, New Jersey Agricultural College; R. W. Reynolds, agricultural and industrial agent, Chicago, Milwaukee & St. Paul Railway; Charles E. Hearst, vice president, American Farm Bureau Federation; George D. Pratt, president, American Forestry Association; H. R. Tolley, director, Gianinni Foundation, University of California; Fred Brenckman, Washington representative, National Grange; Thomas P. Cooper, dean and director, Kentucky Agricultural College; C. O. Moser, president, National Cooperative Council; Elbert S. Brigham, chairman of the finance committee, National Insurance Co. of Vermont; E. H. Thompson, president, Federal land bank, Springfield, Mass.; Sherman M. Woodward, Iowa City, Iowa, representing American Society of Civil Engineers; Dan H. Otis, American Bankers' Association; John B. Bennett, United States Chamber of Commerce; M. L. Wilson, chairman, Department of Economics, Montana Agricultural College; W. C. Coffey, dean and director, Minnesota Agricultural College; C. E. Ladd, director of extension, Cornell University; W. W. Atwood, president, Clark University, and president, National Park Association; L. J. Fletcher, president, American Society of Agricultural Engineers; William A. Schoenfeld, dean and director, Oregon State Agricultural College, Corvallis, Oreg.

4-H Club Orchestras on the Air



(Above) This is the club orchestra of Churchill County, Nev., broadcasting from Station KOH, Reno. These musicians were a great success at the club camp and were featured at the State fair. "They have been a wonderful help in organizing three new community centers recently, for these youngsters are real community builders," writes D. H. Propps, district extension agent.

(Below) This Cheshire County, N. H., orchestra opened the New England section of the annual national 4-H achievement radio program. The leader, Leslie Seaver, got the idea from his leadership-training project, in which 200 other New Hampshire club members were enrolled last year.

New Hampshire Carries On

The total farm income of New Hampshire farmers, according to E. P. Robinson, county agent leader, has been materially reduced this year, though they have not been hit as hard as some other sections of the country. The northern part of the State has borne the brunt of the loss, due to the low prices for wholesale milk and potatoes and the lack of any market for pulp wood. To help the farmers carry on, the extension service is giving special attention to showing them how to keep down costs and to market advantageously.

One very successful project has been the marketing of potatoes. Following an economic survey showing deficiency areas in potato production contracts were made with near-by markets which resulted in 100,000 bushels of New Hampshire potatoes being sold through the local chain stores this season. These stores are featuring New Hampshire grown potatoes and there has been a definite change in the situation.

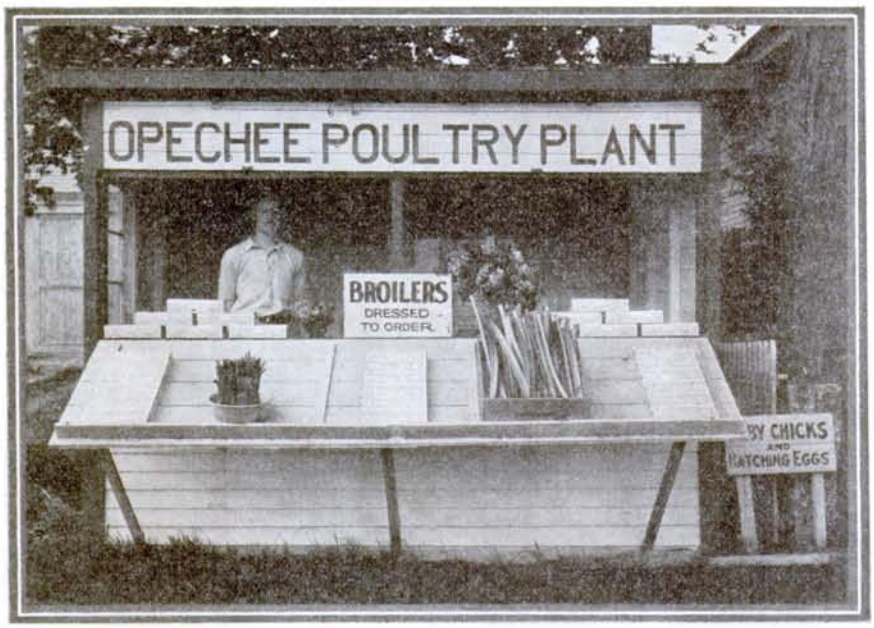
Another phase of the work now being emphasized is the development of underdeveloped activities such as cooperative marketing of Christmas trees, production and marketing of maple products, and catering to tourists.

Methods of keeping down costs being emphasized are economical methods of purchasing and using commercial fertilizers, feeds, spray materials, and other supplies; the judicious use of seeds; choice of crops that will give the best returns in the shortest time; using records of production to detect culls that are not paying for their keep; and employing labor-saving methods. The use of spare time to get out lumber, posts, and fuel from the farm woodlots instead of paying cash for these commodities is also proving popular with New Hampshire farmers.

Assisting Operators of Roadside Establishments

J. C. KENDALL

Director, New Hampshire Extension Service



One of the roadside markets in New Hampshire

ROADSIDE operators have proved to be one of the most interested groups to which the New Hampshire Extension Service has ever offered its assistance. More than 200 of them attended the first conference arranged at the University of New Hampshire in March, 1931, and expressed high interest in another similar gathering before the beginning of the tourist season. Following the second State meeting in May and the several county conventions since, repeated demands led to the scheduling of a third State session this fall.

The original aim of the extension service was to assist the roadside operators in holding one state-wide meeting each year. These folks seem to have found that gatherings for the purpose of exchanging ideas and discussing problems are profitable. As a result, they are peppering us with requests for more of them.

Our interest in roadside establishments took active form in 1927 when we made an attempt to locate all the farms in the State which were selling any appreciable amount of produce direct to tourists and others. This was followed by a direct canvass of 1,000 miles of New Hampshire highways, revealing nearly 800 roadside places on farms or in localities where farming might be done. One of these markets has been operated since 1850 and mainly sells farm products.

Many Articles Sold

A great variety of articles are sold at the New Hampshire roadsides. The five largest markets averaged sales of $12,700. More than 200 places did a business of $1,800 each.

Fifty of these selling farm-raised products, such as vegetables, fruit, milk, and eggs, did an average business of $3,100. Five of the fifty happened to be in the $10,000 class; only four ranked under $500. Only four families got their entire receipts from the stand and eight others only as much as 85 per cent. Families with sales of $4,000 or more were disposed to get a small amount of income from other sources.

Twenty tea-room and gift-shop combinations averaged $2,300 worth of business; 88 with such products as candy, ice cream, soft drinks, gas, and oil, took in $1,500 each; 13 displaying such homemade products as pastries, candy, ice cream, and rugs made $1,300; 21 offering overnight accommodations captured $950 of tourist money; and 12 with dooryard signs only sold $600 worth of rugs, eggs, maple sugar, and similar products.

At the present time, our mailing list of roadside establishments totals nearly 2,000 places. It was brought up to date this spring by our county agents. Although the number of roadside stands in the State fluctuates considerably from year to year, it will undoubtedly be more stable in the future, as the attorney general of the State has ruled that out-of-State people must buy a license to operate in New Hampshire. This will probably eliminate a good many of the "fly-by-nights."

Making Business Profitable

The program for our first conference for roadside operators was developed from information obtained by questionnaire. Greatest interest was shown in the problem of making business more profitable. Other topics recommended for discussion were, in the order of their preference: Meal preparation, ways of making establishments more attractive, advertising, table service, bedchamber accommodations, purchasing, labor problems, handicrafts and home industries, interior decoration, landscape design, home gardens, certification by some outside agency, and legislation.

A group of heated cabins

Two days of general sessions with 6 out-of-State speakers and 15 State people were arranged, and attracted more than 200 operators, representing overnight cabins, tea rooms, meal service in private homes, overnight accommodations in private homes, summer-boarder service, roadside stands, kitchen industries, and gift shops. Each speaker was selected because of his experience in some phase of the roadside business. One edits a national roadside-stand magazine; another is director of the handwork department of an educational organization; and a third is principal of a leading cooking school. An advertising expert and a tea-room manager were also on the program.

Following this conference, bulletins containing the addresses and proceedings of the meeting were issued. Many who were unable to attend the conference, as well as those who did, have found these helpful.

Groups Discuss Problems

The second conference, held immediately before the opening of the tourist season, was arranged in the form of four group discussions for one day only. The four groupings were tourist homes, overnight cabins, tea rooms, and roadside stands. Special services requested of the extension service included the development of a loan library for roadside operators, compilation and distribution of old New England recipes, and issuance of suggestions on meal planning.

The two conferences were no Pollyanna affairs. The operators dug deep into their problems. They were told that New Hampshire is suffering from roadside-stand quantity when it ought to be profiting from roadside-stand quality, and they acknowledged it. The speaker who fired this shot at them emphasized his point with the illustration:

"When one has lunched bountifully in a Normandy farmhouse converted into a unique roadside restaurant, one finds it quite a comedown to enter a shapeless frame shack and have some unshaven man fresh from the gasoline pump wipe his hands on his pants and say, 'Well, what'll it be, gents?'"

Inspection by Board of Health

The operators were keen to welcome and urge a constructive program of sanitation and inspection by the State board of health. They want their water supplies and sewage arrangements to be beyond question, and many of them are interested in developing some system of certification which will give recognition to the more deserving establishments.

The desire to cooperate in cleaning up billboard nuisances on New Hampshire highways was another clear expression of the conference. Whatever crimes against scenery may have been perpetrated in the past, a large group of operators are determined to do everything possible to mitigate the sign nuisance. They appreciate the fact that their very livelihood depends on attractive highways; and while advertising is no less essential for their own business, they now see that such advertising should be done attractively and with due regard to scenic beauty. The conference voted unanimously in favor of the elimination of national billboard advertising and strict regulation of all other forms of roadside signs except those placed by owners advertising their own business.

Throughout the conferences it was also clear that the operators are intensely interested in the improvement and beautification of highways and in the work already done by the State highway department.

South Dakota's Outlook Discussion Meetings

THE SYSTEM of limiting attendance at agricultural outlook meetings to a specially invited list of leading farmers in each county and conducting a discussion type of meeting was employed by South Dakota extension marketing and farm management specialists with good success.

In the past, general invitations to attend the meetings had been broadcast through the press with the result that all types of farmers attended, many bringing their wives and children. Two specialists and the county agent were present at each meeting, the county agent opening the meeting and introducing the subject. One specialist presented the outlook material and the other, using a farm set-up typical of the farming systems of the county, explained how the information could be applied to that farm in a way that might increase farm profits.

Although good success resulted from this type of outlook meeting, it was found difficult to hold the attention of such a heterogeneous audience through two rather technical talks in which all the members were not vitally interested. Occasionally, also, unsympathetic listeners, or hecklers, strayed into the meeting and made things difficult for the speakers.

Leading Farmers Invited

By confining the attendance to an invited list of leading farmers, a high pitch of interest was maintained throughout the meetings as the men present were all concerned in the outlook and were able to discuss it intelligently, and explain how they intended to apply it to their particular farming problems.

The average group was around 20 to 30. This was found to be a desirable number, large enough to maintain a lively discussion and yet not so large as to be unwieldy. It was felt that the ultimate number of farmers reached was perhaps just as great under the new method as under the old, since the influence of each leading farmer would no doubt extend to many other farmers in his community, who would follow his example.

Selection of the group was, of course, left up to the county agent in each county. No press articles were carried before the event, individual invitations being sent through the mails. This furnished a desirable contact for the county agent with his farmers, who felt flattered at being included in the special list.

The meetings were entirely of a discussion type. The specialist started the meeting by asking questions of the group, which opened up the subject. Then as questions arose charts were used to clear up the points involved. After the commodities were discussed, the business situation was received and then the question asked of members of the group as to what they were going to do in the light of the facts brought out. This continued the discussion and many good ideas were advanced. The farmers went away feeling they not only had a part in the discussion, but had questions cleared up that had been bothering them for some time.

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.

Camp Plummer—4-H Club Mecca of The Northwest

CAMP PLUMMER annually becomes the Mecca to which come some of the outstanding 4-H club boys and girls of Idaho, Oregon, Utah, Nevada, Montana, Washington, and British Columbia. The educational activities of Camp Plummer at the Pacific International Livestock Exposition, Portland, Oreg., October 24–31, were participated in by 514 club members, extension workers, and local 4-H club leaders. Demonstrations, judging contests, exhibits, and educational trips made the week a profitable one for the club boys and girls representing the several States, according to Madge J. Reese, field agent, western section, Office of Cooperative Extension Work.

At the opening ceremonies of Camp Plummer the Montana 4-H club boys and girls planted a Douglas fir in front of Penney Hall, headquarters for Camp Plummer. A tree is planted each year by a State delegation

Greetings From Secretary Hyde

Secretary Hyde's greetings were read at the banquet and were received with appreciative applause: "I am again glad to send greetings to the 4-H club boys and girls of the Western States gathered together at Camp Plummer. Through perseverance, hard work, and intelligent planning you have been especially successful in your club enterprises, and I congratulate you on these successes and on your fine records which have won for you the opportunity to represent your groups at the camp this year. The Department of Agriculture is proud of the work you have done. I hope your week at Camp Plummer will be a very happy one, and that out of your experiences there you will gain a greater appreciation of the opportunities and responsibilities ahead of you as members of a generation that soon will be directing the life and fortune of rural America."

Livestock Activities

The livestock-judging contest held a major interest with 162 contestants, or 54 teams as compared to 47 teams in 1930. The Whatcom County, Wash., team placed first with the Fergus County, Mont., team second. Prized dairy cattle, fat steers, hogs, and sheep, 490 head, 30 per cent increase over 1930, were exhibited by club boys and girls. The annual 4-H club fat-stock sale, in the opinion of those who conducted it, was most successful. In one hour and a half 92 sales or 228 animals of market type were sold, bringing exceptionally good prices. It is said the buyers plan a year ahead of time to purchase some of the animals at this sale. The experience of exhibiting and judging livestock is teaching boys and girls to work toward good market types in livestock, and some clubs buy cooperatively good breeding stock at the show. It is reported that young men have been encouraged by their successes in exhibiting to increase their livestock projects and continue in the business on a profitable basis.

Contest and Exhibit Features

Six States enthusiastically entered 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 Montana this year. Nineteen teams of girls entered the home-economics judging contest, and the meat identification contest created considerable interest. The largest home-economics exhibit ever held at Camp Plummer had 52 entries in clothing, canning, and house-furnishing units. The growth and health contest was featured by six entries from three States. The highest score made by the girls was 97.4 while that made by the boys was 99.1.

Club work was well represented in the land-products show in the 4-H potato club exhibits and the crops-judging teams which placed classes of corn, onions, carrots, wheat, barley, oats, and potatoes. The poultry and rabbit exhibit showed 105 entries by club members, and 4-H poultry judging contests were held.

Other Educational Activities

As a treat for the boys and girls from the inland States who had never seen the ocean, special busses took them to Seaside, Oreg., where they were entertained at luncheon and enjoyed the beach. Another day was spent visiting places of interest in Portland. At the annual banquet the delegations had the pleasure of meeting the governors of six Western States and at mealtime prominent visitors were introduced. The horse show one evening was made more colorful by the parade of the entire attendance at Camp Plummer and some of the 4-H livestock which was on exhibit.

SEVEN members of the Delhi (Ark.) Home Demonstration Club drove 15 miles each day to attend the two days' school of construction conducted by State clothing specialist at Hampton. At the Delhi Club meeting the women said, "It was a real task to do the housework and drive the 15 miles back and forth each day in a wagon, but we were well repaid for our efforts." These women are real home demonstration members.

An Attractive Weekly Column

Last month we announced the REVIEW'S *new feature, The Month's Best News Story, and ran what we thought was a good story. The first winning contribution in this series will appear in the February issue of the* REVIEW. *In between we are giving you a sample weekly column written by Rosalie E. Redfearn, home demonstration agent for Anson County, N. C. Under the caption "Woman's Corner," Mrs. Redfearn talks intimately each week with around 2,000 farm women in her county. In the course of 700 words she chats with you about laying out and planning your garden, getting the kitchen sink clean and white, and preventing your bedroom curtains from becoming soiled. She even gives you some conforting advice on whether a wife can ever hope to cook a pie as good as those her husband's mother used to make. Surely a welcome and delightful visitor to have.*—EDITOR.

ONE OF the prettiest spring gardens we have seen so far is that of Mrs. J. L. Beck, of Deep Creek. This garden certainly has a live-at-home look about it, too.

In early winter Mrs. Beck selected a part of the garden about 10 feet wide and made a bed across the length of the garden. This was enriched with stable manure and plowed deeply. It was then laid off in little beds about 10 feet square, each square was planted in little rows of vegetables, such as onions, lettuce, peas, mustard, and beets. A side dressing of 8–33–3 guano was applied, and so well have the vegetables responded that for several weeks the family have had plenty of lettuce, mustard, and onions; the peas are just about ready to pick, and the beets are about 5 inches high. The next part of the garden was planted in Irish potatoes, and the potatoes are now as large as eggs. Adjoining the potatoes is a row of squash almost ready to bloom, and then come the beans with four leaves already; next are the cucumbers. The butter beans are just coming up; along the side of the garden are beds of tomatoes and pepper plants, just hundreds of them.

Out in the field there are two more potato patches. One of these was manured and fertilized well, planted, and then covered with wheat straw, from which they will harvest 100 bushels or more if the seasons are as favorable as last year. At one time last fall Mr. Beck had 100 bushels spread out under the house, which kept well and provided enough potatoes for the winter for a large family. When we asked what they did for potato bugs, they told us that the calcium arsenate or boll-weevil poison was the best thing they had found.

The cabbage patch, about half an acre, is also out in the field. Besides furnishing the family with fresh cabbage, a sufficient supply of kraut will be made for home use and some of the earliest cabbage sold.

One thing that Mr. and Mrs. Beck said that is worth passing on, was, when we were talking about the fine beds of tomato plants, "Well, we have always found it to be true that when you plant enough of everything to be good neighbors you always have enough for your own folks." Being good neighbors means a lot in a community.

We did not notice a strawberry patch in the garden, but incidentally passing through the kitchen we saw eight of the best-looking strawberry pies just out of the oven, and then we learned that in another lot was a big strawberry patch, already ripening. Along with the pies were plates of nice, juicy sweetpotatoes. We can't say what else this happy family was going to have for dinner, but there were several pots on the stove boiling away and milk and butter in the cupboard.

Mrs. Rosalind Redfearn, who has been home-demonstration agent in Anson County for 18 years.

In another lot in the yard were about 400 fryers; out in the crib was 50 or more bushels of last year's wheat waiting to be made into flour, and there was a smokehouse with hams and bacon hanging high.

All of this made us think again, "What's a farm for if not to provide the things that go toward making a happy, healthy home; the kind of pies and biscuit and fried chicken and cake that the children will always remember, and as the years pass will often wonder why things don't taste like the things 'that mother used to cook.'"

Some one remarked a few days ago that as you get older things don't taste like they used to. This may be true. We have often noticed that a married man always likes to ask his wife, "Why don't you cook a pie like my mother used to make?" And it just can't be done; there's no wife can cook a pie like her husband's mother used to make, or a cake either, as for that matter. And the only happy day in this respect that we can look forward to is the time when our sons will say to their wives, "Why don't you cook a pie like my mother used to make?"

THE SINK often gets yellow and dingy-looking. A great aid to keeping a white shining sink is soap jelly. Dissolve a large bar of soap in two quarts of boiling water; add two tablespoons of kerosene. After washing dishes, put some of this jelly on a cloth and rub the sink well; then wash it with hot soapy water. This is also good to clean bathtubs and the lavatory. Aluminum and enamel water buckets and dippers can be cleaned in the same way.

Sometimes the water has an iron sediment that causes the porcelain of bathroom equipment to have a yellow stain. One of the best things to remove this is gasoline; just rub the places with a cloth dipped in gasoline and then wash with warm soapy water. This stain should be removed often; if allowed to stay too long it is very hard to remove.

JUST HOW to keep the bedroom curtains from getting soiled at night when the windows are wide open is always a problem. The wind blowing through, and the dampness as well, often causes them to mildew, and the bottom ends of the curtains soon fade, split, and look unattractive. Some good housewives try the plan of catching the inside and outside edges of the curtains together and folding up as high as one can reach along the outside of the curtain and snapping together with a clothespin. It is surprising how fresh and clean the curtains will keep when this plan is followed.

Speaking of curtains, it is a good plan to make the white or cream-colored curtains for several rooms of the same ma-

terial. Besides giving a harmonious treatment for each window it is a saving, because the curtains can be laundered, changed from one window to another, making them last much longer. We often change ends with the curtains, letting the bottom of the curtain go to the top and the top to the bottom. The top always lasts longer than the bottom, as it is not exposed to the air and dampness so much. When both ends are hemmed with the plain hems, this can easily be done. Another plan may be used by cutting off the bottom parts of the curtains and making half lengths or sash curtains of the upper sections. These may be used in bedrooms, bathrooms, and breakfast rooms.

When the cretonne draperies fade, if the material is still good, it may be boiled nearly white and then tinted with dye and used again. Old rose, deep blue, green, and mulberry are pretty colors to use for tinting the draperies. We saw a lovely bedroom recently that had lavender-tinted ruffled curtains, and the old furniture had been painted green. In the spring we like to fix up the house, and a little dye, a little paint, will be wonderful helps in renovating what we already have on hand.

Department Participation in the 1931 Fairs

The fair season, during which the educational exhibits of the United States Department of Agriculture are shown all over the country, this year reached its peak during the period from September 1–15. Most of the occasions were large State fairs.

In spite of the fact that the country is said to be experiencing an era of great economy, the attendance has been remarkably good. Reports indicate that at both the Midland Empire Fair at Billings, Mont., and the Montana State Fair at Helena, the 1931 attendance was greater than for 1930. Other fairs that report greater attendance this year than last were those held in Detroit, Mich.; Hagerstown, Md.; Raleigh, N. C.; and Dallas, Tex.

The turnstiles at Dallas, according to the Dallas press, continued to click until they had admitted 685,378 visitors to the State fair, October 10–26. This is an increase of 10,000 over last year's figures.

The success of a fair, from the department's viewpoint, of course can not be estimated altogether in attendance, but should be judged as well by the appraisal of the individuals who attend.

One index to the value which is placed on this phase of the department's extension work is the interest shown in its publications. Included with each group of exhibits, there is on display at each fair a careful selection of the publications that are available to the public. Many visitors claim they did not know the United States Department of Agriculture offered any such service and were enthusiastic in their appreciation of this opportunity for helpful guidance. It was impossible to pass in front of one of the mechanical exhibits because the crowds blocked the aisles. Gratitude was expressed by those who last year received the publications they asked for and specific instances were cited of some of them who profited in dollars and cents by the information they received.

Child-Feeding Charts

A set of eight child-feeding charts has been prepared by the Bureau of Home Economics. Attractive pictures of well-nourished children illustrate certain points in the formation of good food habits and the effects of good nutrition. The titles of these charts are:

1. Happy, healthy, growing.
2. Signs of good nutrition.
3. The right start for the baby.
4. Aids to good food habits.
5. A good beginning in self-help.
6. The same menu for all.
7. Meals for the 3-year-old.
8. Foods for good nutrition.

Each chart is 15 by 23 inches in size and printed in black and white on heavy-coated paper. These charts are for sale at 25 cents a set from the Superintendent of Documents, Government Printing Office, Washington, D. C.

Arkansas Women Can for School Lunch

One hundred and twenty-three No. 3 cans were filled with soup mixture and tomatoes, and 12 gallons of kraut were made and stored at an all-day canning held by the East Heights, Ark., home demonstration club, when this produce was donated to the school for hot school lunches during next winter's term. Last year hot school lunches were introduced in this community as a relief measure, and when records showed that students gained in weight and made better grades in school work patrons of the school decided that it was good as a permanent practice and are providing for supplies now for the lunches by canning surplus fruits and vegetables at club canning days.

NATIONAL 4-H CLUB RADIO PROGRAM

Saturday, February 6

What I learned about trees from 4-H club work.—*By club boy.*
Savings from clothing club work.—*By club girl.*
It pays to belong to a 4-H club.—*By State leader.*
A look ahead.—*By C. B. Smith, Chief, Office of Cooperative Extension Work.*

AMERICA'S PATRIOTIC MUSIC

The Star Spangled Banner.....*Key-Smith*
America.....*Carey*
Dixie.....*Emmett*
Yankee Doodle.....*Traditional*
America the Beautiful.....*Ward*
Columbia, the Gem of the Ocean.....*à Becket*
Hail Columbia.....*Fyles*
Over There.....*Cohan*

EXTENSION SERVICE REVIEW

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

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·ACROSS · THE · EDITOR'S · DESK·

Putting Up Economic Facts

"WHAT do you want the farmer to do?" was the question H. W. Hochbaum plumped down before economists and county agents attending the Appalachian States Outlook Conference in October. He was discussing how to translate economic facts into definite action.

Such phrases as "greater stability in commodity prices," "conservative production," "lower inventories," "production expenditures," and "emerging on," he contended, obstruct a clear understanding of the situation described and do not encourage action. "Think in terms of what you want the farmer to do," he insists, "talk and write in simple language and to the point." Here's a couple of samples Hochbaum gives of how he likes to have economic facts presented:

"Light hogs and pigs should be fed for the late winter market. The November or December market with business as it now is looks like a broken bridge ahead. Steer clear of it."

"Since 1914 it paid to feed from late August to the middle of September, 11 of these 16 years. Until October 1, 9 of the 16 years, until October 15, 5 of the 16 years. Of these five years, four years were small corn-crop years and one was a war year. Figure your own odds!"

Do you put up economic facts in this way? If not, how do you do it?

Back To Fundamentals

AMY KELLY of Kansas declares for fundamental principles. Too often we seek the adoption of practices, disregarding those fundamental principles that are the basis for applying practices with discrimination and judgment. Not how many practices are changed but how many are applied with intelligence is her thought.

In millinery, in clothing work, in house furnishing, and in landscape gardening she finds a study and knowledge of the principles of line and design essential. A woman discovers that she can not trim a hat satisfactorily until she understands the principles underlying the reasons for trimming hats. She masters the principles, applies them in practice, and acquires artistic skill. Then, when she undertakes to design and make clothing, to select and fashion house furnishings, and, yes, plan and put into effect landscaping effects, she sees that the fundamentals of making a becoming hat still hold. In this light, the home-demonstration program in a county is no longer a miscellany of projects. It becomes a structure built upon fundamentals, each part related to the other, each new enterprise serving to enrich and round out a harmonious series of activities that make for a satisfying living.

Has Amy Kelly the right idea? Is an understanding of principles essential before we put recommended practices into effect? If so, what are the best ways to bring about the desire to know principles? And how in home-demonstration work should principles be taught?

Visit Them, Show Them

VISIT them regularly. Teach them how to do by doing the job yourself first. That, according to Brodie Pugh, county agent for Claiborne Parish, La., is the way to get results in extension work. And he has the pastures, the silos, the cows, and the records in Claiborne Parish to show that he's done a good job. "If I could reach enough farmers that way," he says, "I would rely on the farm visit and the simple method demonstration. Circular letters, moving pictures, news articles, and meetings have all had their chance with me, but they fail to get the results that a good farm visit or a demonstration well planned and put over gives.

"When I started my pasture program," he continues, "I ran news articles, sent out circular letters, and had community meetings on the importance of inoculating clover seed. I thought I had done a good job, but when I began to check up I found that many farmers had missed the whole lesson. This experience and other similar ones proved to me that in extension work it is best to make certain that farmers understand the simplest operations."

There you have the case for the farm visit and the method demonstration as Brodie Pugh sees it. It's a clear issue. Who rises to defend the news story, the circular letter, the motion picture, and the meeting? What have they done for you?

An Easy, Pleasant, Happy Time

"HOW to turn the nightmare of annual report time into an easy, pleasant, happy time has been a problem that has occupied my spare moments for many a year," writes Stewart Leaming of Porter County, Ind. And, has he succeeded? Well, I would say, "Yes." Suppose we let him tell the story in his own way.

"I have not made the task effortless," he says, "but I have discovered a few short cuts that have made the job easier, more accurate, and more complete.

"Each month I mimeograph a summary of my work and send it to the State office, the members of the county board of education, the county council, county commissioners, farm leaders, bankers, and others who might be interested. They seem to be glad to get the report and feel that I am taking them into my confidence and are willing to give me theirs.

"My first step in preparing the narrative report is to take copies of the monthly reports and clip off the various items and paste them on sheets according to projects. This gives me a chronological summary of every project carried on in the county and forms an outline for the report. By taking up the sheets for a given project I can refer to my files, supply the details from the records and have the whole story in a few minutes.

"Each week I carry a farm page in the county paper which carries in detailed story form the results of the week's work. These pages I have bound and by referring to these articles I have as much detail as is desirable. By these aids the preparation of a complete and correct narrative report is a matter of hours rather than of days." R. B.

"4-H Club Work Has Economic Value"

THIS IS THE CENTRAL THEME FOR THE NEW SERIES OF NATIONAL 4-H RADIO PROGRAMS ANNOUNCED FOR 1932 . . . . . "LEARNING TO KNOW AMERICA'S MUSIC" IS THE THEME FOR THE 4-H MUSIC ACHIEVEMENT SERIES OF COMPOSITIONS PLAYED BY THE UNITED STATES MARINE BAND AND EXPLAINED BY R. A. TURNER

SCHEDULE FOR 1932

JANUARY 2.—What George Washington means to me.—*By club boy.*
What club girls can learn from George Washington.—*By club girl.*
How our club members will help commemorate George Washington.—*By State leader.*
George Washington comes home to his country.—*By staff member of Bicentennial Commission.*
America's negro spirituals and songs.

FEBRUARY 6.—What I learned about trees from 4-H club work.—*By club boy.*
Savings from clothing club work.—*By club girl.*
It pays to belong to a 4-H club.—*By State leader.*
A look ahead.—*By C. B. Smith, Chief, Office of Cooperative Extension Work.*
America's patriotic music.

MARCH 5.—My purebred dairy calf makes good.—*By club boy.*
Standardizing 4-H products.—*By club girl.*
What we parents think of club work.—*By 4-H parent.*
What's going on in the 4-H clubs.—*By Department of Agriculture staff member.*
America's hymns and religious songs.

APRIL 2.—4-H poultry pays.—*By club boy.*
Planning the home garden.—*By club girl.*
What 4-H club work has meant to our community.—*By community leader.*
Significant accomplishments of 4-H club work.—*By Department of Agriculture staff member.*
America's country dances.

MAY 7.—How my purebred litter was raised.—*By club boy.*
4-H handicraft activities.—*By club girl.*
4-H club work helped me decide my vocation.—*By county extension agent.*
4-H club work and vocational adjustment.—*By Department of Agriculture staff member.*
America's favorite songs.

JUNE 4.—How I won my trip to Washington.—*By club boy.*
How I happened to be selected for a delegate to the National 4-H Club Camp.—*By club girl.*
What our delegates to National 4-H Club Camp have done.—*By State leader.*
The National 4-H Club Camp this year.—*By Department of Agriculture staff member.*
America's favorite composers.

JULY 2.—Profit from potatoes.—*By club boy.*
How we reduced clothing expenses.—*By club girl.*
What our older 4-H club members are doing.—*By State leader.*
The local 4-H leader a cornerstone.—*By Department of Agriculture staff member.*
Final music identification contest.

AUGUST 6.—Farm economics help older club members.—*By club boy.*
Our club learns how to plan and serve meals.—*By club girl.*
Is 4-H club work practical?—*By State leader.*
What's doing in the 4-H clubs.—*By Department of Agriculture staff member.*
Descriptive music.

SEPTEMBER 3.—What the home garden gives us.—*By club boy.*
Canning 4-H products.—*By club girl.*
4-H leadership a goal.—*By State leader.*
Why club work is effective.—*By Department of Agriculture staff member.*
Contemporary composers.

OCTOBER 1.—This baby beef went to market.—*By club boy.*
Helping mother to manage the home.—*By club girl.*
What 4-H club work has meant to our State.—*By State leader.*
What 4-H club work strives for.—*By Department of Agriculture staff member.*
Modern operas.

NOVEMBER 5.—Third National 4-H achievement program.

DECEMBER 3.—4-H club congress program featuring Moses leadership trophy winners.

THESE PROGRAMS ARE BROADCAST OVER A COAST-TO-COAST NETWORK OF RADIO STATIONS ASSOCIATED WITH THE NATIONAL BROADCASTING CO., FROM 12.30 TO 1.30 P. M., EASTERN STANDARD TIME

"Always on the first Saturday of each month"

U. S. GOVERNMENT PRINTING OFFICE: 1932

Extension Service Review

VOL. 3, NO. 2 FEBRUARY, 1932

THE 4-H CLUB GIRL LEARNS TO COMBINE ATTRACTIVENESS AND COMFORT WITH ECONOMY

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

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In This Issue

JUST WHAT is the scope of economic extension? It's a question on which many of us have not been altogether clear. In vigorous forthright fashion Nils A. Olsen, Chief of the Bureau of Agricultural Economics, gives us the answer. He outlines in two articles on some essentials in economic extension the opportunities in this field as he sees them. The first of these, appearing in this issue of the REVIEW, deals with an understanding of world forces. In the second, he takes up next month the meeting of the problems at hand. It's a program that challenges.

IN FOURTEEN YEARS, the Washington Cooperative Egg and Poultry Association, with its chief market the breadth of a continent away, has built up an annual business of $20,000,000. It has accomplished, also, two important aims of every cooperative marketing association—a lower price to the consumer and, at the same time, a larger share to the producer of the consumer's dollar. As W. D. Buchanan, extension poultry specialist, brings out in the story the loyalty of the individual members of the association and the consistent effort they have made to maintain high production and marketing standards have done much to make possible this truly remarkable showing.

MARY COLLOPY of Wyoming gives us a new appreciation of what achievement days may mean when they bring together neighbors living 35 miles apart. Or again, when she mentions that in some instances special recognition is given to those women who come more than 100 miles to make their contribution to local home demonstration achievement. This sisterhood of the magnificent distances, we find, is just as keenly alive as are the women of the more closely settled communities to all that makes for convenience, saving, comfort, and charm in the home and its surroundings.

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COOPERATION results more from an attitude of mind than from a form of organization. That is the thought Dean L. E. Call of Kansas drives home in his discussion of the part of research and extension forces in developing agricultural programs and policies. "Yet," he adds, "much may be done to organize work in such a way as to promote cooperation." It's a thought, isn't it, that fits well into carrying on all extension effort?

On the Calendar

SOUTH DAKOTA'S annual State extension conference, to be held at Brookings, is scheduled for March.

RALPH TRAEFELET, county extension agent for Osceola County, Mich., gets from local undeveloped marl beds the lime supply needed to make a go of his soil fertility program. Unemployed road building machinery was put to work in getting out the marl, with a saving of $12,000 to the farmers of his county.

AS LEADER of the many forces which work for a more profitable and satisfying country life, the extension worker must assume many different rôles. So says C. B. Smith as he discusses the needs of professional improvement and how planned and supervised study can aid the extension worker to recognize and meet his problems successfully.

SEVENTY-FIVE KANSAS 4-H boys and girls at a summer camp in Rawlins County put in 4 to 5 hours a day studying the business of farming. They not only get the theory, but in line with 4-H tradition, take practice in conducting the business transactions they have been told about. Certainly, a new idea in hot-weather recreation!

STEPPING UP from one commercial poultry flock, only 12 people interested in making poultry pay, and no hatcheries in 1924 to 84 farms raising more than 500 chickens each year, 284 farms having more than 100 hens, and 3 hatcheries in 1931 is one measure of the progress that Mary Donney made in putting the live-at-home program into effect in Warren County, Miss. In promoting home gardens she was no less successful. A good living and more cash income on every farm was the end sought and the end gained.

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Some Essentials in Economic Extension

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Part 1. An understanding of world forces

WHAT is the purpose of economic extension? There is, of course, the purely economic, material motive to increase the economic returns of farmers. But it would be very short-sighted to set that as our only objective. Why do we wish to increase farmers' incomes? Because we wish to increase their level of living. After all, richer and nobler living is what we are all striving for. Material things alone do not yield the greatest satisfactions. The joys springing from the intellect and from a broad culture are far more soul-satisfying. Of course, we always have to bear in mind that good incomes help us build desirable levels of living.

But we are not even satisfied to say that the sole purpose of extension is to help the individual selfishly to build up merely his own income and level of living. There are still greater objectives. We must never forget that we are but individuals in a Nation, the welfare of which is all-important. It behooves us so to order ourselves that whatever we do is for the material, intellectual, and social welfare of the Nation as a whole. That is a great ideal that should be planted in the mind of every boy and girl, man and woman, in America.

World Economic Forces

In your extension work, particularly in the earlier days, you have wrestled with a type of problem that differs materially from that in economic extension. In the past you have dealt largely with the facts and forces of the physical and biological world. These contrast markedly with the facts and forces of the economic world. In my judgment one of the greatest needs now is to bring home to those whom we seek to assist the fact that there are fundamental economic forces operating in the world—forces that are dynamic, shifting, and powerful. They operate as a result of mass action and they profoundly affect our fortunes. We can not override these forces, but they can harm us if we do not operate with a full understanding of them, and it is very essential that we understand also that economic forces operate not only within the boundaries of the United States but that they are world-wide in their influence.

Look about you and you will see that this is so. World influences play upon the markets in all corners of the world

Nils A. Olsen,
Chief, Bureau of Agricultural Economics

to which our products go. These same influences react upon the prices our farmers receive for products sold at home. Witness the growing expansion of production in foreign parts and the mounting supplies poured into world markets. It is not difficult to see how this touches our lives in the United States. It is almost literally true that transportation and communication have brought the most distant parts of the world to our very doors.

But do not misunderstand me. While economic forces reflect mass reactions and often yield grudgingly to interference, it is equally true that the degree to which they operate may be influenced by human policies and activities. So true is this that many of the most serious situations facing our agriculture to-day grow out of unsound economic policies of the past or the failure to adjust our activities to world-wide tendencies over which we have no control. This distinction is important in our effort to help agriculture, because it emphasizes the responsibility that rests upon us to correct unsound economic policies and to adjust our activities to developments which we can not control.

Potent Influences

A recent farm-income report issued by the bureau shows that farm income, in the last two years, has dropped 42 per cent and prices of farm products 50 per cent. At the same time, production in the United States has remained at rather even levels from 1925 to date. There is a dramatic story in that report. Something in addition to surpluses have undermined agricultural prices.

But what has happened to our markets? We must understand these larger elements in the situation. We have been stressing minor yet important influences such as preferences of consumers, seasonal influences, and the like, upon demand. These factors affect the demand for agricultural products, but we can not explain the collapse of markets in terms of those influences. There are more powerful forces at work.

We can not measure accurately the effects of the various factors that have brought on the present situation, but at least we know what they are. The great destruction of wealth in the World War has had a great deal to do with undermining the purchasing power of consumers. This is particularly true of foreign peoples. We can not have a war of that kind without destroying wealth and ability to buy. We can not have a war of that kind without disrupting industry.

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We can not ignore the effects of war upon the economic well-being of our country. Our farm people should see this in a concrete way.

The financial elements, so much stressed in recent weeks, undoubtedly affect the buying power of peoples. Reparations, international debts, unbalanced budgets, upset currencies—all interfere with the purchasing power of consumers. Our policy of foreign lending doubtless bolstered our markets during recent years, but it is fair to ask if such policies are beneficial to our markets in the long run.

Consider for a moment the matter of protective barriers placed about our foreign markets. Following the war, under the driving force of the spirit of nationalism, various countries gradually moved up these barriers until in 1929 they were as high as before the war. Then came the collapse in price. In the effort to bolster their markets, every conceivable device was uncovered—tariffs, import restrictions, subsidies, controlled acreages, and any number of others. You as extension workers should not ignore these influences because they far overshadow the effect of many other elements.

Population Growth

Growth of population affects both domestic and foreign markets. At the present time our own population is increasing by a million a year compared with two millions 10 years ago. If this rate of decline continues, our population in 1960, it is estimated, will be stationary at around 25,000,000 more people than we now have. Of course, we may revise our immigration policy, but it would require a very drastic revision to restore the rate of increase that obtained 10 years ago. In other words, we are not likely to have a progressively increasing demand for farm products in this country such as we have had in the past. The consumer can shift from one food to another, but his stomach will hold only about so much. The same tendency in population growth has been observed in the industrial countries of northeastern Europe which have been our great markets. This tendency is less marked in southern Europe. Russia and the Orient, on the other hand, show a greater rate of population growth. If the trend toward smaller populations continues in the industrialized countries we shall have to take it into account in our plans; if it is reversed, we shall still have to take it into account.

Foreign Competition

Our farmers can not afford to blink the fact that during the last two decades there has been enormous expansion in the area of land the world over. The World War demoralized European agriculture. Overseas countries stepped to the front and provided the supplies then so urgently needed. Naturally they have sought to hold these gains and to expand still further. Meanwhile, European agriculture has come back and Russia looms up once more as a serious competitor. If the Russian agricultural program materializes, there will be competition of a very real nature for the American farmer. I hope that the tendency to increase the standard of living in Russia will continue; that will help absorb a larger portion of her supplies. But under present conditions, with the Government controlling supplies and apparently disposed to dump these supplies upon foreign markets, we have in Russia a type of competition that must be watched very closely by American agriculture. In most new countries—Canada, Argentina, and Australia, in which phenomenal agricultural expansion has taken place—there must still be large areas of arable land suitable for development. Just how much, no one seems to know.

So on the demand side there are powerful world forces undermining our markets. We must know what they are and adjust to them. On the other hand, competition has become increasingly keen. We can not stop it, but we can study it and appraise its possibilities of success and adjust our plans accordingly.

Next month, continuing the discussion of some essentials in economic extension, Chief Olsen will turn to the immediate problems we have at hand and the part that extension workers can take in meeting them. He will touch on the problems of submarginal lands, farm taxation, rural credits, the tariff, production adjustments, and the distribution of farm products.

What he will have to say regarding these problems and their relation to the extension program will be of absorbing interest to readers of the REVIEW.

RURAL BUILDING in Kentucky carries on. County agents report 1,271 farm buildings constructed or remodeled last year from plans furnished by the college of agriculture. These included 175 dairy barns, 88 hog houses, 626 poultry houses, 75 silos, and 308 other buildings put up on 1,001 farms.

In addition, 33 new homes were built and 80 remodeled with the advice and help of the county agents and plans from the college. The agricultural engineering section has prepared 144 sets of plans for all kinds of farm buildings and equipment which are sent out on request.

C. B. Smith,
Assistant Director of Extension Work

C. B. Smith Promoted

C. B. Smith, chief of the office of cooperative extension work, was appointed assistant director of extension work January 11.

Doctor Smith's new duties will include direct responsibility for the activities of the extension service force both in Washington and in the field. This service includes office of cooperative extension work, of which Doctor Smith will continue to be chief, and the office of exhibits and office of motion pictures. By this appointment Director Warburton will be able to give more attention to matters of major administrative importance, policies, legislation, extension matters affecting other governmental departments, interbureau relationships, and similar matters.

Both the director and the assistant director were associated with the department's first efforts in extension work. Director Warburton came to the department in 1903 as scientific aid in the office of farm management of the Bureau of Plant Industry and was sent to Texas to supervise demonstration farms. Doctor Smith became associated, in 1896, with the office experiment stations, and later went to the Bureau of Plant Industry where he was put in charge of the section known as field studies and demonstrations, into which was placed the then beginning county agent work in Northern and Western States. In 1921 Doctor Smith became chief of the office of cooperative extension work.

Good Living and a Cash Income on Warren County (Miss.) Farms

There are many fine examples of home-demonstration work in the counties, examples which show the very tangible results in the lives and homes of the people when a well-planned program is carried on over a period of years. This story, the second in the Review's series, describes the success which rewarded the efforts of a capable and enthusiastic worker in a Mississippi county.

HOME GARDENS on practically every farm in the county, well-filled pantry shelves displaying the canned produce of these gardens, 84 commercial poultry flocks, 284 farm flocks of more than 100 hens, and a curb market which brings in a goodly sum for the surplus garden and poultry products make Warren County, Miss., a fine place in which to farm and live. These advantages have come to Warren County during the last eight years with the development of home-demonstration work under the leadership of Mary Donney.

In February, 1924, when Miss Donney came to the county there was only one commercial poultry flock and no hatcheries. There were but 12 persons who were interested in making poultry pay and these organized the Warren County Poultry Association in April of that year. These demonstration flocks reported raising 6,754 chickens at a profit of $3,829 the first year. During the next five years the poultry association members reported a profit on sales of eggs and birds of $48,056. There are now three hatcheries and 84 farms where poultry is a major farming enterprise. Each of these farms raises more than 500 chickens each year. The number of farms having more than 100 hens is about 284. The interest in combating disease has resulted in the construction of approved brooder and laying houses on almost every farm in the county. The local market absorbs most of the eggs and fowls sold, and the price is unusually good. Standardization of eggs and packages has become an accepted practice.

The home-garden campaign was begun in 1924, and at that time many families bought all the fresh vegetables consumed in Vicksburg. At the present time only one farm home in the county reports no garden.

Curb Market Established

To aid in marketing the products of garden and poultry flocks, a curb market was established, sponsored by the local real estate board who obtained material from local lumber dealers to build sheds and supervised their building. Before the market was opened various meetings were held to discuss rules and regulations. The best methods of grading, standardizing, and marketing poultry and garden produce have been emphasized in the market until such methods are now the rule.

Another advantage of living in Warren County is the well-filled pantry shelves, showing a fine array of canned vegetables, fruits, and meat. When Miss Donney came to the county, five farm homes owned pressure cookers, and now more than 50 pressure cookers are owned in the county and are used to preserve vegetables and meats for the winter meals. In addition, large factory retorts, bought by the board of supervisors, were used by the home demonstration agent in four communities for those who did not own their own pressure cookers. A fifth factory retort was destroyed by fire which razed the school building two years ago.

The planning of the home-demonstration program in Warren County shows the real spirit of cooperation which exists between the farm women and Miss Donney. To decide just what should go into this program, two women from each community were chosen to serve on a committee. One of the two women represented a large landowner family, and the other, a tenant family. As far as possible women were chosen who had children at home. Thirty women were present when the meeting was called to order in the chamber of commerce committee room. A representative of the chamber of commerce had been invited to attend and was present for part of the discussion.

Homes Surveyed

A series of questions which had been mimeographed was distributed to the women. A blackboard was used for making notes during the discussion of each question. The first question was "What is the greatest need of the homes of your community?" The last one was "Do you think the women of your community meeting once a month as a home-demonstration club can do much toward solving community problems?" The discussion brought to light the fact that most of the women did not know with accuracy the conditions in the homes about them. This resulted in each one agreeing to survey 10 homes in her community by a personal visit to each. A mimeographed form was distributed to be returned in two weeks for tabulating. Then the women met again and were surprised to find that what they had thought major problems were often minor ones. The ones occurring in as many as five communities were made minors, and those that were purely local were left to the solution of the local group. It was agreed that this program would be revised at the end of three years. The survey figures were graphed and supplied to the chamber of commerce, county board of supervisors, and others.

After eight years of successful work in Warren County, Miss., Miss Donney has been transferred to the State office where she is now tackling another big problem as food preservation specialist for Mississippi.

College 4-H Club Plans a Busy Program

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.

Cooperation in the Conduct of State-Wide Agricultural Programs

L. E. CALL

Director, Kansas Agricultural Experiment Station

THE DEVELOPMENT of agricultural policies is a recognized function of an agricultural college. The agency within the college that should take the leadership in the execution of this function has not been clearly defined, but the two agencies upon which this function would most naturally fall are the extension service and the experiment station. Which of these should assume leadership; should it be vested exclusively in one or the other of these agencies; or should it be a joint responsibility of both acting cooperatively, become important administrative questions.

They may not present a difficult problem at those institutions where the administrative responsibility for both agencies, extension and research, are vested in one individual, but in other institutions where this responsibility is divided, many difficulties can develop. The way in which the problem is solved has an important bearing upon the ability of the two agencies to work together and vitally affects the efficiency of both.

The problem is being handled with a reasonable degree of satisfaction at the Kansas State College. It was recognized at the start that the responsibility for the development of agricultural policies was a joint one between the extension service and the experiment station. The two agencies have worked in close cooperation in the development of all agricultural policies and in the planning and execution of all agricultural programs. The way in which the two agencies have cooperated may be illustrated by describing in some detail the plan of organization of the Kansas wheat-belt program, one of a number of agricultural programs organized by the college for the promotion of the agricultural welfare of the wheat belt of the State.

Wheat-Belt Program

The wheat-belt program took definite form and became a definite working program of the Kansas State Agricultural College in 1926. It had its beginning many years earlier, however, in the work of a number of research projects of the Kansas Agricultural Experiment Station. These projects supplied the basic information upon which the program was built. The results of three of these projects will be mentioned in the way of illustration. The first was the wheat tillage project started in 1907. This project proved conclusively that it was possible to increase the yield of wheat greatly by early and thorough preparation of the seed bed. The project supplied one of the essential facts upon which the wheat-belt program was built.

A second research project that contributed to the program was a study undertaken for the control of the Hessian fly. Date-of-seeding plots to determine the correct dates to plant wheat to escape the Hessian fly were started jointly by the entomologists and the agronomists of the station as early as 1907. As a result of this work, safe dates were determined for the seeding of wheat, both from the tandpoint of escaping the Hessian fly and from the standpoint of maximum yields. A map of the State was prepared showing safe seeding dates for the crop in the different wheat sections.

Improved Wheat

A third station investigation that contributed to the program was the wheat-improvement project. As a result of this study, started in the early days of the experiment station, it was shown conclusively that the Turkey types of wheat more nearly meet the ecological requirements of Kansas than other types. Improved strains of this variety, such as Kanred, were developed. The experiment station became also a source of supply of pure seed of adapted varieties to be used as foundation stock by pure-seed growers. The advocacy of the use of pure seed of adapted varieties, therefore, became a definite part of the wheat-belt program.

In a similar manner other facts essential for the development of the program were discovered by station workers, such as methods for the control of smut, foot rot, and other wheat diseases, methods for the control of bindweed and other weeds, economical methods of farm organization, safe methods of combine harvesting, storing, and the like. Thus the foundation facts upon which the wheat-belt program was built were supplied by the experiment station.

Giving Facts to Farmers

The extension specialists on the other hand were developing technique for placing these facts in the possession of farmers. Their early efforts were more or less sporadic and not always successful. They did not always agree among themselves or with the experiment station workers regarding the best methods to be followed by the farmers or the best methods of taking the information to them. Frequently advice was contradictory in character when presented to the farmer by workers in different subject-matter fields even though based upon the best of experimental evidence. The need of cooperation and a unified program was clearly evident. It was this need, recognized by both extension and station workers, that supplied the stimulus for the setting up of the first 5-year wheat belt program in 1926.

As has already been stated the program was built upon facts secured through many years of experimental work. These facts were considered by committees in which subprojects for the program were planned. These subproject committees were usually headed by an extension specialist as chairman and were made up of extension specialists, experiment station workers, and county agents. After the subprojects were formulated, the committees meeting together determined how these subprojects should be coordinated into a unified program. After this tentative program was formulated it in turn was presented at a conference attended by extension representatives, experiment station workers, leading farmers of the wheat belt, and representatives of commercial enterprises interested in the wheat industry, such as railroads, grain men, millmen, and newspaper men. At this conference the tentative program was presented, amended where desirable, and a completed program adopted.

Program of the Institution

The execution of the program was the responsibility of the extension workers, but they were assisted by members of the staff of the experiment station with many special events, such as district schools, agricultural trains, tours, field days, and special meetings. The program, therefore, was neither an extension program nor an experiment station program but a program of the institution as a whole. It was planned cooperatively, executed cooperatively, and every member of the staff, whether in research

or extension, who was engaged in a line of work touched by the program, was personally interested in the success of it.

The procedure used in the formation and conduct of the wheat belt program has been following in the development of the legume program, the beef cattle program, the farm accounting program, and others for the betterment of agriculture conducted by the college. It has resulted in bringing about not only good cooperative relations between the station and extension workers but between the workers at the State college and the farmers and commercial interests of the State. While the spirit of cooperation results more from an attitude of mind than from a form of organization yet much may be done to organize work in such a way as to promote the spirit of cooperation. This has been done with a reasonable degree of success in the development of agricultural programs at the Kansas State College.

4-H Club Boys Form Cooperative

A 4-H club crotalaria association was organized by the 30 crotalaria club members of Union and Bradford Counties, Fla., reports County Agent L. T. Dyer. Crotalaria is a summer legume introduced in Florida during recent years which is proving very successful as a soil builder.

The boys each grew an acre of crotalaria last season and now all of them have about 12,000 pounds of seed to sell. This seed will be recleaned, pooled, and sold by the association at 3 cents per pound; 2 cents for actual expenses and 1 cent for the treasury.

Regular officers and an adult advisory committee, composed of parents of three of the boys, were elected and a constitution accepted. The purpose of the association, as set forth in the preamble, is to further the growing of crotalaria in the two counties and to sell seed for its members.

"At least 50 farmers in the two counties have already said that they expect to buy seed from the association this year," Mr. Dyer said.

This spring each boy will plant another acre of crotalaria and plant corn on last year's crotalaria acre.

THRIFT, in the form of thorough utilization of all available food, clothing, and household supplies, has been the guiding thought of North Dakota Home-makers' clubs during the past year, Grace DeLong, State home demonstration leader, states.

Michigan County Agent Finds a Way

ONE OF THE first problems confronting Ralph Trafelet, county agricultural agent, when he took up his duties in Osceola County, Mich., was to work out a soils-improvement program to raise the fertility of soils which were yielding less than the average produced by central Michigan counties on practically all crops.

An increase in the acreage of legumes was one of the first requirements of a soils-building program, but most of the soils were too sour to grow alfalfa without an application of some form of lime before the legume was seeded. Farmers who were interested in growing alfalfa stated that they could not buy lime to apply to their fields.

The county agricultural agent located several fine beds of marl, but the farmers lacked equipment to excavate the material and were reluctant to make any investments in expensive machinery. The soils-improvement program seemed to be hopelessly bogged down.

Equipment Borrowed

About that time, Mr. Trafelet noticed an idle excavating outfit mounted on a caterpillar tractor and owned by the county road commission. A visit to the county road commissioners yielded the information that the highway officers would loan the equipment for digging marl if the owners of the marl beds would sell the material, after excavation, at a reasonable price.

Setting the price for the marl in the stock piles and obtaining orders from farmers for the soil sweetener were next in order. With these details attended to, the excavator moved into the first pit and the first stock pile of marl was soon awaiting removal to prospective alfalfa fields.

Mr. Trafelet's annual report for 1930 states, "Nine beds approximating 15,000 to 18,000 yards of marl were dug at a cost of from 3.5 to 14 cents per yard. One cooperative digging association was formed with 15 men paying cash for 1,000 yards at 2.8 cents per yard. About 6,000 out of the 15,000 yards dug this year have been spread on 1,000 acres of soil."

This machine, located in Osceola County, Mich., has dug 34,000 yards of marl since April, 1930

To prove that this marl-digging project was not in the one-night-stand class, the report of the county agent in Osceola County for 1931 says that in 1931, 10 beds were dug by this excavating shovel. According to a story in The Grand Rapids Herald, farmers in Osceola County have saved $12,000 during the past year by the county extension agent introducing this method of marl digging. At the present time, approximately 19,000 yards have been dug and a large percentage has been sold.

OVER a 10-year period South Carolina 4-H clubsters have averaged 39 bushels of corn per acre while the State average is only 15 bushels per acre, says Theo Vaughan, assistant State boys' club agent.

Louisiana Agent Attacks the Pasture and Feed Problem

Claiborne Parish, La., is working on a dairy-development program. The present agent, Brodie Pugh, started work in 1929, following C. W. Davis, who had organized a bull association of 25 members, brought in 30 cows of fair breeding, and had negotiations under way for a cooperative creamery. With this beginning, County Agent Pugh decided the next big step must be an improvement in the pastures and the production of home-grown feeds. In the following article he tells in his own words how he went about it.

THE PROBLEM of building a pasture in this parish can not be appreciated unless you can picture a soil which is as nearly depleted of all plant food and organic matter as it is possible to deplete a soil by growing cotton on it for 20 to 30 years without a winter cover crop. The unterraced hillside with gullies across it was the type of soil on which I attempted to demonstrate pasture building. I was informed by good authority that it was impossible, but it was clear to me that if this was impossible then dairying in Claiborne Parish was impossible, because most of the land is just such hills. I do not want to give the impression that they are all washed away, but the farmers of this section would not think of devoting their best land to pastures.

Clovers and most of the grasses will make a fair growth on the hill soil in late winter and spring but during the summer they will burn over. This brought up another problem which is being met by planting Dallis grass. Dallis grass seed has a very low germination and are exceedingly high in price so I am urging the farmers to dig up the plants along the roadside and transplant to the pasture. All of the roads here are lined with the grass and one bunch will make several cuttings or plants.

Feed Problem

The feed problem has given me about as much trouble as that of pasture building. The 2-year drought and a depleted soil brought about an unfavorable reaction toward feed on the part of many farmers. I contended, and still contend, that with ordinary market prices, unless a farmer produces his own feed it is best for him to forget about dairying in any of its forms. I am glad to see that most of the farmers here are taking that attitude and are realizing something aside from work out of their dairy cows.

I have secured a general adoption of planting soybeans, cowpeas, velvet beans, and oats or rye for winter grazing by most farm dairymen. Some of the farmers pick the peas or beans and crush them for their concentrates. Cottonseed is exchanged for cottonseed meal or is fed to the cattle. When it becomes necessary to buy feed, I recommend buying the materials and mixing their own feed at home. The soybeans supply plenty of hay when at least 1 acre per cow is planted. Cowpeas are used for hay as well as lespedeza. Lespedeza is not generally successful due to not standing the summer droughts.

Silos Built

I started a silo program this year which has been successful, but I did not reach my goal. I planned to put in 25 trench silos but was able to get only 18 in this year. Failure to reach my goal was due to inferior seed and a drought in one section of the parish. The 18 silos have a capacity of 806 tons. I realize that this is a small tonnage for a parish to put up, but last year there was not a farmer who saved a ton of silage.

The saving of silage is new to all our farmers and naturally they are slow to try out a new idea on an extensive scale. This is especially true when they are putting the silage in a trench silo. To start with, there was not a cutter in the parish and the farmers were not able to buy one. I met the problem by going before the police jury of this parish and asking them to buy a cutter for filling the first silos. The body bought the cutter and made a charge of $5 per day for the use of the machinery. I had the cutter mounted on an auto trailer so that I could attach it to my car and move it from farm to farm. I had two ideas in view: First, to secure the machinery for filling the silos, and second, to have a good excuse to make the farmers wait until I could supervise filling the silos. This being a new demonstration, I was especially anxious for every silo to be a success.

Work Organized

Filling silos was organized on a community basis. The Summerfield community was the outstanding community in this parish. There were eight silos filled in the community, and every man was on the job until the last silo was filled. I have never seen a better spirit of cooperation demonstrated in my life. The farmers were not used to that type of work and the second day they complained about being sore, but they all took it good-naturedly and continued the work.

Some of the silos were filled with corn and velvetbeans, but most of them were filled with sorghum, Texas seeded ribbon and hone drip being the two varieties used. Corn will not make tonnage enough per acre here to justify a farmer to depend on corn alone for filling a silo.

One farmer who filled two of the trench silos is going to keep one of them for feeding next summer when his pasture gets short, and the other one will be used for winter feeding. This will supply succulent feed during the short pasture periods.

One of the best proofs of the value of dairy cattle to a cotton farmer was brought out last year when I made a drought relief survey of the whole parish. The survey showed that of every 100 farmers who had 6 cows or more only 35 wanted Government assistance. Of every 100 farmers who did not own 6 cows or more 95 called for immediate relief, and they needed all the relief they asked for. This fact proved to many cotton farmers that they needed cows on their farms, and they have made every effort possible to secure cows.

THE EXHIBIT of the United States Department of Agriculture at the south Florida fair, February 2–13, featured honey and egg production, increased incomes through standardization of dairy products, better practices in egg production, the food required for healthy growth in children, and the feeds required for fattening steers. Other subjects included were the control of flies, hog cholera, farm and woods fires, fertilizer values, and an exhibit showing enrollment of the 4-H clubs by States.

The Washington Cooperative Egg and Poultry Association

EFFICIENT marketing brings the producer and the consumer closer together. Poultry men in Washington are 8 cents a dozen closer to the New York consumer than they were in 1921. The Washington Cooperative Egg and Poultry Association has been the biggest factor in bringing this about, writes W. D. Buchanan, extension poultry man. The story of its organization, management, and financing is a record of efficiency.

The association was organized in 1917. The years 1916 and 1917 had brought a crisis to the poultry men of Washington. The State was sparsely settled but even so the farmers had not been producing enough eggs for the population. As late as 1916, 167 cars of eggs were shipped into the State to satisfy the local demand but suddenly there were more eggs than the people would eat. Other adjoining States also had enough. The Middle West had more than enough. The people who would eat the surplus eggs lived in New York, and there the eggs must go.

In February, 1917, a small group of poultry men met in Seattle to discuss their problem of marketing. The meeting resulted in the organization of the Washington Cooperative Egg and Poultry Association.

Financial Plan

The plan for financing the association is simple. Each member pays into the association a sum equal to 2 cents a hen, but never less than $5. In addition the association deducts 1 cent from the sale price of each dozen eggs sold and adds this to the capital stock of the member. That is all there is to the plan. It has never been changed except in the financing of the feed department.

The association now ships a carload of eggs every working hour of every working day. In 1922 it shipped 361 cars. In 1930 it shipped 2,156 cars. This is export business only and takes no account of eggs sold in Seattle, Tacoma, and other local cities and towns.

The association started with one station in Seattle in April, 1917. The second station, Winlock, opened May 20, 1920. Then followed Bellingham, August 10; Lynden, August 12; and Tacoma, August 17; all in 1920. It now has 23 receiving stations, 16 of them being candling and grading stations. These stations cover all of western Washington and three points in eastern Washington.

The association is spending about 15 cents a case, one-half cent a dozen, in the special preparation of eggs for the trade that it did not spend 10 years ago, yet its total costs are lower than they were 10 years ago. The cost per case was $1.15 in 1929 as compared to $1.13 in 1923.

The cooperative association has more than one iron in the fire. Organized originally to market eggs it has gradually assumed other duties associated with the business of producing eggs. Its attention to these varied details has helped its members to weather the financial depression of 1930 and 1931. The following

(Continued on page 24)

(Top.) Cooperative general office building in Seattle.
(Below.) Cooperative truck and trailer of a fleet of 120 trucks.
(Right.) Packing eggs in cartons for local consumption.

Kansas 4-H Camp Studies the Farm Business

A DIRECTED study of the farm business was the principal interest of 75 4-H club members encamped at Crystal Springs, Rawlings County, Kans., last summer. They learned how to buy and sell commodities, and how to keep an accurate record of these same transactions in the regulation farm account book. This work occupied from four to five hours of the day.

Each camper was given an inventory from a regular farm business to enter in his farm account book in the proper form and place. Then a regular schedule of business transactions for the first three months of 1930 was studied.

Business Transactions

Each one figured out how much his eggs, butterfat, and hogs were worth at current prices. He then went to the Hikeville store or elevator, established in camp, and sold his products. He bought gas at the Hikeville filling station for his auto and tractor. He bought shorts, bran, and other feeds at the Hikeville Farmers' Elevator and paid for these necessities with a properly written check drawn on the Hikeville State Bank, in which he had already deposited his surplus cash. He sold his wheat at the elevator, taking in return a check which he deposited at once.

Every check was scrutinized very carefully, and any inaccuracy or improperly written checks were corrected before the purchase or the deposit could be made. Finally, the facts of the whole transaction were written in the proper place in the farm account book.

After the sales and purchases were all made and the entries written in the record, the second inventory, including the value of buildings, machinery, feed, supplies, and livestock, was entered.

Then came the making of the final summary, or the balance sheet. These 4-H'ers were now farm business men and women, closing a year's business on their own respective farms, figuring up and charging off the depreciation, and learning to take their losses as well as their gains.

The camp was comprised of 4-H club members from Sherman, Cheyenne, and Rawlins Counties. It was held under the direction of County Agent D. M. Howard of Sherman County, County Agent H. J. Stewart of Cheyenne County, and County Agent R. W. Stumbo and Home Demonstration Agent Esther M. Huyck of Rawlings County.

NATIONAL 4-H CLUB RADIO PROGRAM

Saturday, March 5

My purebred dairy calf makes good. By club boy.

Standardizing 4-H products. By club girl.

What we parents think of club work. By 4-H parent.

What's going on in the 4-H clubs. By Department of Agriculture staff member.

America's hymns and religious songs.

Lead, Kindly Light	*Dykes.*
The Little Brown Church in the Vale	*Pitts.*
The Holy City	*Weatherly-Adams.*
The Old Rugged Cross	*Bennard.*
The Son of God Goes Forth to War	*Outler.*
God Be With You	*Tomer.*
Nearer My God to Thee	*Mason.*
Eili, Eili	*Katz.*

Washington Cooperative Egg and Poultry Association

(*Continued from page 23*)

table shows the importance of the various activities:

Department sales, 1930

Egg department	$11, 193, 080. 08
Egg meats department	364, 403. 41
Poultry department	740, 672. 02
Poultry cannery	224, 820. 43
Pad manufacture sales	15, 252. 70
Feed department	7, 897, 869. 26
Total sales	20, 436, 097. 90

The financing of the feed department illustrates a real value in cooperative marketing. Starting with no funds available for this department the association at first borrowed from the egg department. These funds have since replenished from profits on the sale of feed. The plan from the beginning was to sell good feed at a fair market price. No attempt was made to undersell independent dealers, although in some cases the independents brought down the price of their feed. The association has refused to follow a competitive market up and down, but has rather tried to run on a basis that would allow independent dealers a fair profit. The members ultimately get the feed at cost. Any surplus or profit resulting from over charges is returned to them in the form of preferred stock, drawing 8 per cent interest. The money representing this stock now amounts to $1,802,492.24. The feed profits returned to the members yearly amounts to a sum varying from $2 to $4 a ton. The feed department distributed 181,830 tons of feed to the members during 1930.

The following table shows how both producers and consumers have benefited from increased efficiency in the association's operations.

	1921	1928
Consumers' purchase price	$58. 35	$47. 25
Producers received	$33. 30	$30. 08
Spread between consumer and producer	$25. 05	$17. 37
Producers' per cent of consumers' dollar	57. 08	63. 39

The extension service has cooperated closely with the association ever since its inception. Several county agents assisted in the organization of the poultry cooperative by acting in an advisory capacity. While the organization is a centralized set-up, a large number of local poultry educational associations have been organized by county agents. These served to strengthen the morale of the organization, keep the members posted on poultry production and the operation of the association.

Extension service specialists have been in close contact with officers and branch managers of the cooperative for the past 12 years. The extension poultry man was a member of a college committee on feeds last spring, which resulted in the adoption of Washington State College ration formulas for the preparation of the prepared poultry feeds sold by the cooperative. Extensive use of various poultry bulletins has also been made through the organization.

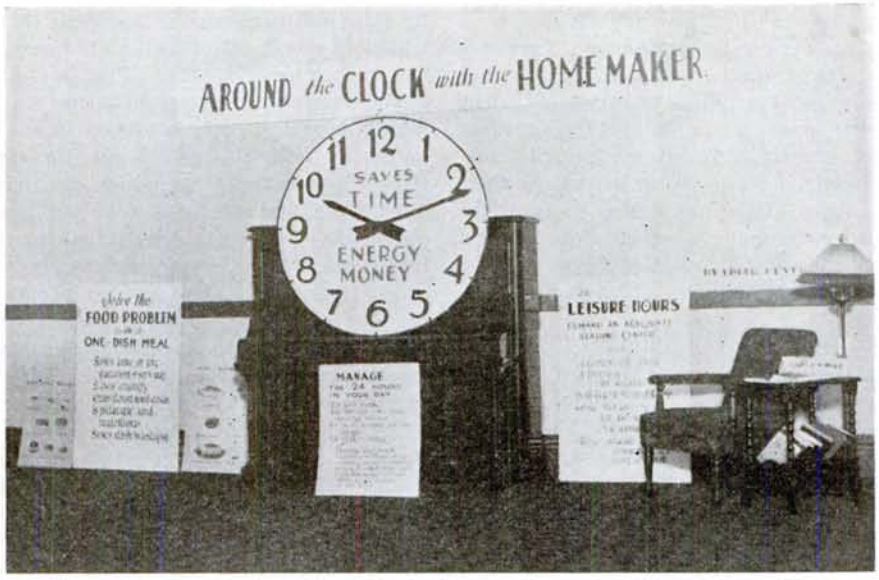
The association officials are cooperating with the extension service this year in making a success of the annual poultry schools, 18 of which are being held this winter. Several county agents are working with the cooperative in conducting better egg campaigns.

A COLORADO State organization of home-demonstration clubs was recently formed at a meeting in Denver attended by women representing 13 counties.

Wyoming Achievement Days for Adults

MARY COLLOPY

State Home Demonstration Leader, Wyoming Extension Service



A home management display at a county achievement day in Laramie County, Wyo.

IF INTEREST in home demonstration work can be measured through achievement days, Wyoming has just cause for gratitude this year. In 8 of the 9 counties having home demonstration agents, and in 1 of the 11 counties having county agents, achievement days were featured during October and November with an average attendance of 2,081 adults. To those families with the vast distances and scattered population of the West this figure will not seem small. It will bring quickly to mind the picture of almost 3,000 interested wives (and often husbands) leaving the morning work finished and driving from 25 to 100 miles with their exhibits, their share of the noon lunch, and their children to participate in the crowning event of their extension club year.

For Wyoming county agents this number holds greater interest when they recall that 16 county-wide clothing project achievement days, featuring style revues, were held during the summer months of this year with a total attendance of 1,851.

Mornings have been devoted to the work of exhibits. In some counties a short business meeting of the county extension advisory council has been held before lunch. Games supervised by recreation project leaders have proved popular with those not in the council meeting.

During the noon hour ample opportunity is afforded for all to view the exhibits. In a few counties potato shows arranged on the same day by the county agent have brought a large number of husbands to see the exhibits.

The county chairman is in charge of the afternoon program which is composed of stunts, songs, and reports featuring one of the projects. Music project leaders give short demonstrations of music-appreciation work.

This year a special effort has been made to have one or more county commissioners appear on the program. In one county in which rumblings of discontinuing the appropriation had been heard the three commissioners were made honor guests at the luncheon and each made a brief talk emphasizing his surprise and pleasure at the scope of the work reflected in the noncompetitive exhibits, charts, and the program.

Thrift Ideas in Exhibits

In keeping with the needs of the hour many thrift exhibits have been arranged this year. In connection with the meat-canning work in Goshen County an exhibit was arranged to show the money saved by canning beef instead of selling at the present low price. "This Little Cow Stayed at Home" was the clever caption used in this booth. A clear-cut chart showing in figures the butcher's profit attracted attention.

The evolution of canning methods arranged on four steps was the basis of another clever exhibit showing progress made since the days great-grandmother sealed her preserves in the stone jar. Dried vegetables and yeast were prominent in this booth as well as wild and domestic meat canned by a daughter in 4-H club work.

Beauty Not Forgotten

Gratifying indeed have been the large number of splendid home-beautification exhibits arranged especially in eastern Wyoming counties where trees are few and far between. Many of these booths have portrayed the contrast between the unkempt yard with no trees or shrubs and the neatly kept yard well planted with native shrubs and drought-resistant trees.

Clothing exhibits have fairly shouted a challenge in their displays of two dresses, one ready-made and one home-made which have been worn the same length of time by volunteer home demonstrators. Home sewing proves its point beside the faded bargain dress.

The home management project, given new impetus this year by the advent of Wyoming's first home-management specialist, has been reflected in clever playlets, stunts, and exhibits portraying time and energy-saving ideas, home accounts, and goals in home making.

Awards Are Made

Awards are made at the close of the afternoon program. Prizes are awarded in the following competitions:

1. Best club secretary book.
2. Club having largest number of 100 per cent local leaders present.
3. Club having largest number of points. (Base on score card for attendance activities, practices adopted, and the like.)
4. Best essay on value of a project.
5. Certificates bearing the seal of the University of Wyoming are given each woman attending all club meetings during the year and to all women completing the meal-planning contests.
6. In some counties recognition is given to those who have traveled more than 100 miles to attend.

It would be unfair to conclude a story of Wyoming achievement days without emphasizing the fact that the social feature is vastly more important than in States more densely populated. The contact with "neighbors" who live 35 miles away is decidedly pleasing to Wyoming women. Incidentally, the home demonstration agent gains a score by watching the dissolution of community lines and the birth of county-wide viewpoints on this big day.

Kaw Valley Develops Potato Industry

"PROFIT in the potato industry depends, first upon reducing the cost of production per unit, and second, upon receiving a higher price for the products grown, and these were the two points considered in the program for the Kaw Valley potato growers started more than 10 years ago," says Frank Blecha, district agent in the Kansas Extension Service.

Lowering the cost of a unit was a major production problem, and this the growers of the Kaw Valley accomplished by controlling the potato diseases and by employing better methods of cultivation. Their yield was tremendously increased per unit of land. At the end of the 5-year period, the figures of the Kansas State Board of Agriculture showed that the yield of potatoes was increased, on an average, 38 bushels per acre.

The second problem in the potato industry was that of marketing, and that phase entailed the problems of standardization, the use of branded packages, and finally the problem of distribution.

The proper distribution of the product meant centralized control, and centralized control meant a growers' marketing association.

Standardizing the Product

The marketing phase of the program was begun in 1924 with the standardization of the product. Before this potatoes were dug and gathered in baskets by boys from neighboring towns and cities, and sometimes big potatoes, little potatoes, rotten potatoes, and knobby potatoes were in the same pack.

Unfortunately, too many cars of these inferior potatoes worked their way into the market without being detected. The Kaw Valley potatoes fell into disrepute in the trade channels of the United States. Initial sales were not bringing repeat orders. Potato growers that were standardizing their product were "out selling" the Kaw Valley growers.

Grading Potatoes

In 1924, the whole situation was presented to the growers of Shawnee County by the extension division, and these growers voluntarily adopted the Federal grading rules. The growers requested the Federal Government to send inspectors to place the grade on every carload that was shipped out of this particular county. A comparison of prices received in Shawnee County with surrounding counties that did not have inspection service showed that the graded potatoes received an average of 17 cents per 100 pounds more than field-run potatoes grown in adjoining counties.

This did not escape the potato growers in other counties, who demanded that their potatoes also be inspected. The result was a compulsory State grading law, effective during the time the commercial potato men are marketing their products. It has now been in effect for five years, and the benefits of this law are more and more apparent to the growers of Kansas each year.

Cooperative Marketing

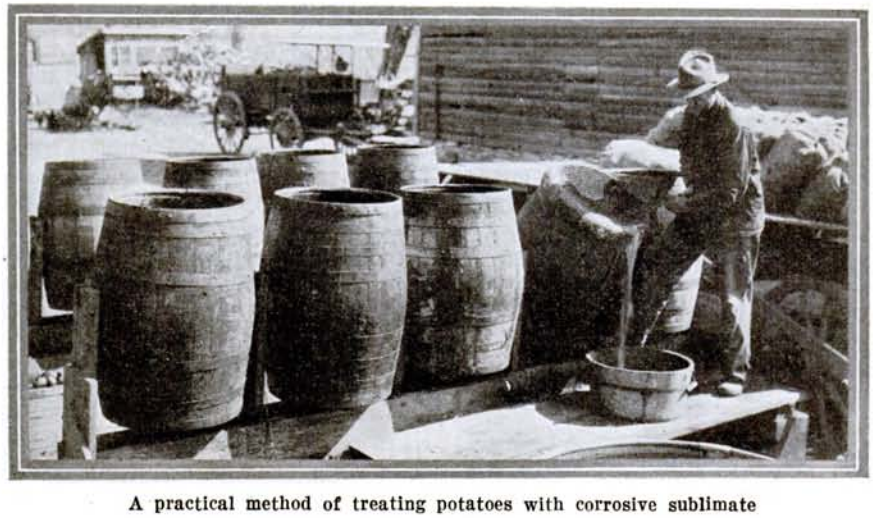
After the inspection service was secured, the last step, that of cooperative marketing, was attempted. There were many dealers handling the Kaw Valley potatoes prior to 1928, and each dealer shipped the potatoes wherever he pleased. Sometimes these dealers sent several cars of their potatoes to the Chicago market on the same day. Other producing sections would do the same, thereby flooding the Chicago market.

Studies conducted at the college showed that the Chicago price of potatoes governed the prices paid for potatoes in other sections of the country. Chicago might be flooded, but on the other hand Denver, Colo., or San Antonio, Tex., might be in great need of potatoes but it would be impossible to get the old price at Denver or San Antonio if the Chicago price had been lowered. This condition could be remedied only by having centralized control.

The first attempt at cooperative marketing of Kaw Valley potatoes in 1929 failed because there was an insufficient number of signatures to the marketing agreement to make the plan effective. However, the next year, early in 1930, with the cooperation of the Federal Farm Board a plan was outlined whereby the potato growers of the Kaw Valley could receive the benefits of cooperative marketing.

The grower signed a continuous marketing agreement, which allowed him to withdraw from the association for the following year by giving notice any time during the first two weeks in the preceding December. The association establishes a daily pool for the various grades of potatoes sold. Each grower producing a given grade gets the average price of that grade for that day. As Mr. Blecha explains it, "Suppose 50 car loads of potatoes of a definite grade are delivered on a certain day. The destinations of some of the cars are to far points while others are to extremely close ones. The latter will, therefore, usually net more than those going to a distance and are delivered with much less hazard. In order that there may be no dispute as to the destination of each car, a daily pool is established. The grower, according to the contract, is to receive approximately 75 per cent of the value of the potatoes when they are loaded on the car." A commercial firm was secured to sell the potatoes at $15 a car.

About 61 per cent of the car-lot tonnage was handled through the association. The potatoes were not sent to larger centers, there to be redistributed, but were sent directly to the points where the potatoes were actually consumed. The association was a dominant factor in quoting prices. While the advantages of this can not be definitely proved, the members of the association and business men in general realized fully the advantage they had through the association.



A practical method of treating potatoes with corrosive sublimate

Professional Improvement for Extension Workers

C. B. SMITH

Assistant Director of Extension Work, United States Department of Agriculture

EXTENSION workers have manifold responsibilities and problems. Extension work is a profession which calls for many diverse skills, aptitudes, experiences, and knowledges. Extension agents, specialists, or supervisors must assume many different rôles every day. They play the parts of office manager, farm or home advisor, leader of rural youth, investigator, analyst, demonstrator, reporter, speaker, news writer, teacher, organizer, leader of the many forces which work for a more profitable and satisfying country life.

New problems are put before extension workers constantly. The objectives and ideals in extension work are becoming broader and deeper. Programs of work are growing larger in diversity and content. New fields of subject matter must be explored and understood. New teaching agencies, new means and agencies need to be employed. Modern principles of education and teaching procedure should be applied.

How can the extension worker keep abreast? How can he meet the manifold problems successfully? How may he do the work with less strain? How can he make his leadership in rural betterment more result bringing? Every new problem, every changing situation, every advance depends upon new knowledge and new ways of using knowledge.

What Will Help Most?

The solutions to these problems may be obtained through planned and supervised study, through purposeful professional improvement. Few indeed are the extension workers who do not recognize this need. Many long for a chance to learn new facts, new ways, and means of doing the job better. They realize that they did not always select work in college which would fit them specifically for extension work. The subject matter knowledge gleaned in college was fundamental of course. But methods of procedure in solving extension problems were probably not gained there. Besides it is some time since college days. New knowledge is necessary. Why not go to college again? Why put off getting the needed additional training? The individual's pride in extension work as a career will grow as he gets down to systematic preparation and skilled fitting for that career. His satisfaction with his work will increase. The results he will obtain as a worker in the field of farm and home improvement likewise will grow. Moreover, the additional training and the larger successes he may win should prepare him for other responsibilities. Eventually, special training and fitness will be given full weight when advances and promotions are made.

Special Summer Courses

The opportunities for obtaining special training are multiplying. Several colleges now offer special courses for extension workers. These courses are on a graduate level, and credit toward a graduate degree may be obtained. Wisconsin and Cornell Universities offer such courses regularly every summer. Ohio State University has conducted two courses of this nature. Six weeks, the regular summer school session, are involved. The Utah Agricultural College last summer conducted a two weeks' graduate school for extension workers. The Oregon Agricultural College conducted a course during the summer of 1931 for home-demonstration workers. The Louisiana State University will conduct graduate extension courses for three weeks during the summer of 1932.

Various offerings and opportunities are listed in the summer courses. Cornell University gives:

1. Educational psychology for extension workers.
2. Educational philosophy for extension workers.
3. Organization and administration of cooperative extension work in agriculture and home economics.
4. Method in teaching in cooperative extension work.

Each of these courses allows two credit hours.

Wisconsin University, where special extension courses have been given for the last three summers, offered the following courses during the summer of 1931:

Agricultural education 110, extension methods, lectures and discussions, three credits.

Agricultural education 175, applied extension methods 175, two credits.

Agricultural extension 142, administration and supervision of extension, two credits.

Home economics 126, problems in home economics extension, two credits.

Agricultural education 103, extension research, credit to be arranged.

Agricultural journalism 140, writing for extension workers, two credits.

The extension agent who attends such summer schools has the opportunity to elect other courses in the regular summer-school courses which present a wide range. Courses are open in agricultural economics, including marketing, farm management, rural social organization, home economics, rural education, psychology, as well as the typical agricultural and arts and science courses.

Study Brings Satisfaction

An increasing number of extension agents, supervisors, and specialists now leave the work to carry on graduate studies during the regular college year. In many cases this is possible because the States have extended to their extension staff the same privileges of sabbatical leave which have been enjoyed by the resident staffs. The following States have provided some form of sabbatical leave: Arizona, California, Kentucky, Massachusetts, Michigan, Minnesota, Missouri, Montana, New Jersey, New York, North Dakota, Ohio, Oregon, Pennsylvania, Utah, Wisconsin, and Wyoming, and the Territory of Hawaii. Meanwhile, the deans of the agricultural colleges and directors of extension in other States are seeking to develop similar opportunities for their extension staffs. The first beginnings have been made in some States where individuals whose work has shown special merit are allowed leave, while in other States leave on pay for short periods is allowed, as for attendance at summer-school sessions.

TO DATE THIS YEAR five Colorado farmers have won memberships in the 600-bushel club. The first to win the honor this season was John Gredig, of Rio Grande County, who set a new world record for Bliss Triumph potato production, with 1,069.06 bushels to an acre. Each of these five large yields has been made in spite of a generally unfavorable season in Colorado.

Cost Analysis Exposes Leaks

SIX YEARS ago a representative group of citrus growers in the citrus department of the Orange County (Calif.) Farm Bureau started a cooperative project with the agricultural extension service to study the cost of producing Valencia oranges, says Harold E. Wahlberg, farm adviser in Orange County. The prices of oranges and returns to the grower were comparatively high, and the urge to analyze costs of production was not pronounced; but the extension service at the time was engaged in an educational program of demonstrations and field meetings for the conservative use of irrigation water in the citrus orchard. Investigations had revealed that many growers were using excessive amounts of irrigation water not only to the detriment of their trees, as reflected in lessened production and quality of fruit, but also apparent in excessive water bills and in the general receding of the water tables that furnish the bulk of the water for the citrus area in Orange County.

This new project, involving the segregation of all costs incurred in the production of oranges, immediately appealed as an important means for studying the effect of heavy irrigation practice on citrus production and income. So the project started in January, 1926.

Seventy-five cooperators have been submitting their itemized cost reports month by month and completed the 5-year summary last year. The original draft of the project contemplated a 5-year study and analysis of the business of growing Valencia oranges, but upon its completion last January the cooperators were unanimously agreed that their enterprise efficiency study should continue, inasmuch as a new economic period was upon them. The 5-year period then completed reflected costs and returns during an era of prosperity. The next five years they said, in view of declining trends, may tell a different story, so now we're in the sixth year of cost analysis. It is designed primarily to assist the individual grower to analyze the various costs involved in his production operations in comparison with other orchards and groups of orchards and help him direct his operations toward great efficiency of the dollar expended.

The Irrigation Picture

To get right into the heart of the thing, let us see what these 75 growers contributed toward the knowledge of irrigation practice from an economic standpoint. In 1927 the low-profit orchards used 20.2 acre-inches of irrigation water per acre in five irrigations, and produced 138 packed boxes per acre. The high-profit orchards used 16.4 acre-inches in four irrigations and yielded 360 packed boxes per acre. The average ages of the two groups were 14 and 20 years, respectively, which would naturally affect the production, but the data show that 20-year-old trees did well on 16 acre-inches that year and that the low-profit orchards could have saved an average of 4 acre-inches, or approximately $4 per acre for water alone. In addition, the cost of extra furrowing out and cultivation, which averaged $2.44 and $2.90 per acre, respectively, could have been saved.

The records for the next three years tell a similar story. The bulk of the economic evidence submitted by these growers indicates that profitable orange production is fundamentally dependent upon the availability of irrigation water in this arid country and that its use must not be abused. The optimum range of usage for Orange County appears to be from 16 to 20 acre-inches, depending on the age and size of the trees.

Less Cultivation Pays

The extension service spent many hours and days urging the reduction of cultivation expense, but not until the cost records were available was the proposition clinched in the average grower's mind. The efficiency study has revealed each year that there is no correlation between cultivation and returns or yield.

Cultivation costs for all orchards ranged from $5.68 per acre to $64.37 per acre. The 10 orchards reporting highest profit averaged $18.71 in cultivation cost. There are many large and small operators in Orange County who have reduced their cultivation costs 50 per cent or more in the past five years. About 25 per cent of the orchards in this study report higher cultivation costs than the $18.71 per acre for the most profitable orchards.

Fertilizer Leaks

Fertilization of citrus trees is essential to normal growth and production. The cost reports revealed a wide range of expenditures for this item. Some growers spent as high as $175 per acre for fertilizer and some less than $5 per acre. The experience tables for the 5-year period indicate that the upper figure represents a big leak in the production program. while the lower figure provides too meager a ration for normal growth. The most profitable orchards spent during the five years an average of $69.95 each year for fertilizer materials. Thirty per cent of the growers spent over $70 per acre for fertilizers. Savings up to $105 per acre can be made by these growers in this item alone, Mr. Wahlberg points out, and with the lower cost of nitrogen, organic matter, and other elements now the fertilizer expenditures may be materially cut under the above average for the most profitable groves.

Future Costs and Returns

"In this way," says Mr. Wahlberg, "the individual grower may analyze his own business and intelligently adjust his costs to meet the lowering trend of commodity prices." Commenting further, Mr. Wahlberg says: "The increasing planting and production of citrus fruits in this country and foreign areas will depress price trends. The grower who applies an efficiency analysis to his production business and thereby disposes of unprofitable trees and practices will be able to weather market conditions that may sink the grower who can not produce fruit cheaply."

Arkansas Women Study Clothing

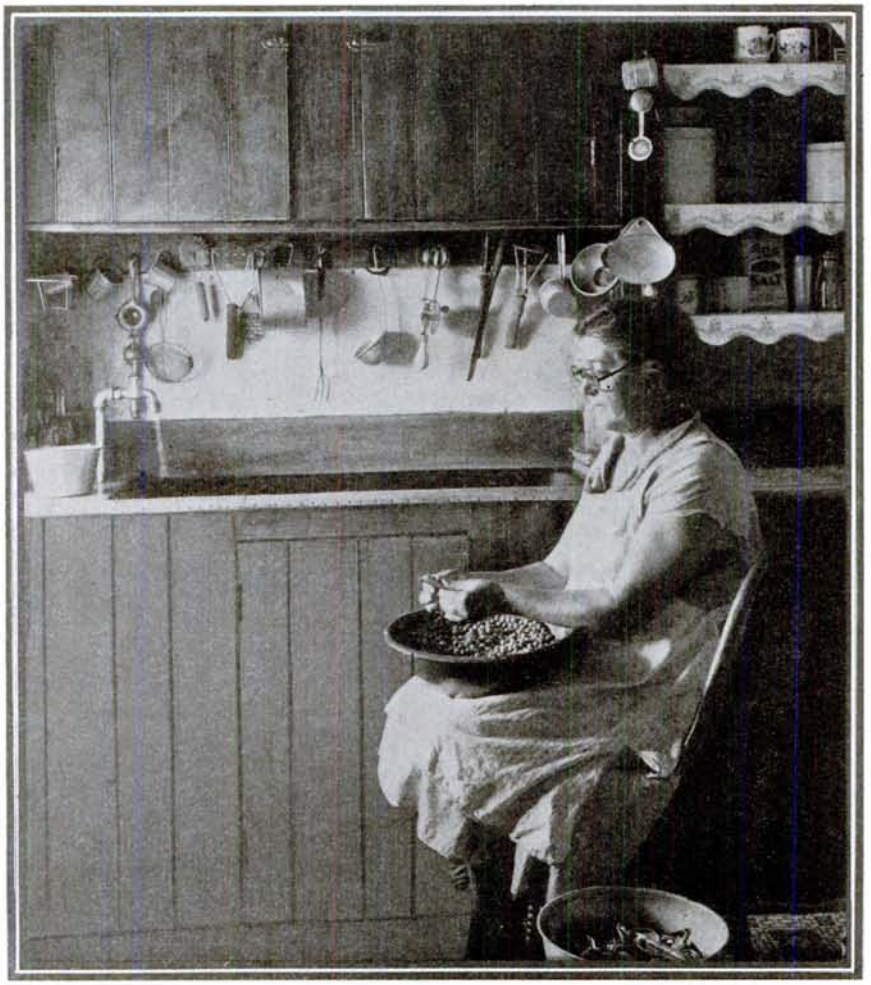
In 816 home-demonstration clubs in Arkansas 8,443 women are studying and working on clothing projects. These projects included care of clothing, selection of all the clothing for the entire family, construction, costume design, millinery, special work in planning the layette, and special work this year in remodeling and home cleaning.

"Clothes clinics" both in county and community centers have been held as a means of training women to help themselves and their families by restoring clothing and hats to up-to-date usefulness. Thirty-seven training demonstrations have been given to local leaders and club women who wished to improve their methods by Rosalie L. Wolfe, Arkansas extension specialist in clothing and household arts.

ABOUT ONE-TENTH OF MISSOURI local 4-H club leaders had been members of 4-H clubs themselves, and 49 per cent of these were leading clubs of the same project as that to which they had belonged, according to a leadership study based on questionnaires filled out by 613 club leaders in 1928.

Satisfying Living Sought

TWO projects carried on in Washington County, Me., are doing much to promote satisfying rural living in that county. The balanced community meals project was started in 1927 and has been gathering impetus ever since, while the campaign to put running water into the homes of the county was off to a good start last year.



Before the water was piped from a well it was necessary for this woman to carry water down a hill

A community meal in Washington County, Me., may contain baked beans and brown bread, but you can gamble it also contains other health-giving foods, to make it a "Square meal for health." Vegetables and fruits along with only one kind of dessert have forced the traditional New England baked bean over to one side of the seat.

Community Meals Improved

The project "Square meals for health" was introduced by Katherine Dennison, then home demonstration agent, to encourage the serving of well-balanced community meals using an approved form of table service. Seventeen communities carried the project in contest form in 1927, serving 110 meals to 1,866 people. In 1930, the project was carried with almost as much zest as in 1927. Approved meals numbering 101 were served to 1,507 people. New interest was aroused this year when the contest was changed from a State to a county basis.

There is little doubt that the "Square meals for health" project has left its mark in Washington County. Everywhere you hear, "It's a square meal for health." Folks who have used this practice so many times at extension meetings have a feeling that something is horribly wrong when they have suppers or go to suppers where everything is served too abundantly and promiscuously.

Washington County folks and representatives of the extension service have also been working upon a survey of water facilities within the rural homes which reveals that 36.1 per cent of the families carry water 126 feet; 22 per cent pull water from a well without the use of a pump, while 16.2 per cent have running water in the house. Clearly this is a problem which is worthy of the best efforts of all concerned.

The work on the project was begun in 1930 when G. W. Ackerman, staff photographer for the Office of Cooperative Extension Work, Washington, D. C., assisted the extension agents in taking a series of pictures showing the actual conditions as they relate to the water facilities in the rural homes in the county, from the simplest to the complete modern pressure types. These pictures were made up into a film strip with charts and diagrams to show how the various systems could be installed, which proved very useful in community meetings.

Newspapers Aid Project

A definite program of publicity through the press was outlined and used. This included announcements of meetings where the film strips would be shown and stories by folks in the county enjoying successful water systems. A newspaper mat was used in many papers to illustrate some of the systems. A story accompanying this mat carried the following head: Let Water Do the Running, Maine Farm Women Say.

These various extension methods have created an interest in better water facilities in Washington County and have assisted the county extension agents in compiling a definite prospect list of those who are interested. In this present year the agricultural engineer is working with the home-management specialist and the home-demonstration agent in developing plans with rural home owners who are on this prospect list. Actual installation of systems, adapted to the conditions and needs of rural families, will be started next year.

A TRADE OF CAROLINA pecans for Florida Crotalaria seed was made recently with the aid of County Agent J. J. Heard, of De Soto County, Fla. The South Carolina farmers had some pecans which they wished to sell. The De Soto County growers had some seed of Crotalaria, a new leguminous summer cover-crop plant which is especially desirable for planting in orchards, groves, and vineyards.

"We'll swap you some pecans for some Crotalaria seed, pound for pound," said the South Carolinians. "It's a bargain," said the De Soto farmers, and so the trade was made.

The Month's Best News Story

Rightly or wrongly, we give the palm this month to F. W. Hoepfner, Nueces County, Tex. He deals with an important crop and a piece of work important to his county. It's a follow-up story on the results of a fall clean-up campaign to reduce boll-weevil infestation. There were many good stories submitted. This one, though, is an unusually good example of the type of follow-up story that is often overlooked. During a clean-up campaign it is easy to maintain a steady flow of progress stories. It is mopping up thoroughly after the immediate battle is over that insures to us the real returns of a campaign. This story in a few words gives to the people of the county a precise picture of the extent to which extension recommendations were followed by them and what results were obtained in terms of reduced infestation in each community.

BOLL-WEEVIL infestation counts made during the last week in June show that those communities in Nueces County which practiced early clean-up of cotton fields last fall have a minimum number of boll weevil compared to the communities which were backward in their clean-up, according to information that has been received here from F. W. Hoepfner, Nueces County agricultural agent, whose headquarters are at Robstown.

Last fall, on November 15, while the early season clean-up campaign was underway R. R. Reppert, entomologist of the extension service and the county agent made observations to determine the percentage of clean-up of cotton fields in various communities of the county. It was found at that time that the London, Chapman Ranch, Petronila, Robstown, Driscoll, and East Bishop communities had cleaned up around 95 per cent of their growing cotton. In the western part of the county comprising Calallen, Banquete, and Agua Dulce communities, growers had cleaned up only 50 per cent of their growing cotton.

Observations last week showed that the early clean-up areas in the eastern part of the county showed from 2 per cent to 5 per cent infestation compared to 25 per cent to 80 per cent infestation in the western communities, it was said.

The presence of more brush pastures in the western part of the county, allowed hibernating quarters, together with backward clean-up accounts for the heavy infestation in these communities, Mr. Hoepfner said. It shows, however, that the campaign waged for the last four years for early clean-up of cotton fields after the cotton crop is harvested is showing splendid results in weevil control and should be evidence for its continued practice, he added.

Augusta County Booth at the State Fair

THE COUNTY home demonstration exhibits at the Virginia State Fair last fall were planned to show clearly just one line of extension activity in each booth. The exhibit shown here was prepared by Augusta County and based on the major project for women's clubs for 1931.

A set of six chairs was found in very bad condition at a farm home—two had the backs off, several were very much weather-beaten from having been thrown out of doors or left on the porch, and all of them were without seats. They were soft wood and too much battle-scarred to be nicely finished with oil and wax. The committee used these chairs to show the steps in refinishing soft wood. On each chair was placed one line of the following verse to show the different steps in the work:

Once in the attic dejected I stood,
They scraped, dusted, and sandpapered my wood,
Away to the store for some stain they ran,
Clear varnish, too, I seemed to demand
Rubbed with steel wool, a dull finish for me
A complete transformation, I think you'll agree.

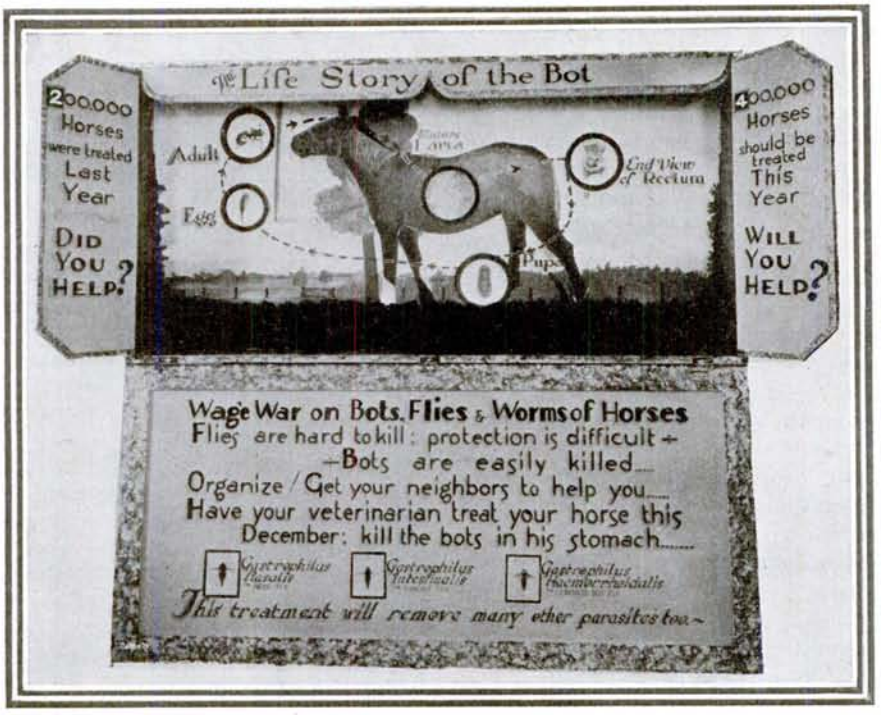
A wall hanging and two units of furniture and accessories which had been made or refinished by women in the county, were used in the background. As activity there were two women working in the booth showing how to refinish hard woods, such as mahogany and walnut, and also how to cane chair seats.

Each booth emphasized one subject, such as household linens; inexpensive kitchen equipment; table service; homemade toys; and health through good foods, exercise, and posture.

SORGHUM SATURDAY was observed recently in Arkansas as a part of the program to promote the use of Arkansas products. The home consumption of this product was emphasized by exhibits and demonstrations.

Iowa Wages War on Bot Fly

A CAMPAIGN to eradicate the nose fly of horses has gained impetus rapidly in several Iowa counties during the past two years. Conservative estimates place the number of horses treated in Iowa during the 1930–31 season at 200,000, says L. R. Combs, extension editor, Iowa State College.



The first step in the program was to educate farmers concerning the nature of the flies and their life cycle. Three distinct species of bot flies have to be dealt with in Iowa. The larvæ or bots of each of these, however, spend several months attached to the walls of the stomach or upper intestine. Carbon disulphide administered to the horses in the late fall or winter is recommended to destroy these bots and reduce the number of flies which will be present the next summer.

Bot control work in Iowa had its beginning in 1905, when F. C. Bishopp, of the United States Bureau of Entomology, met with the extension workers, veterinarians, and entomologists of the Iowa State College. During the two years following, the educational work went on and interest grew.

Campaigns Organized

The first public meetings for the consideration of the organizing of campaigns were held in the fall of 1927 in Morgan Township, Woodbury County, and Frankfort Township, Chicasaw County. Few men were found in Frankfort Township who were willing to pay a reasonable sum to have the recommended dosage of carbon disulphide administered to their horses, colts, and mules by a competent veterinarian.

In 1928 Dr. K. W. Stouder, extension veterinarian, and F. D. Butcher, extension entomologist, intensified the educational work, and among other things prepared an exhibit showing the life cycle of the nose bot fly and its course through the horse. The results were encouraging, for in the fall of 1929 areas of one township in each of several counties were organized as demonstrations for those counties. The same plan of first educating the horse owners about the flies, three varieties of which infect horses and mules, and explaining the way in which the larvæ producing the flies may be killed, was followed. Surveys made in these townships the next summer showed that more than 90 per cent of the horse and mule owners were well satisfied with the results obtained and the benefit to their horses from this treatment.

District Meetings

In the fall of 1930 series of well-attended district meetings were held where county agents, veterinarians, and horse owners were asked to come together to hear a discussion of the problem of controlling the bot fly and the results already obtained. News stories and some mats of cuts were prepared by the extension editor and distributed to local newspapers through the county agents and veterinarians. These stories explained the need for the nose fly control, explained how it should be done, and gave the results obtained in other places.

As a result of these meetings and publicity, calls were received for meetings in 36 counties where one or more townships wanted to organize. In all of these townships an organization was set up with a leader in each school district who circulated an agreement form on which horse owners who were willing to join the organization entered their names and the number of horses owned. When these forms were filled out they were sent to the county agent who in turn passed them on to the local veterinarian who had previously agreed that where a number of horses in a small area were presented for treatment, the cost of mileage, treatment, and material used would not exceed 50 cents per head. Treatment was administered in most cases during the months of December and January.

Veterinarians Cooperate

The bot-fly eradication project has had the hearty support of the Iowa Veterinary Medical Association and has resulted in many veterinarians working in close cooperation with the educational work of the local farm bureau along these lines. It has taught the horse owners that by close cooperation they can reduce the prevalence of parasites. Cooperation and working on a community basis have reduced the expense of the work materially for each man and have caused them all to realize that animal parasites are problems of increasing importance in a county where the livestock population is high and that when such problems become acute methods of combating them usually can be found.

So that the work might be more widely understood, an exhibit in motion was prepared to use at fairs the past summer and this fall. The exhibit illustrated a horse in the typical attitude of head tossing caused by attacks of the nose fly. Transparencies in the model of a horse beginning at the nose showing an adult fly making the attack which causes the head tossing, the "bots" in the stomach and as they are later passed out and the pupæ in the ground were illustrated in a cycle illuminated by electric lights. This together with appropriate lettering made an attractive and interesting exhibit of educational value and is in good demand in the territory where the project has been adopted or is being considered for next year.

Alabama and Oregon Work Together

A FEW YEARS ago two directors of extension got together at an annual meeting of the Association of Land-Grant Colleges and Universities and talked about winter legumes. One of these directors, Paul V. Maris, of Oregon, said that farmers in his State were producing excellent seed of Austrian winter peas and that they were looking for an outlet for them with a view to increasing their production.

The other director, L. N. Duncan, of Alabama, said: "That's very interesting to me, for our farmers in Alabama are increasing their winter-legume plantings and they are looking for a dependable supply of good seed. They want good seed at a low price."

Then they got together on it. Through two organizations of farmers a contract was made for the production and the purchase of seed. An organization of Oregon growers agreed to produce Austrian pea-seed on a given number of acres, and the Alabama Farm Bureau Mutual Supply Association agreed to purchase these seed at a given price. There was a guaranty on the part of the buyer as to price and payment.

The agreement gave the buyer authority to inspect the seed in the field and to supervise harvesting, sacking, and shipping. C. L. Hollingsworth, county agent for Clarke County, Ala., went to Oregon in the summer of 1930 where he inspected the fields and remained with the growers while they harvested and shipped their seed.

In 1930, Alabama farmers bought 1,290,100 pounds of winter legume seed, the majority of it being Austrian peas from Oregon. This was a substantial increase over 1929, and 1931 showed an increase over 1930.

The agreement which obligates a group of farmers near the Atlantic coast to a group of farmers near the Pacific coast has been beneficial to each group. The Pacific coast farmers have increased the production of Austrian pea seed with assurance of sales. Consequently, they are now in the seed-production business on a bigger and a more profitable scale.

On the other hand, Alabama farmers are obtaining for less money first-class seed, the quality of which is assured. They are proceeding with their soil-building program to which winter legumes is the key.

The direct connection resulted also in lowering the price of seed to the buyers because no middlemen were involved. It was a direct transaction. By a study of freight rates and shipping, reductions in transportation were made, some of the seed having been shipped by boat through the Panama Canal.

New Film Strip Series

THE SERIES entitled "Good Equipment Saves Time and Energy," consisting of 56 frames and illustrating good equipment which the home maker may install in her home, and which will save time and energy of herself and her family, has been completed by the Office of Cooperative Extension Work. The film strip may be purchased from the contracting firm at 44 cents, provided authorization to purchase is procured from the Office of Cooperative Extension Work.

Six new film strip series, as listed below, were completed by the Office of Cooperative Extension Work in cooperation with the Bureaus of Animal Industry, Rural Engineering, Chemistry and Soils, and the State of New Hampshire since August 1, 1931.

Legume Inoculation, series 206. 39 frames. Supplements Farmers' Bulletin 1496, Inoculation of Legumes and Nonlegumes. This series illustrates the value of legumes in the fixation of nitrogen. 35 cents.

Plows and Plowing, series 252. 40 frames. Illustrates the most important adjustments and the uses of the common types of plows. 35 cents.

Roadside Marketing, series 273. 60 frames. This series is mainly composed of illustrations sent in by L. A. Daugherty, marketing specialist, New Hampshire, collected from Michigan, Massachusetts, New Jersey, and New Hampshire. The series illustrates roadside-market stands, signs and advertising, displays, and diagrams of sales. 44 cents.

Good Equipment Saves Time and Energy, series 274. 60 frames. Illustrates that good equipment which the home maker will install in her home will save time and energy to herself and that of the members of her family. 44 cents.

Wool-Shearing and Preparation of Fleece, series 275. 54 frames. Illustrates various steps in shearing, preparation of fleece, grades, and grading. 44 cents.

Growing Healthy Pullets, series 276. 33 frames. Illustrates the more important points to be observed in brooding and rearing chicks. 35 cents.

IN THE State of Vermont, 1,500 4-H club girls are engaged in clothing work. A program covering seven years of work for these girls has just been arranged by Martha Leighton, assistant State club leader.

The first year's work is in the nature of home service, making of articles, care of clothes, and improvement of health. The work for the second year follows the same order under an advanced program. The third year marks another advance with emphasis on work connected with school life; then follow programs designed for four years of even more progressive work, entitled, "The Thrifty Maid," "At Home or Abroad," "4-H Club Outfit," and "Little Tots."

This plan for seven years of clothing club work provides an opportunity for membership by the older group of girls in whom the whole extension staff is interested in reaching. The plan does not imply that club girls will take the whole seven years, but does provide, however, work of interest to many different types of club girls.

According to County Agent O. P. Griffin and Maysie Malone, home-demonstration agent, over 500,000 cans of home-grown food were canned in Brown County, Tex., in 1931.

EXTENSION SERVICE REVIEW

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

C. W. WARBURTON, *Director*
C. B. SMITH, *Assistant Director*

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 ·

They Use The Facts

TO HAVE the facts is essential to profitable production. This is the thought of Harold E. Wahlberg, farm adviser for Orange County, Calif. Citrus growers of his county followed their production costs for five years. With the help of these facts, they expect in the face of growing competition to continue in business on a profitable basis. The big thing, as Wahlberg sees it, is for the individual grower to analyze his own business and intelligently adjust his costs to meet the lowering trend of commodity prices. The grower, he contends, who applies an efficiency analysis to his business and thereby disposes of unprofitable trees and practices will be able to weather market conditions that may sink the grower who can not produce fruit cheaply.

Why Do We?

WHY DO the Department and the agricultural colleges give out information on refinishing furniture, window curtaining, making rugs, and planting flowers and shrubs? What has such information to do with obtaining a better income from agriculture? Why should home demonstration agents devote part of their time to such matters? These questions came to my desk recently. I passed them on to Mary Rokahr, sure that she would have the answer. Here it is.

She says, "If farm life is to be successful, there must be happiness and contentment in the home. Whether or not there is such happiness and contentment depends in a large measure on how comfortable and attractive the home has been made. Is it a home to which the home maker welcomes the occasional visitor with pride and assurance? Do the children gladly bring their friends to it? If not, the life in that home is not a success. Happiness and contentment are lacking in it. Yet, if she knows how, the home maker, even with limited means, can make her home comfortable and attractive.

"It is through doing a multitude of little things in the right way that attractiveness and comfort are obtained. That is why information on refinishing furniture, window curtaining, making rugs, and planting shrubs and flowers is vital. The sum of these things is a comfortable and attractive home. How to obtain them, how to use them, is what the home maker wants to know."

Much Can Be Accomplished

ONCE IN A WHILE we come upon an unusually apt phrasing of some underlying thought on extension work. Essie M. Heyle, of Missouri, in writing sometime ago about attractive homes expressed such a thought in an unusually happy fashion. It's one, I think, that we can not afford to miss. "Much can be accomplished," she says, "when there is desire, knowledge, and willingness to work even though there is little or no money to spend." It's a saying tuned to the times. The knowledge needed we should be able to supply, but desire and willingness to work—they are things not so easy to give. Still, that's a part of the extension job, isn't it?

She Saves Mileage

PLANNED TRIPS save many miles and many dollars. This is a cardinal point in the plans that Pearl Sims, home demonstration agent in Plymouth County, Iowa, outlines for holding down expenses. She figures that without reducing the effectiveness of her work, she can save with careful planning much unnecessary travel.

In keeping up the work in communities already organized, Miss Sims uses letters and phone calls. She gets the letters out well in advance of the time when action is required. She cultivates the art of making the phone call as satisfactory and effective as the personal visit. When organizing a new community, personal visits, of course, are necessary. Miss Sims lists her prospects, plans her route of travel carefully, takes her lunch along, and puts in a full day of travel.

When training schools are scheduled, two are planned on succeeding days. She spends the night in the community instead of returning to headquarters. "It is no hardship," she says, "to stay with friends and such an arrangement last year saved 250 miles of travel for me in one township alone."

Here's One Answer

HERE'S THE WAY V. G. Applegate, county agent for Harrison County, Ohio, answers the farmer's question, "What must I do?" "Find something that you can do and then make it raise the cash income that you need, is what I advise," he says. "For instance," he continues, "one of our farmers dried 150 gallons of sweet corn and sold it at $2.50 per gallon. Another farmer raised 40 to 50 pound white pigs to meet a special demand. These pigs bring him from $8 to $10. Some of our local men are butchering and retailing their chickens, turkeys, and lambs at a considerable advance in price.

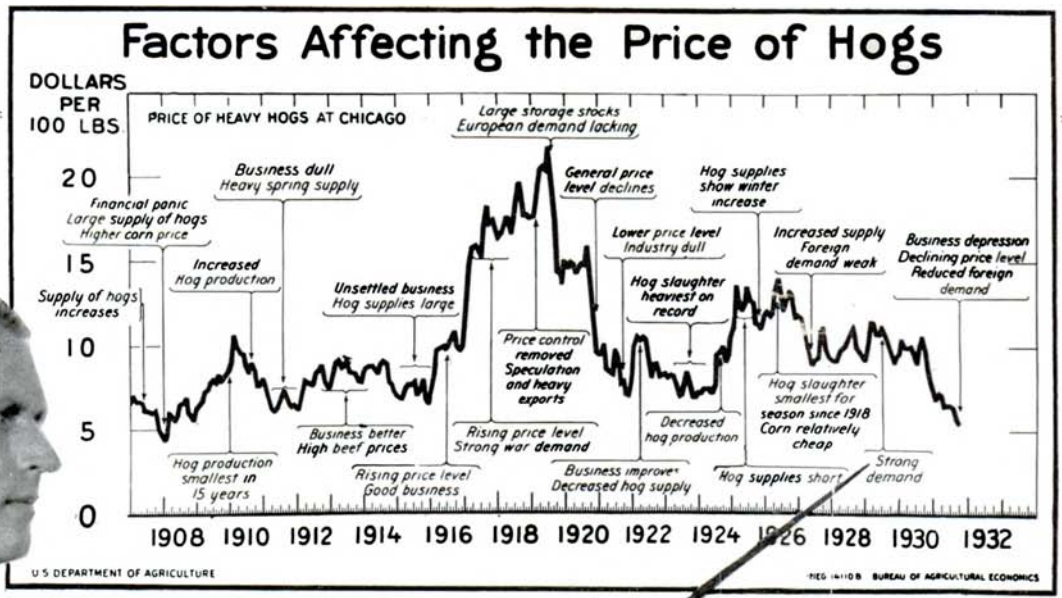
"Other farmers are studying markets in order to better know what to produce and when to sell it. Organized market tours conducted by the county agent have started this trend of thinking and the effect can be seen in the changing production of lambs and hogs and the increasing business of the cooperative shipping association."

On Our Doorstep

W. A. LLOYD laid a weighty problem on the extension doorstep in his recent address before the extension section of the Land-Grant College Association, discussing the future of extension work with young men and women. "The curve of extension interest, as I see it," he says, "is markedly upward from 10 to 13 years of age. After that, it drops rapidly and practically disappears at the age of 20. It reappears again at about 30 for a slow climb to 40 or 45 and then remains constant until 60 or 65 years is reached."

Here's a problem, indeed. What can extension do to interest this group of young men and women between the ages of 16 and 30? From this group, Lloyd points out, come the new recruits to the army of farmers and farm home makers of each succeeding year. "How can extension aid them?" he asks and then gives his suggestions. It's an address well worth reading and thought.

R. B.



CHARTS HELP TO TELL THE STORY OF THE OUTLOOK

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Statistics are not easy to grasp.

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3. PRINTED BULLETINS, Outlook Reports, and Graphic Summaries.

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BUREAU OF AGRICULTURAL ECONOMICS
UNITED STATES DEPARTMENT OF AGRICULTURE
WASHINGTON, D. C.

U. S. GOVERNMENT PRINTING OFFICE: 1932

Extension Service Review

VOL. 3, NO. 3 MARCH, 1932

CAPITALIZING THE HOME ORCHARD AND GARDEN

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

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

In This Issue

ALADDIN with his wonderful lamp was the forerunner of the agricultural extension engineer of to-day. A field of activity that magically touches every phase of American farming and farm life. That's what S. H. McCrory, chief of the department's new Bureau of Agricultural Engineering describes in handling the land, the problems of soil erosion, irrigation, and drainage. In farm operation, the problems of building, equipment, and power. In the home, problems of building and rebuilding, problems of lighting, heating, and ventilation, problems of water supply and sewage disposal. These are the field of the agricultural engineer.

EVERY ACRE of farm woodland in North Carolina under profitable managment. That's the ambitious goal that R. W. Graeber, extension forester, has set for himself and cooperative county agents. There are some 12,000,000 acres of such woodland in North Carolina, and Graeber sets 10 years as the time in which to get all this territory on a well-managed basis. Power to him!

WHAT IS the educational field with which the Federal Farm Board is concerned? What are the things that it wishes farmers to know and understand? Frank Evans answers that any and all educational effort leading to the permanent success of cooperative marketing is of deep concern to the board. Efficient management and financial independence are the major objectives sought for each cooperative. This means, he says, a better understanding of sound organization, safe financing, and businesslike operation by association members.

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ONE-DAY builders' schools for interested farmers, carpenters, and builders have been held in Kansas counties for several years. These schools, according to W. G. Ward, extension agricultural engineer, have been invaluable in bringing about a better understanding of desirable types of farm structures and construction methods on the part of all concerned.

On the Calendar

THE SIXTH national 4-H club camp is scheduled for June 15 to 21, inclusive. It will be held, as previous camps were, in Washington, D. C. Each State and territory may send as its representatives four 4-H club members, two girls and two boys, accompanied by two extension workers. The program for the camp includes daily assembly meetings with guest speakers of note, junior and adult conferences, studies of the work of the Department of Agriculture, and visits to places of historical interest in or near the capital.

UPSETTING the tradition that lime and potatoes can not mix—at least, not without serious detriment to the potatoes—Verne C. Beverly, county agent for Aroostook County, Me., proceeded to find the proper time and place in which to use lime in Aroostook's potato fields.

Failing clover crops, thanks to proper liming, were succeeded by heavy crops. When, following these heavy clover crops, potato fields jumped 10 to 15 barrels per acre, liming had won a secure place in the scheme of things on Aroostook's farms.

J. ROBERT HALL, county agent for Linn County, Mo., tells how and why to take good pictures of extension activities. It's his habit wherever he has a good demonstration to photograph it and to show it with pictures of other similar demonstrations at community meetings during the late fall and winter. "In this way," Hall says, "I show a demonstration that, perhaps, only 40 people have seen to over 4,000 people in my county and I get the idea across."

J. R. BECK of Polk County, Oreg., gives us a fine demonstration of how to use a news story to inform the public of a county of what extension work has accomplished locally in a particular field of endeavor.

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Extension Service Review

VOL. 3 WASHINGTON, D. C., MARCH, 1932 NO. 3

Engineering Extension Aid

S. H. McCrory

Chief, Bureau of Agricultural Engineering

THE Bureau of Agricultural Engineering is conducting investigations and researches in those agricultural and farm-home problems which have engineering aspects. When solutions to these problems are found they are published in bulletins and circulars and made available to extension workers in the form of recommendations. This is an engineering age when the forces and materials of nature are being utilized for the service and welfare of mankind to a greater extent than in any previous period of history. Engineering practices are utilized in practically every phase of American agriculture and farm-home life. Some of these practices need to be improved or replaced by new ones. The task of the engineer is to determine the improvement needed and to formulate recommendations in accordance with which the improved practices can be put into use. The extension objective of the bureau is to make these recommendations for improved engineering practices available to American farmers, their wives, and children. This is done through the Extension Service of the Department of Agriculture and through publications.

The bureau conducts studies to determine and analyze agricultural engineering problems by formulating for farm use, recommendations of engineering practices which will solve these problems, and makes these recommendations available to farmers through cooperative extension work. In order to carry out this work the Bureau of Agricultural Engineering is represented by an extension agricultural engineer in the Office of Cooperative Extension Work, who is the subject-matter specialist in agricultural engineering. It is his duty to make available to the State extension agricultural engineers the subject-matter recommendations of the Bureau of Agricultural Engineering and the extension-method recommendations of the Office of Cooperative Extension Work. In performing this duty he also acts as a contact man for the exchange of ideas and experiences between the extension agricultural engineers in the various States. The present specialist is S. P. Lyle, who was appointed to the position on September 9, 1930.

S. H. McCrory,
Chief, Bureau of Agricultural Engineering

S. P. Lyle,
Extension specialist in agricultural engineering

Engineering Practices

Since the Bureau of Agricultural Engineering has been established so recently, we will present here the nature of its recommendations relating to the adoption of engineering practices on farms. These recommendations, however, are not new, the same practices having been recommended by the former division of agricultural engineering of the Bureau of Public Roads, based on researches and proved practices. These recommendations are of interest to all extension workers, especially county agricultural and home demonstration agents, since engineering practices are related to all cropping and livestock activities and also to the mode of living of the farmer. The recommendations fall under four heads corresponding to four of the research divisions of the bureau, namely, irrigation, drainage, mechanical equipment, and structures.

Successful practice of irrigation antedates written history, but the opening to settlement of irrition areas in the Western States has presented new problems. Added to these are problems of pumping for surface, subsurface, and spray irrigation in many States in the humid areas. Recommendations on these topics and others are covered in 41 available bulletins and other publications of the bureau. In addition, motion pictures, slides, film strips, and other extension material have been made available on irrigation topics.

Drainage

Recommendations in drainage of special importance have reference to terracing of farm land to prevent harmful erosion. Low velocity of run-off reduces the soil carrying capacity of the water and makes practical a soil-building pro-

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gram with crops and fertilizers. The recommendations for terracing harmonize with those in tillage practice which tend to control run-off and its resultant erosion, and also help to insure the success of recommendations for the replacement and maintenance of soil fertility. In some areas of light soils and deficient rainfall the run-off is impounded behind level terraces, thus conserving both moisture and plant food.

Other drainage recommendations relate to the draining of wet spots in cultivated fields and to methods of maintaining existing drainage ditches. The reclamation of new land by drainage is not recommended. The subjects relating to drainage and erosion control are presented in 25 publications of the bureau, as well as motion pictures, slides, film strips, and other extension material.

Land Clearing

Recommended practices for land clearing and development are also presented in bulletins and in other publications and extension aids. Following the war, this activity took the form principally of demonstrating the utility for land improvement of salvaged war explosives such as picric acid, sodatol, and pyrotol. At present, activity in this field is directed not only toward the improvement of crop land by terracing, drainage, clearing, and relocation of field boundaries to fit the farm-crop rotations and pasture system, but also toward the balancing of labor, power, and machinery with the acreage, buildings, and livestock in order that the engineering recommendations shall harmonize with the farm-management, livestock, cropping, and home-improvement programs in the various States.

Recommended practices relating to mechanical equipment vary widely in the different sections of the country, depending on topography, soil, climate, crops, pest control, and marketing factors. Features of the development work in this field are the cooperative demonstrations the bureau has given with mechanical equipment where improvement in design or utilization has resulted from its researches. Reports of these investigations are available in 39 bulletins and other publications of the bureau as well as motion pictures, slides, film strips, exhibits, and other extension aids.

Building Plans

Recommendations in farm structures have been prepared for farm use as building plans, and bills of material distributed in blue-print, bulletin, and circular form. Twenty-seven bulletins on structures and appurtenances have been published, and more than 200 plans with bills of materials are now available. Copies of an illustrated and descriptive list of these plans were supplied to the State extension directors and to the State extension agricultural engineers three years ago, from which they were invited to make selections for additions to State blue-print service lists. Tracings of such plans can now be supplied for use in State blue-printing services. An additional means of developing the resources of the State extension blueprinting services is being arranged this year. Under the provisions of this plan a large number of the States are pooling their most popular building designs in an exchange system in which the Bureau of Agricultural Engineering acts as a clearing house for the States in the selection, filing, listing, and reproduction of tracings for blue-printing service. The State extension offices participating contribute designs on tracing cloth, and order from the exchange pool duplicate tracings of any designs listed. The plan also provides for agreement between extension agricultural engineers in the States on production of new building designs to avoid duplication of effort.

Our Cover

The cellar shown on our cover belongs to Mrs. A. S. Landthrip, Johnson County, Ark., and is just a sample of what has been done in that State as a phase of the live-at-home program. This was one of the many show places visited during pantry stores week when 36 counties celebrated the bountiful production and conservation of the vegetable and fruit crops in Arkansas this year.

Fifty-six home demonstration agents planned exhibits, tours, and other special events to commemorate the canning of hundreds of thousands of jars of food products.

This cellar contains 726 quarts of a considerable variety of canned products as well as a generous supply of stored vegetables.

Home Improvement

Engineering recommendations relating to home improvement are a feature of the structures program of the bureau. Lighting fixtures and running water in the kitchen are the modern improvements desired first in farm homes. Demand for such improvements as modern plumbing, heating systems, gas, and electrical equipment varies in different sections of the country. As an agency for the procurement of greater satisfaction from farm-home life, electric line service is becoming increasingly more popular. Providing information and making recommendations that will assure satisfaction to rural electric customers is an important means by which the bureau is endeavoring to aid extension workers in many States.

This article merely outlines the salient features of agricultural engineering extension work. Because of the broad contact of engineering applications, all of the subprojects in extension work in which the bureau aids can not be mentioned here, and space permits mention of only a few of the researches being conducted on which future extension projects may be based. The field of mechanical equipment comprises studies of very timely interest in which processes involved in the growing and harvesting of cotton, corn, sugar beets, sugarcane, hay, and other crops are being investigated and developed.

Controlling Soil Erosion

The studies in the control of soil erosion being conducted jointly by the Bureau of Chemistry and Soils, Forest Service, and Bureau of Agricultural Engineering, and cooperating State experiment station offices on nine farms in typical erosion areas of the Nation have already become of demonstration value in the extension field. Here the engineers are determining the best types of terraces to be used under various conditions of soil, land slope, and rainfall; the best methods of checking gullies and of restoring gullied lands; and the utilization of mechanical equipment with various crops on terraced fields.

Rural housing conditions are of especial interest at this time due to the activities of the President's Conference on Home Building and Home Ownership. Architects and engineers of the bureau are participating in the work of this organization with particular interest in improvement of existing farm and rural village homes. Studies of buildings for the storage of crops and agricultural products and for sheltering livestock are continually developing improvements in practices.

The agricultural industry, like all other progressive industries in the United States, must utilize the service of engineers. The Bureau of Agricultural Engineering working through the Extension Service is the agency of the United States Department of Agriculture for making engineering aid available to farmers.

Texas Bankers Aid Home Demonstration Program

MILDRED F. HORTON

State Home Demonstration Agent, Texas Extension Service

WHAT'S this? asked a stranger upon entering a Texas bank and seeing shelves and shelves of neatly labeled and arranged canned fruits, vegetables, and meats. The banker quickly left his desk and came out to explain. "That's a 4-H pantry set up by a home demonstration club woman and the home demonstration agent in this county. It shows what the farm women of our county are doing and is considered as one of the biggest steps toward prosperity by the bankers and business men as well as by the farmers. Every pantry in reality is a branch bank where the farm family cashes its check for wholesome and palatable food."

Placing pantry exhibits in the bank lobbies is one way Texas bankers are cooperating with the extension agents in encouraging the live-at-home demonstrations which, according to one estimate, have resulted in the use of 15,000,000 containers for food during 1931.

Organization Effected

A cordial and helpful relation between bankers and extension workers has always existed, but in 1929 the more or less hit-and-miss relation was replaced by a very definitely planned organization. It was then that the agricultural committee of the Texas Bankers' Association was reorganized so that each member became a chairman in his district. This territory corresponded with that of the extension service district. Of course, the general chairman is for the whole State. Every county has its key banker who works with the men and women agents and reports to the district chairman. Since the reorganization of the bankers' agricultural committee, a bankers' day, with a special program, has become a regular part of the farmers' short course at the Texas Agricultural and Mechanical College. Bankers from all over the State come to the college for this conference. The program for one day of each district meeting has been set aside for a joint meeting of bankers and agents of the district. During the day results of the year's work are given and plans for continued cooperation made.

Bankers Visit Demonstrations

As a result of the reorganization and these meetings with the extension agents the bankers have worked in many ways. In the first place, they have been actively interested in visiting demonstrations. Yards, pantries, living rooms, and gardens have been visited and the demonstrator has been given personal encouragement. In the canning work many bankers have made it possible for the women to borrow the money with which to purchase canners, sealers, and even tin cans wherever necessary. Sometimes the cans were paid for by the return of a percentage of the filled cans. Poultry flocks have been started, better houses have been built, and other improvements have been made through the loans made by interested bankers.

Seed for special vegetables for garden demonstrators have been purchased and demonstrations established with the results available to all the people of the county. Much asparagus, rhubarb, swiss chard, kohl-rabi, and other vegetables not grown in the State before have found their way to many Texas tables through this cooperation.

Crops Traded

In the panhandle district especially the bankers have been instrumental in making plans for bartering crops. The families are holding a reserve for their own use but are trading the surplus of their crops for those which they do not have—wheat for field peas, wheat for pears, wheat for cotton, wheat for meat.

Club girls and women have been given trips to the short course and to the State fair of Texas by interested bankers. These trips were considered a good investment since these recipients returned home with information and inspiration of great value to the women and girls of their clubs. One west Texas woman expressed the feeling of many when she said, "I don't know how we could have stood the drought if we hadn't been to the short course and had something else to think about all winter long."

Work Supported

In counties without home demonstration agents interested bankers have met the commissioners' court with the citizens of the county, and have presented the need and value of extension work and secured appropriations. In a few counties where there has been a feeling of economy on the part of the commissioners' court the bankers have assisted in maintaining the work—sometimes making it possible for the county to borrow the money for the support of extension work.

W. B. Lee, chairman of the agricultural committee of the Texas Bankers' Association, who succeeded Col. C. S. E. Holland, chairman at the time of reorganization, gave to Texas agriculture the slogan "Every farm a factory every week in the year." This was adopted at the 1931 short course, is being used on letterheads by the agricultural committee of the Texas Bankers' Association, and is being carried into the field as a living principle by the extension workers and bankers.

MORE than 600,000 pounds of wool were marketed cooperatively in Pennsylvania last year. This is the largest amount ever handled by the pools and represented the product of more than 4,000 flocks in the 36 counties served by the 28 cooperative organizations.

Two new organizations entered the field of cooperative wool marketing during the year, one in Berks County and the other in Northampton County.

Pennsylvania wool producers have carried on a 12-year program in cooperative wool marketing. During that time they have sold 4,578,000 pounds, and the rejects or unmerchantable wools have been reduced 10 per cent as a result of the lessons learned at the grading table.

County Builders' Schools in Kansas

THE county builders' schools, as held each year in the various counties of Kansas, are considered to be one of the most important means of acquainting farmers of the State with the recommendations concerning farm buildings.

Since 1920, the Kansas Extension Service has been giving assistance to farmers in solving their farm building problems. For the first five years, the work was conducted directly with the farmers by means of meetings and farm visits arranged by the county agricultural agents. A standardized farm building-plan service was started and a large number of plans were distributed.

As this program made no direct effort to reach either the retail lumber dealers or the carpenters constructing buildings in the rural districts, the farmer was frequently confused by the conflicting advice he received from his dealer, carpenter, and from the extension service. To remedy this situation and to extend the use of the recommended farm building plans, meetings were first held in 1926 for the benefit of both the building material dealers and building mechanics. These meetings, which were called builders' schools, were designed to acquaint dealers and mechanics with the reasons for advocating the adoption of the plans recommended by the agricultural college.

Schools Held

Fourteen counties arranged schools the first year with an average attendance of 12.7 dealers and mechanics. In most places the meetings were given a hearty response from those in attendance, and requests were made to continue them. A series of three meetings was first planned and later was increased to five.

The second year 22 counties held builders' schools with an average attendance of 16.8. There were instances where a few farmers attended, but no effort was made to encourage their coming. By limiting the attendance primarily to those directly interested in building work, it has been observed that they are more free in discussing the problems under consideration.

Additional counties desired these schools, and the third year 35 schools were held with an average attendance of 17.2. In addition, a state-wide meeting was held at the college. About 70 dealers attended a 2-day session.

The fourth year, 43 counties held builders' schools with an average attendance of 16.

For one specialist to reach this number of counties it was necessary to schedule some of the meetings late in the spring after the building season had begun. This resulted in a decrease in attendance at the late meetings. The general plan is to hold these 1-day schools during the winter months when normally neither the dealers nor the mechanics are busy. During the last year, 33 counties were reached with an average attendance of 19.7. For two of these counties, this represented the sixth program. A record is kept of those attending builders' schools, a few names showing a perfect attendance record for all six years.

In addition to the talks given by the extension specialist, the county agent, local dealers, carpenters, and farmers take part in the discussion. Several of the building-material interests, such as the Portland Cement Association, National Lumber Manufacturers' Association, and others have furnished representatives to assist with these meetings.

Film Strips Used

At the beginning of these meetings, the illustrative material was prepared in chart form. Later on in developing the programs, slides were used extensively. Last year, a pocket-size film-strip projector was used, which was found to be by far the most convenient method of carrying and showing illustrative matter.

In following up this work, the blueprint service has been found most useful, 2,720 sets of standard blue-print plans and specifications for farm buildings having been distributed last year. All of the 78 organized counties and 25 of the counties without farm bureaus were furnished plans last year which was a year of retarded building activity.

Approximately 25 per cent of the retail lumber dealers in Kansas have been reached through the county builders' schools conducted during the last six years. Probably all of those reached are having some influence on the buildings erected by their customers. The 2,704 new buildings, exclusive of silos, and 752 remodeled structures reported by the county agents are estimated to have cost in excess of $500,000. No record is available on the total farm construction for the year. It seems probable that the construction reported by the county agents comprises at least one-fifth of the total for the State. On this basis, the farm building-plan service has influenced 20 per cent of the 1931 Kansas farm improvements.

A Timber Crop for North Carolina

"EVERY acre of farm woodland in North Carolina under management" is the slogan of the forestry extension work under the leadership of R. W. Graeber, extension forester in that State. There are about 12,000,000 acres of woodland in the hands of the farmers and small land owners together with about 1,500,000 acres of idle or abandoned crop land which should be bringing in a profit in the form of a timber crop.

North Carolina with her varied industry offers a fair market for almost any kind of merchantable timber in reach of practically every farm section of the State. At certain seasons of the year, there is much idle labor on the farms which could be used profitably in cutting pulpwood, mine props, bolts for the manufacture of staves, crating, shuttles, handles, and baskets. The veneer mills, manufacturers of small dimension stock, and the crosstie market offer an outlet for much farm timber. The farmer himself has a market for the first crop to be taken from his woods—fuel wood. The farms of the State require approximately 4,800,000 cords of fuel wood annually for heating homes, curing tobacco, and other purposes. Tobacco curing alone requires nearly 1,500,000 cords annually.

Demonstrations have shown that an average of eight cords or more of thinnings can be cut from each acre and leave a full stand of growing timber. Thus a systematic harvest of fuel wood alone would enable the farmers to put 600,000 acres of their woodland under management each year. Add to this a selective cutting of all farm timber going to market and it would be possible to put the entire acreage of farm woodland under management in 10 years and reach the goal of "Every acre of farm woodland under management."

Some Essentials in Economic Extension

NILS A. OLSEN
Chief, Bureau of Agricultural Economics

Part 2. Meeting the Problems at Hand

In last month's REVIEW *Chief Olsen, in his discussion of essentials in economic extension, brought out the need of an understanding on the part of the extension worker of the powerful world forces at play in the economic situation. In this second installment he brings us to grips with the problems at hand and outlines ways in which the extension program may be adapted to meet them.*

IN LAST month's issue of the REVIEW, I outlined to you some of the powerful forces that are undermining our markets. I pointed out that we must know what they are and adjust to them. At home there are just as many serious conditions requiring attention. A few of them can be indicated briefly.

In the better farming areas, many farmers are not realizing fully upon their opportunities. This may be due to the fact that their farms are too small or too large, the combination of farm enterprises is not properly balanced, the use of power and equipment is not as effective as it might be, or to other factors. In practically every farming area there is wide variation in the efficiency with which farms are operated. Economic research and extension people have a great opportunity for service in this field.

Submarginal Lands

And then we have the submarginal land problem. Large areas are sorely distressed because of low incomes, heavy taxes, and the like. It is a dismal picture of great agricultural areas in which people evidently can live only under the lowest standards of living. This is the type of problem we are striking at in our land-utilization program.

H. M. Dixon, Chairman, extension in agricultural economics

Consider for a moment the farm taxation situation. The tax burden on farm lands is onerous and excessive. The farmer knows this is not an equitable condition of affairs and he must come to know what accounts for it. He can help correct this situation only if, as an American citizen, he insists upon its correction.

The rural credit situation is no less distressing. An appalling number of banks have failed. In my own home community, ordinarily a prosperous community, only a few small banks are left. Even the good risks in the community can not obtain accommodations which they sorely need. In some sections of the country there is complete paralysis of our credit and banking system. These are conditions that affect farmers in a very real way. The extension forces in my judgment should help farmers to a better understanding of these conditions and sound measures pointing to their correction. I have faith in the ability of knowledge to bring about results.

Tariff Policy

Everyone is or should be interested in the tariff. Farmers have a perfect right to know how the tariff policy affects their industry. It is not merely a question for politicians. It is a question that concerns them as much as reparations, international debts, and the like. If these problems have a bearing on his business—and they do—why should not the farmer have a good working knowledge of them and wield the proper influence in their solution?

On the other hand, many are the maladjustments in our domestic markets. Industrial depression, unemployment, credit contraction, and deflation have brought the purchasing power of consumers to low levels. The quantity and quality of products produced has not been adequately correlated with market demands.

Much is said these days about the margins between producer and consumer prices. Distributors come in for their share of criticism. Some of this criticism is just; some of it is unjust. The various functions of marketing can not be performed without labor and physical facilities. These entail costs. We must always be fair with the facts. But I recognize that something can be done to narrow these margins.

Attacking Problems

Flank attacks are all very well and necessary but our present situation requires a frontal and collective attack upon present problems. Such an approach will have to do with great underlying policies which have a far more vital effect on American farmers than most of them realize—perhaps more than most of us realize.

Eugene Merritt

H. E. Drobish

D. W. Watkins

A. E. Mercker

J. K. Wallace

These six men comprise the field staff of the department in agricultural economics e xtension and are the joint representatives of the Bureau of Agricultural Economics and the Extension Service. The unit to which they belong was organized in 1930 under the chairmanship of H. M. Dixon.

What is the philosophy which should animate the extension service? I have been deeply interested in the work of the extension service. It is striking at the fundamentals. We have attacked a problem here and a problem there with telling effect. But I feel sure it is going to be essential to better appraise the relationships between all elements in the situation and make a mass attack upon these several segments of the problem if we are to attain real and permanent results.

I should not be satisfied that the extension service has realized its full possibilities until it steps out and attacks some of the problems which prudence might suggest avoiding. But we must somehow get across to the farmer that great forces affect his fortunes. We must get across to him that he will have to adjust himself to many of these forces. On the other hand, we must help him see that much can be done to remove obstacles and barriers to success.

Meeting Competition

There are in effect two types of problems—one that is directly attacked by the farmer himself; the other in his collective capacity. On his individual farm he alone can act, but here are unlimited opportunities for constructive action. But questions like this must be daringly raised: With the breakdown of foreign markets and with the growing competition, shall the American farmer run to cover or shall he meet this new competition? After all, will not the most efficient win? In my judgment we are going to have to fight it out in the arena of downright, keen competition. And I want American farmers to realize the situation and gird themselves for the battle.

On the production side naturally you will stress the outlook, and the adjustments that should follow. There are limits to the shifts that may be made. But if the facts relating to each crop are laid clearly before the farmer, we can leave it to him to make his own decision. He must have the very best facts for his guidance. He should have every bit of information that will help him reach a good decision. Perhaps the size of his unit is not right; perhaps he is not using the right type of power, the right kind of machinery.

Utilizing Research

I am not in sympathy with the disposition to minimize the value of research in the physical and biological fields. Our friends in these fields have done invaluable work. They have increased the returns to American agriculture by developing new varieties of wheat, better products, improved strains of milk cows, control of disease and parasites. I do not know what we would do without them. But we must relate these results to results of economic research, and through a combination of technical improvements and economic adjustments realize the optimum results.

No one can gainsay the argument that it is perfectly sound and right to help every farmer to become efficient. If you increase a farmer's efficiency in production you are going to increase his net return. The man who has it in him to make good has every right to succeed; we ought to help him to succeed. On the other hand, many farmers are so handicapped by natural, economic, and other conditions that they can not succeed. You should have the daring to tell them so. If you carry through on the basis of that philosophy you can not be tripped up. It is sound.

Know Market Conditions

On the marketing side, it behooves the research forces of this country to provide a more adequate conception of the capacity of markets; when and how fast to feed these markets to realize maximum returns. We can not afford to stop there. The extension forces must so present and dramatize this information that the farmers of every section will know market conditions and outlook currently. There will be a certain amount of guesswork, but such service will take a large part of the guesswork out of marketing. There are many good farmers who do not know what we are doing in the field of standardization, inspection, certification, and the like. I am afraid altogether too few farmers are using the market news, crop and livestock estimates, and similar material now available. That information is hardly worth the paper we are putting it on if we can not reach the farmer with it.

Although the economic phases of your work are of vital significance, you as extension workers would make a serious mistake if you did not keep always before you the ideal of a higher standard of living among farm families. After all, that is what we are striving for. Let us know more about the best ways to expend the money we make; let us assist our people to elevate their level of living and to get the deepest satisfaction from life.

Repeatedly I have been impressed with the fact that although this depression is lashing us severely, it is not without its values. Many of us have come to realize, through it, that there are many things of consequence besides material goods. I would not, for a moment, minimize the importance of having the wherewithal with which to provide beautiful homes and the like, but I believe that we shall never get what we should out of life until we learn to enjoy the finer things that come from within. That realization and the ability to act on it form a significant part of the extension program in economics.

Sound Thinking Vital

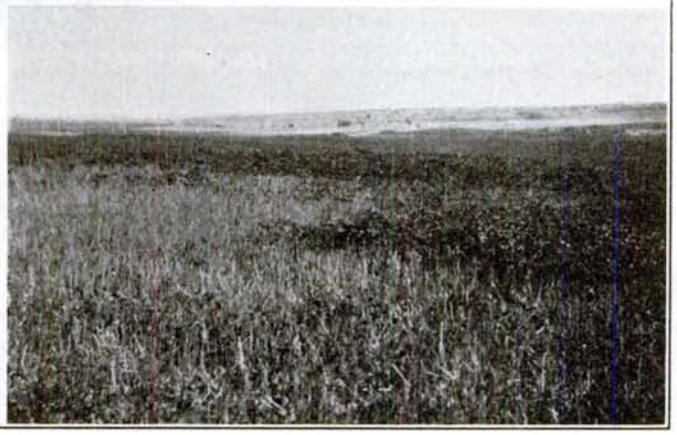
Even in regard to those great national questions that affect the farmer, he can do much to help himself if extension workers will help him to realize that he has some part in determining what the Nation shall do in the field of policies—as, for example, land policies, banking, currency, tariffs, international debts, relief measures. Lack of understanding has led to many wildcat proposals. Unfortunately wildcat thinking spreads rapidly because we have not cultivated sufficient fundamental thinking. We shall continue in serious difficulty, I fear, until we help our people think soundly on these questions. If we implant the right information in the farmer's mind, he will insist that his representatives do the constructive thing. He ought to so insist.

Knowledge—more knowledge—deep and searching—is what we need. Action on the basis of such knowledge, by the individual, the community, and the Nation, is no less essential. In many fields of endeavor what will count is action on the part of the individual. Action from the ground up is going to be all-determining. The economists and the statisticians will furnish us the facts, if we support them with our demand. But the extension forces hold the true key that will unlock the combination of factors that constitute the farm problem, for the key is education. If we are going to succeed in solving the agricultural problem, it will be through the intelligence of the farm people and the intelligence of the American people.

NINE district meetings were held recently in North Carolina to take the place of the annual extension conference. Each meeting included 10 to 12 counties represented by 2 farm women leaders, 2 farm leaders, 2 business men, 2 other interested people in the county, farm and home agents from each county, and the State staff. The economic status of each county had been determined and the specialists presented this material including what the county produced and what it lacked. The discussion centered around how the county could organize to establish better living conditions and to set a desirable goal.

Soil Improvement in a Maine Potato County

Applying lime on a check plot.



Clover growing where lime was applied and grass where no lime was used.

CUTWORMS, lime, clover, then more potatoes. This is a fleeting glimpse of the progress cash crop Aroostook potato growers made in increasing the use of lime from 350 tons in 1927 to 6,109 in 1931. "From cutworms to potatoes via lime and clover" might be an appropriate title for this story. Yet Aroostook potato growers are not interested in cutworms, lime, and clover primarily, but they are interested in their effect on potato crops.

Why mention cutworms? Just this—Verne C. Beverly, the Aroostook County agricultural agent, reports that in 1924 and 1925 clover failures were general throughout the county. In 1924, he says, the failure was due almost entirely to a heavy infestation of the black army cutworm. Literally hundreds of grain fields had no clover catches. An examination of these fields showed that a horde of cutworms had eaten the young clover seedlings. In 1925, he continues, clover catches were poor but the cutworms were scarce.

Thus far we have a problem, a puzzled county agent and a solution to be sought. We must digress at this point and explain that when Mr. Beverly attended college he was taught to beware of trying to reconcile lime and potatoes in the same soil because lime would promote scab. When he went to Aroostook County he found this to be a common belief among potato growers, and why not—they had been taught that way.

Lime Applied

A. K. Gardner, crops specialist for the extension service at the University of Maine, says that probably less than 200 tons of lime was used in Aroostook County prior to 1925. But it was from these scattered farms where lime was used that the county agent discovered good clover stands. With the aid of the crops specialist, the county agent induced 18 farmers to try lime in 1926 and they responded by using about 200 tons. From then on until 1930 the number of cooperators and the amount of lime applied increased as follows: 52 farmers, 250 tons of lime in 1927; 197 farmers, 900 tons in 1928; 528 farmers, 4,934 tons in 1929. As mentioned before, 6,109 tons were applied this present year.

Percentage of clover catches where lime has been used is even more significant than the total tonnage of lime, Mr. Gardner believes. In the 5-year period (1927–1931) applications of lime on farm demonstration plots gave an average of 89.7 per cent on clover catches. The parallel check plots where no lime was used showed an average clover catch percentage of 25.3.

Yield Increased

The Aroostook extension program for 1931 called for 300 cooperators as a goal. Mr. Beverly reports that 397 were enrolled and 345 have reported. Mr. Beverly also reports that a heavy crop of clover turned under has resulted in an increase of from 10 to 15 barrels of potatoes for each acre. This was the reason, he claims, that farmers were induced to apply lime.

Aroostook farmers have proved that it pays to lime but how much or how little lime is best for a particular soil in a potato rotation is another question. Back in 1925, Mr. Beverly had very little information on which to base recommendations on the amount to apply. In 1928, some tests were started by the Maine Agricultural Experiment Station which in time will throw light on the proper amount of lime to use.

In summarizing his reports on lime for 1931, Mr. Beverly says that the 345 cooperators made an average application of 0.472 tons for each acre. He also states that his cooperators were secured by the following methods: Planning meetings and project meetings, 214; personal calls, 83; project leaders, 68; and circular letters, 32.

Aroostook County, with an average yield of 245 bushels of potatoes for each acre in 1931, leads the country in both total production and production per acre.

As a tribute to their home demonstration agent, Mrs. Theodosia Hadnot, the home demonstration club women of Red River Parish, La., planted a tree on the courthouse lawn. Mrs. Hadnot was transferred to a position nearer her home after five years of successful work in Red River Parish.

Mountain State Tourist Homes in West Virginia under the supervision of the Mountain States Home Industries and the West Virginia Agricultural Extension Service entertained 4,000 tourists last season. There were 14 of these homes which came up to the requirements and displayed the uniform sign "Mountain State Tourist Home."

Research Aids Extension Effort

FACED with the problem of recommending practices in the development of the grapefruit industry, the Arizona Extension Service took steps to determine what practices should be recommended and to inform citrus producers regarding them, reports George W. Barr, extension economist.

Grapefruit production in Arizona on a large scale has developed since 1920. In that year, the year's crop totaled 65 carloads, as compared with 500 carloads shipped in the 1931–32 marketing season. Grapefruit plantings also continue on the increase in two Arizona counties, Maricopa and Yuma. In Maricopa County, 1,400 acres were set out in 1929, 3,070 acres in 1930, and 3,636 acres in 1931.

The industry is constantly facing new problems. Demands for expert advice come to the county extension agent offices not only from present producers but also from individuals who plan to go into citrus production. To meet this situation, the extension service detailed Reuben M. Hess, assistant county agricultural agent, Maricopa County, and Ronald B. Elmes, assistant county agricultural agent in Yuma County, to work with the State extension economist.

Data Obtained

Before definite recommendations could be made as to practices, however, it was necessary to have more data on the type of tree that would be the most productive in these counties and on how to grow this type of tree economically. The problem was taken up with the Arizona Agricultural Experiment Station and a plan for obtaining the data desired was outlined.

This plan called for a determination of the relative size of trees in each of 30 grapefruit groves. Each of these groves was planted in the spring of 1927 and consisted of Marsh seedless variety. The 30 groves comprise a major portion of the 1927 plantings and are rather evenly distributed over the entire citrus-producing area of Arizona, 20 being in Maricopa County and 10 in Yuma County.

Success in showing what practices were resulting in the largest tree growth depended upon an accurate measurement of the size of trees in each grove. In December, 1930, 36 grapefruit trees set out in the spring of 1927 were cut down and weighed separately. Before the trees were cut down, the circumference of each tree was measured 2 inches above the bud and then a correlation was calculated between a function of the circumference and the weight of the trees. From this correlative a line of estimate was obtained which was later used to estimate the weight of all citrus trees of 1927 plantings. Every seventh tree in each of the 30 groves was then measured and from this measurement a weight calculation was made.

At the same time tree measurements were obtained, data were also collected on the practices followed by the farmers. The type of soil on which the trees are growing was obtained from a recently published soil map. Arrangements were also made for the collection of cost information and production information for the year November 1, 1930, to October 31, 1931. After one year, that is, in November, 1931, a second tree measurement was made of the same trees.

Production Records

Obviously the goal to be reached in grapefruit production is not necessarily large tree size but rather large production per acre, and beyond that, large net returns. Those carrying out the study were able to get individual tree records of production on three groves. A correlation of this production in the fourth year with tree size showed a substantial advantage in favor of the larger trees. Then, too, a high correlation was obtained between the production per acre by groves, and the average size of trees by groves. The other factor, that of net returns per acre, is a little hard to calculate on young citrus trees. This, however, was one of the factors analyzed in the detailed study.

During the year, the county extension agents kept the cooperating citrus producers in close touch with the progress of the study. Each producer was advised of the size of his grove in comparison with the average of all groves measured. He was advised, also, as to the relationship between his practices and the practices of the producers who had obtained the largest tree growth. Later, when the production returns were in, each cooperator received a statement showing his production per acre in comparison with the production of the average of the cooperators. The final report to these cooperators compared the practices followed by that third of the groves making the largest growth during the 12 months with the practices followed by that third of the grove owners whose groves made the least growth during the 12 months.

In this way, the leading citrus growers of the State had the opportunity to understand and to see the need of research as a basis for effective extension work. This understanding of the basis for extension recommendations on the part of these leading growers, and what they told other growers in their communities about the results obtained, strengthened in no small degree the efforts of the extension agents to encourage each grower to adjust his practices with respect to the quantity of water applied, number of cultivations, and amount and kind of fertilizer used to obtain the largest net returns.

W. P. Moore

Extension workers in Virginia have suffered a severe loss in the death, on January 24, of the assistant director, William Poindexter Moore. Mr. Moore had been associated with extension work in Virginia for about 25 years, first as county agent in Bedford County, his home county; then as special agent; later as district agent in southwest Virginia; and in 1918 he was made assistant director with headquarters at Blacksburg. Mr. Moore was a graduate of the University of Virginia. County agents and district agents from all over Virginia came to the funeral to honor the memory of their old friend and coworker. One group of agents drove over 300 miles. Mr. Moore is survived by his wife and two sons.

In speaking of Mr. Moore's death, Director Hutcheson said, "I consider Mr. Moore's death an almost irreparable loss to extension work in Virginia, the greatest, indeed, that we have sustained."

A Home Information Center

A home information center for Greene County, Ark., has been established by the home demonstration agent, Mrs. R. B. Rogers, as a result of her trip to the President's conference on housing and a long-time interest in better homes.

Such subjects will be emphasized as house plans, landscape gardening, built-in conveniences, plumbing, interiors, furnishings, draperies, electrical equipment, music, books and pictures, and child care and development. Each subject will be presented for one week. Home demonstration club women will take turns staying in the center, which will be open two or three evenings each week to give the men also an opportunity to attend.

The Farm Board's Part in Agricultural Education

FRANK EVANS

Member, Federal Farm Board

THE Government performs many of its functions through departments. The minutes of the Federal convention of 1787 make reference to the respective departments which the members of the convention had in mind and through which the executive business of the Government might be performed as such departments from time to time should be established. Only general reference to the subject was made, however, and that was in such terms as foreign affairs, domestic affairs, war, marine affairs, and finance. But in the course of development of the functions of Government, the Departments of Agriculture, Commerce, Labor, and others have also been built up. The growth of commerce, industry, and finance has given rise to various commissions including the Interstate Commerce Commission, the Federal Reserve Board, the Shipping Board, the Farm Loan Bureau, the Federal Trade Commission, the Tariff Commission, and the Federal Farm Board.

The question of the establishment of this Farm Board, the youngest of these agencies, had been a paramount question in the public mind for 10 years. The question as to its need arose as an economic issue, but it later became an issue of general public interest and one of first importance. It was discussed throughout the country in 1928, and the convening of a special session of Congress later to deal with it further emphasizes the importance it had assumed. Not only farmers, but business men generally had in mind the creation of a Federal agency to represent the business side of the agricultural industry.

The 1928 report of the United States Chamber of Commerce gives the result of a referendum vote which is in point, upon the following proposal:

"The committee recommends that a Federal Farm Board be created, the members to be appointed by the President of the United States, and be charged in considering the problems peculiar to agriculture * * *."

The recommendation was adopted by a vote of four to one.

The business men's commission in its report of 1927 recommended:

"That a Federal Farm Board, consisting of a small number of men appointed by the President, should be established to aid in the stabilization of prices and production in agriculture * * *."

The farmers are interested in the work of the Federal Farm Board and in the agricultural marketing act much as a previous generation of farmers was interested in the act which provided for

Frank Evans,
Member, Federal Farm Board

the establishment of the land-grant colleges. The farmers availed themselves of the advantages of this latter measure. It is so often said that it has become commonplace, that American farmers are to-day, as a group, the peers of any agricultural producers anywhere, and this is conceded to have been made possible largely as a result of the beneficent influence of Government policy as declared through this college measure. This latter measure has been in operation long enough so that it is now taken for granted, and rarely, if ever, does anyone in these days question its worth.

The marketing act can not be satisfactorily appraised without taking into consideration this other epochal agrarian measure. This other measure was originally designed to make better farmers—better producers. The marketing act is designed to make better merchants of these better farmers. The two acts may well go hand in hand; one can not be wholly effective without the other. They are in a sense interdependent. The one without the other is like a manufactory without a sales force or a transportation system without a traffic department.

Lincoln signed the agricultural college bill and we now have agricultural colleges in every State in the Union. They have served as a major factor in the development of a great army of men and women, located in nearly every county in the Nation, and teaching agriculture both by precept and example. Their work is not the work of the schoolroom; it is the work of the field. Their hours are not the hours of the time-server, but the hours of the servant. The extent and the quality of their service is not measured by the check book. As a result of their work we have farmers' community meetings, classes in farm management and home economics, boys' and girls' clubs, health programs, studies in marketing and valuable aid in building of marketing associations, and programs for the improvement of rural life generally.

The production phase of agriculture has been well provided for. Indeed, production has in some lines been expanded beyond existing needs. Distribution alone has been left to haphazard methods. The agricultural marketing act is designed and intended to bring about improvements and economies in the distribution phase of agriculture. Of course, it is not perfect, but as its worth is demonstrated, the time will speedily come when we will accord to it the same confidence and the same appreciation which we now give to the act that provided for the production phase of agriculture. The Farm Board is the agency through which this act is to be administered, and this is the all-sufficient reason for the interest of the farmer in the work of the Federal Farm Board.

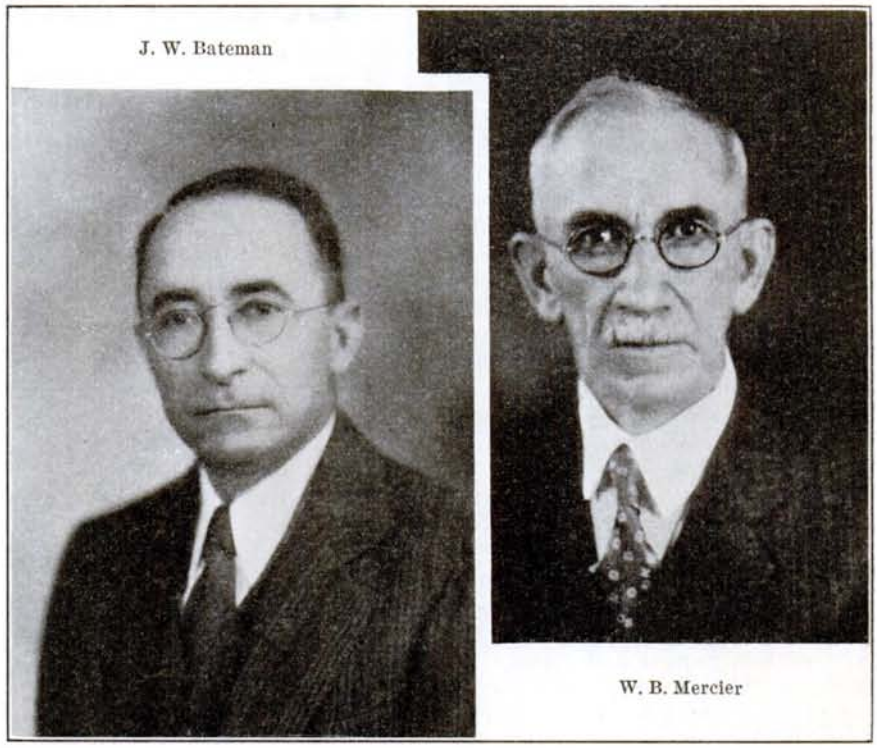
The agricultural marketing act is not in the nature of an emergency measure. It provides for a long-time constructive program. It is just what its title implies—a marketing act; and its essential purpose is the building and fostering of a system of producer-owned and producer-controlled cooperative associations.

As the "next friend" of these associations, the board is examining the organization papers and the general scheme of the respective associations asking for assistance, and is making recommendations with reference thereto. It is encouraging efficient accounting methods and systems of bookkeeping. It is urging the necessity of frequent and complete audits of accounts. It is advising against excessive advances, and in fact is urging the avoidance of the advance-payment system wherever, considering the character of the commodity handled and of the marketing operation involved, it is consistent to do so. The board is helping to develop cooperatives upon a sound basis. All this is done in the direct interest of the producer, and therefore in the interest of the country as a whole. In the past two and a half years the board has carried on 370 projects, this work extending into every State in the Union. In addition to this, the board, in cooperation with State agricultural agencies, has made a detailed survey of co-operative associations in 12 Northeastern States. The board is emphasizing the desirability of conservative financing, feeling as it does that there can be no more wholesome development than that which proceeds in the direction of financial independence.

The early American doctrine, "Keep out of debt" is as applicable to cooperative associations as to individuals. This principle to-day is having a struggle for its life in competition with the new idea expressed by the modern trade slogan, "A dollar down and a dollar a week." Neither individuals nor cooperative associations can go along with the proper feeling of security or face the future with real courage wholly on the basis of borrowed money. Occasionally, of course, borrowing money is necessary, but it should be avoided wherever reasonably possible, and should be resorted to only when it is clearly to the advantage of the association to do so. Better credit facilities should be provided so that prompt, efficient, and low-cost financing can be provided when the real need arises—this to the end that cooperative associations may gain economic stability and independence.

Because of its influence in the direction of these wholesome practices amongst cooperatives, the board is of vital interest to the farmer. The farmer is interested in these operations because he receives the direct benefit resulting from the establishment of a sound marketing system owned and controlled by himself.

New Director in Louisiana



J. W. BATEMAN is Louisiana's new director of extension. Director Bateman has been farmer and county agent, and at the time of his appointment as director was the supervisor of agricultural education in the State department of education. He succeeded W. B. Mercier, now director emeritus and extension adviser, who has been cotton planter, experiment station worker, county agent, assistant chief of the Office of Extension Work in the South, and director of extension for Louisiana. Because of ill health, Mr. Mercier resigned to accept his present position as extension adviser and becomes the first to hold the title of extension director emeritus.

Bicentennial Film Strips

The intense love that George Washington had for farming, his agricultural pursuits at Mount Vernon, his keen insight into agricultural problems and ability to cope with them, his life as a country gentleman, and other phases of his farming activities are presented in a film strip entitled, "George Washington, the Farmer," recently made available for use in connection with the celebration of the two hundredth anniversary of the birth of George Washington. Another film strip has been completed which illustrates the song entitled, "Father of the Land We Love," written by George M. Cohan expressly for the bicentennial celebration.

Both of these film strips were prepared and illustrated by the Extension Service in cooperation with the United States George Washington Bicentennial Commission. Although intended primarily for use by extension workers, they are also available for purchase by others. Persons desiring to buy copies of the film strips should forward their formal order to the Consolidated Film Industries (Inc.), Main Street, Fort Lee, N. J., and at the same time submit a request for authorization to purchase the film strips to the Extension Service of the United States Department of Agriculture. Both the order and the request for authorization are required. The series number and title should be indicated. With the film strips will be included without additional cost pamphlets containing descriptive information about the illustrations for lecture use. Sheet music will accompany the film strip of the song. Information about these series follows:

George Washington, the Farmer. Series 277. 74 frames. Price 53 cents.

Father of the Land We Love. Song by George M. Cohan. Series 279. 32 frames. Price 35 cents.

The Month's Best News Story

J. R. Beck, of Polk County, Oreg., takes the prize this month. His story might be classed as a feature story rather than as a news story except that it has a distinct time value Beck has formed the good habit of making the widest possible news use of his annual report. When his records for the year are in he proceeds to let the people know just what has been accomplished through a series of news stories on outstanding features of his work. Sometimes when the annual report is released we find in the newspapers a story summarizing all the important phases of the agent's work for the year. Possibly Beck's way of taking his important projects and making a separate story of each is better. His story, which appeared in the Polk County Itemizer-Observer, is somewhat long perhaps, but he has given the people of his county a clear and convincing picture of what the promotion of alfalfa production has done for them. He tells them about the increase of alfalfa acreage in the last five years, what the money value of the crop is, what farmers first grew alfalfa in the county, how the effort ties in with a state-wide campaign sponsored by the agricultural college, how the business men, banks, and schools of the county have cooperated, how many farmers are now growing alfalfa in the county and the names and location of many of them, what the latest methods used in growing the crop are, and how much increased production has been obtained on various farms from hogs and dairy cattle to which alfalfa has been fed.

Alfalfa Pays Big Dividends on Polk Farms

Development of New Crop Phenomenal in Five Years; Benefits Experienced by Dairy, Sheep, Poultry, and Hog Industries

By J. R. Beck, County Agent

FROM 70 TO 3,500 acres of alfalfa in five years. Almost every nook and cranny of Polk County now has some alfalfa successfully growing where but a few farms in the entire county were producing this wonderful crop back in 1926. Replacing other crops for hay and finding new uses each year, alfalfa has taken the fancy of livestock men and poultry men all over the county. Its introduction and successful culture now means nearly $25.000 to the county each year over other crops on the same land.

One of the best known of the earlier fields in the county is that grown by Robert Pence on the Nesmith farm at Rickreall. It has produced as high as 5 tons per acre and is just as good now as it was several years ago. Several farms had good stands at that same time. In those days, just five years back, a 5-acre field was considered some size. Now there are a good many fields of 20 or 30 acres each, and Byron Ruddell of Oak Point has a field containing upwards of 80 acres.

For years different farmers of western Oregon had tried producing alfalfa but without very great success. In 1922 O. T. McWhorter, then county agent of Washington County, working with his farmers, developed the successful features that have firmly established alfalfa in western Oregon. These practices were taken up by several other county agents and they in turn worked with their farmers until now every county has large acreages. County agent work was reestablished in Polk County in 1926 and from that time on the culture of this crop developed. This office has worked with hundreds of farmers in the county during the past five years aiding in establishing acreages on their farms.

At first soil was tested, seed was secured for the farmers, for at that time very little Grimm seed was available, inoculation was brought down from the college and distributed, meetings were held, and the various problems talked over. This work has been continued each year, except that now local seed dealers handle hundreds of pounds of certified Grimm seed each year.

In the later years land plaster, superphosphate treatment, and cultivation demonstrations have been carried on to still further develop the best practices. Meetings have been held with farmers who were trying new methods of using alfalfa, such as the sheep pasturing on alfalfa in the early spring, started first by Byrd Walling of Lincoln. This has been taken up by many other prominent sheep men such as James Riddell, Wm. Riddell & Sons, J. B. Stump & Son, Zielesch Farm, Homer Link, and many others.

One of the biggest boosts given to interesting farmers to grow good fields of alfalfa was the silver trophies put up by the Dallas Chamber of Commerce in 1928 and 1929. The county was divided into 11 districts and the farmers in each district chose their best field and then visiting judges picked the county winner. Each year the 11 local winners were entertained at a luncheon in Dallas, followed by a presentation of the trophy. In 1928 J. J. Roberts, of Perrydale, was the winner and in 1929 C. Muller, of Independence, won the honor. Hundreds of fields were gone over each year and the best practices studied.

In 1930 the Farmers' State Bank of Independence sponsored a slogan contest for school children. A $25 prize went to Bernice Blodgett, of Monmouth, for her slogan "Know and grow alfalfa" as the best entered by the 69 boys and girls participating.

Some of the first fields planted in 1926 were those of R. N. Bosley, J. B. Stump, James Riddell, Robert Pence, W. W. Rowell, Ernest Zielesch, M. I. Capps, D. R. Ruble, Claud Boothby, Henry Keyt, T. E. Blair, and others. Some of these are now the largest growers in the county. The Zielesch farm has upward of a hundred acres. On this farm the first successful alfalfa ensilage and alfalfa meal were produced for this section.

The new features that made the culture of alfalfa successful after so many previous failures were the use of genuine Grimm variety, late seeding along on a firm, well-drained seed bed, and severe cultivation of the stand each year after it was firmly established so as to eliminate weeds. Some stands have failed because these and previously known rules have been violated, but in the main the production has enjoyed a high degree of success.

Alfalfa has brought increased yields. Good stands regularly yield from 3 to 5 tons per year and some run quite a bit higher than that. In addition much pasture is provided in the early spring and in the dry weeks before fall rains. A good alfalfa field is a money-maker.

W. O. Morrow of Rickreall pastured 23 pigs from April to August on three-fifths of an acre by adding only 1,000 pounds of grain. The resultant increased weight of the hogs after subtracting the grain cost brought in $256 for less than an acre of alfalfa.

Joe Eisele of Buell reports that butterfat production increased 5 pounds per cow last January simply by feeding them alfalfa hay. Ed. Harmon states that alfalfa sod rejuvenated a field for him and increased the following wheat crop 15 bushels per acre.

On the markets alfalfa hay regularly brings $2 or more above other hay. On such a basis every acre of alfalfa now growing in the county means from $6 to $10 in the pockets of its owner each year. On this basis alone, the 3,500 acres mean at least $24,500 annually to the county. But the benefits don't stop at the increased hay value. Pasturing and many other features already mentioned contribute to the value of this great crop.

Nearly 200 farmers are growing alfalfa in the county, of which this office has a record and with whom we have worked. There are quite a number of others. Still the job is not complete. After careful consideration of the livestock demands of the county and also the available soil, it is the opinion of the writer that we should have double the present acreage, or at least 7,000 acres. Every farm that has cows, sheep, hogs, or chickens is a potential place for alfalfa production.

Hundreds of farm visits have been made in my work as county agent and hundreds of office calls and letters have been received for pointers on alfalfa production. Fields and farmers in every community of the county have been visited to determine on the best way to produce this crop.

Many trials of different practices have been worked out with different farmers. At present an alfalfa nursery is under way on the F. E. Pence farm east of Rickreall and carrying on of landplaster trials in all parts of the county will be on the program for next spring. Limerock has been used and demonstrations of all kinds held. One of the outstanding limerock demonstrations was that on the Ernest Hoisington place this year.

Even yet there will be new practices developed. Through the hearty cooperation of farmers and business folks with this office, there has been firmly established in Polk County these thousands of acres of alfalfa which only a few years ago most people thought couldn't be grown west of the Cascades. In future years we will probably wonder at how simple the growing of alfalfa really is. Pioneering is quickly forgotten by those now directly connected with it.

The 4-H club boys of Escambia County, Fla., knew what to do last year and they did it. For two months County Agent E. P. Scott was sick and could not visit the clubs, but the work was kept up and 30 per cent more boys than the year before completed their club work.

Farmers Who Make Money

B. H. CROCHERON

Director, California Extension Service

THE AGRICULTURAL situation is bad enough to occupy national attention; the times are desperately hard for many people. Nevertheless, some farmers are finding agriculture a profitable business even in these days of depression. It has been said that nobody is making any money out of farming. Such a statement is not correct.

	Number of farms	Net profit per acre: High-profit group	Low-profit group	Average
Almonds:				
Butte County	23	$31.84	−$27.40	$12.03
Apricots:				
Stanislaus County	18	29.57	−75.62	−42.27
Apples:				
Sonoma County, Gravensteins	19	46.35	−40.41	.44
Sonoma County, late varieties	11	45.41	−65.76	−5.48
Clingstone peaches:				
Sutter County	20	13.50	−32.04	−6.55
Pears:				
Lake County	14	−59.61	−115.34	−88.44
Mendocino County	15	−5.44	−106.46	−60.24
Sacramento County	14	−32.75	−164.73	−98.61
Prunes:				
Colusa County	27	17.60	−25.20	1.20
Napa County	13	13.32	−65.52	−10.76
San Benito County	13			−65.98
Sonoma County	28	68.43	−25.37	3.09
Walnuts:				
San Joaquin County	19	104.42	36.07	85.11
Cotton:				
Tulare County	13	8.81	−7.81	−1.35
		Net profit per cow		
Dairy:				
Marin County	5			$41.81
San Luis Obispo County	7			9.46
Tulare County	7			25.31
		Net profit per hen		
Poultry:				
Santa Cruz County	17	$1.15	−$0.27	$0.32
Sonoma County	46	.88	−.24	.23

A number of our enterprise efficiency studies have been analyzed. In these studies farmers kept careful individual records of their business in cooperation with the agricultural extension service. Every legitimate cost is charged against the enterprise, including cash costs, depreciation on orchard or livestock, value of the farmer's labor, and 6 per cent interest on the investment. The item called "net profit" is what is left after all these are deducted. Now, notice how they run. While the average of most of the groups lose money, nevertheless, when they were divided into a "high-profit group" and a "low-profit group," those in the high-profit group usually made a net profit.

Good Yield Is Important

By analyzing the details of these studies it is seen that the greatest factor causing the difference between profit and loss is that of yield. Sometimes there are other factors but, by and large, it is usually the man who gets a high yield who makes a profit. Tons of fruit per acre, pounds of butterfat per cow, or eggs per hen, is usually the deciding factor in the success of farming.

This explains why farmers are still interested, first of all, in production problems. Farmers know that if they make a big crop they may make money. If they get a small crop they certainly won't make money.

Theorists say that in these days farmers are not interested in cultural problems. We do not find this to be the case. This does not mean that economics is not of prime importance but rather that good farming begins with the production of high yields at low cost. The man who succeeds in getting high yields wins out even in times of low prices.

These studies also show that among a group of men in the same locality, growing the same crops, there is an enormous variation in the yields they get and the profits they make. This may be the result of differences in soil. Some men are wise enough to buy good land. But not all these differences are explainable in the land. Good farming is still the gateway to frequent success.

Despite a serious drought, Rio Grande County, Colo., farm women who are members of home demonstration clubs have canned 9,861 quarts of vegetables and fruits and stored 14,165 pounds of vegetables, under the leadership of Nellie Mathews, county home demonstration agent.

Beginning last spring, these women budgeted their family needs in vegetables and fruits for the summer and winter, studied gardening, canning, storing and drying of vegetables, and raised excellent garden produce in spite of the drought.

4-H Club Members Teach Themselves About Barberries

A PLAYLET, "The Trek of the Common Barberry," depicting the migration, spread, and destructive qualities of barberry bushes, was an interesting feature of the ten 4-H club camps in South Dakota this year, and furnished a welcome variation to the usual routine of talks in the instructional work, says Samuel H. Reck, jr., extension editor in South Dakota.

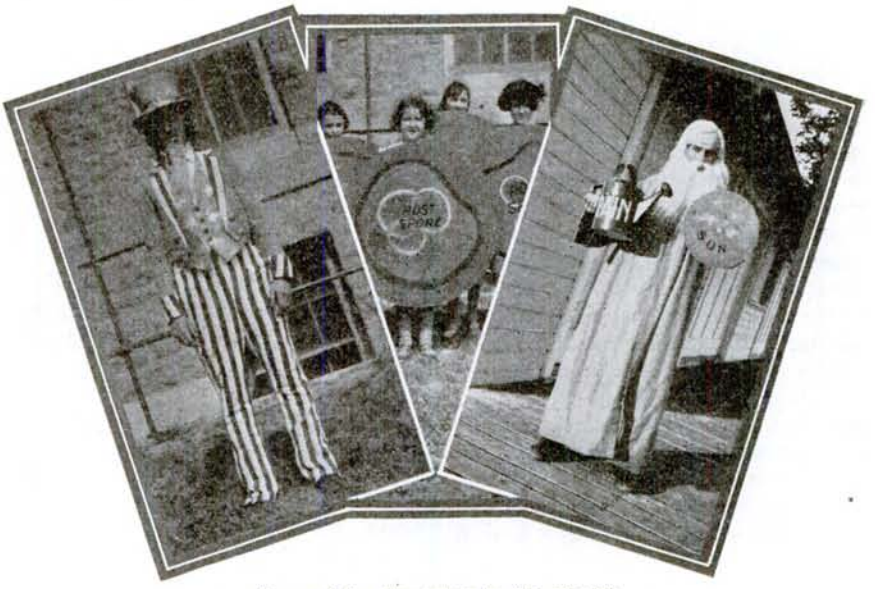
Every second year, since 1925, the State office of barberry eradication has participated in the camp instruction by conducting classes in stem-rust control. This year, however, when H. M. Jones, the State club leader, asked Ray Bulger, leader of the barberry office, if he wanted some time on the camp programs, he replied in the affirmative but mentioned that he was profoundly weary of the old-style type of presentation by talks and charts.

The two got their heads together and the upshot was a decision to present the material in the form of a playlet. Happening to run across G. D. George, agent of the United States Department of Agriculture, with headquarters at University Farm, St. Paul, Mr. Bulger explained the idea to him. In a burst of enthusiasm, Mr. George, who is also a cartoonist, dashed off the body of the playlet in verse, sketched his idea of the costumes which the characters could wear, and sent it to Brookings. Mr. Jones wrote a prologue and the playlet was complete.

Nineteen characters take part. First on the scene is the Puritan Father, followed by Barberry Bush and Doctor Science. Other characters are Farmer Brown, Old Man Weather, Grain, Spores, Merry Farmer Boys, Uncle Sam, and Eradicators Three.

Boys and Girls Appear in Playlet

The personnel of the playlet was selected from among the boys and girls at each camp. Casts were chosen before the camp opened, through the cooperation of the county agent. Time for rehearsals was necessarily limited, but the parts are simple and the costumes, which were furnished by the Conference for the Prevention of Grain Rust of Minneapolis, aided in creating interest. The playlet was so popular with the club folk that George Frandsen, assistant leader of barberry eradication, who handled the project, and Mr. Bulger repeated it at the junior short course for 4-H club members at the college, December 27–31, with an all-star cast selected from the 10 casts which participated at the club camps. It is also planned to include the playlet as a feature of the agricultural short courses to be held this winter in various parts of the State.



Some of the characters in the playlet

Home Gardens in Ottawa County, Mich.

SEVEN DEMONSTRATION gardens, grown in Ottawa County, Mich., were visited by 1,163 people during the season, reports Muriel Dundas, extension specialist in nutrition. The gardens were planned and planted with special attention to selection of seed and ease of cultivation under the supervision of Esther C. Lott, home demonstration agent, and with the cooperation of George W. Woodbury, extension specialist in horticulture. Garden plots were approximately 110 by 200 feet to allow labor-saving methods in planting and cultivation. They were designed to be adequate for the needs of a family of six for one year.

The total cost of the gardens including seeds, fertilizer, and material for insect control amounted to $74.20, while the estimated value of the gardens was $415.

The gardens were developed as an outgrowth of the nutrition work which interested women in growing more vegetables for home consumption. A poster campaign was conducted prior to the planting season, and 100 posters were displayed and judged at the 4-H club achievement day.

Gardens Visited

Community meetings were held at the gardens at which methods of insect control, canning of vegetables, and other means of storage were discussed by the home demonstration agent and specialists.

The reports indicate an average of five new vegetables per garden, which necessitated instructions in suitable preparation. Women were interested in acquainting their neighbors with broccoli, endive, eggplant, and Chinese cabbage and were generous in distributing surplus products to their friends.

Canning demonstrations were used to introduce better methods of home canning. A total of 1,058 quarts canned from the gardens means a like improvement in quality of meals for all the families.

Through 4-H club activities New Hampshire boys and girls contributed nearly $60,000 to rural family incomes in 1931, according to C. B. Wadleigh, State 4-H club leader, University of New Hampshire.

Hot Lunches Aid Health

IN 17 of the rural schools in Calvert and St. Marys Counties, Md., 539 children are asking, "When do we start hot-lunch clubs this year?" These girls and boys enjoyed a hot bowl of soup or creamed vegetable for 60 days during the last school year through the cooperation of the homemakers' clubs, the home demonstration agents, teachers, the American Red Cross, and other organizations. They are eager to have it again this winter.

The story of the hot-lunch clubs in these two counties of southern Maryland goes back to the effort of a teacher in a 1-room school in Calvert County in 1929. Discouraged at the report each year from the health nurse as to the physical condition of her pupils and the low attendance records during winter months, she asked for help from the health nurse and home demonstration agent.

Though there was very little to work with, either in equipment or supplies, and there was almost no community interest in hot-school lunches, these women succeeded in providing a hot dish for these youngsters throughout the winter. The results were most surprising; the children liked it; they gained in weight and maintained an excellent health and attendance record for the winter; the parents were pleased; and the whole community became infected with enthusiasm for the hot-lunch clubs. By the next fall, many of the rural schools in Calvert County and the adjoining St. Marys County were eager to start a hot-lunch club.

Committee Plans Work

To plan for the second year's work a committee was formed in each county consisting of the health doctor, health nurse, superintendent of schools, a school supervisor, the county chairman of the Red Cross, the president or a representative of the homemakers' club, and the home demonstration agent as chairman.

The home demonstration agents were asked to meet the teachers to discuss equipment needed and to consider the ways of raising funds. The reports from the 17 school teachers contain many human-interest stories on how money was raised.

January saw the project ready to be launched. The home demonstration agents had given help in training older boys and girls in the preparation of the hot food to be served. The plan was to serve at least three times a week and to have cocoa only once during that time. The reason for this was that the health nurse and home demonstration agent hoped to teach the children to like new foods.

Results began to be obtained in ways least expected. In St. Marys County one teacher had a perfect attendance for the first three weeks after the project started—an unusual condition for her school, where six to eight might be away each day.

Children who had not been bringing any lunch came with some biscuits or bread to eat with the hot lunch. The noon hour became a sociable time; more time was taken to eat, and children became interested in a few table manners.

Health Nurses Cooperate

The health nurses in both counties visited the schools and checked the physical condition each month. In the six schools of Calvert County the average gain in weight of children within 5 per cent of normal was 3 pounds while the gain of children 10 per cent below normal was 4.6 pounds.

All 17 schools in the 2 counties served the lunch for at least 60 days. When hot weather came, milk drinks were served. The children who were greatly underweight were usually given milk at 10.30 in addition to the noonday lunch.

Equipment Obtained

In planning for this year the third year of the hot-lunch club, a list of the equipment that was considered absolutely necessary was prepared by the district agent, nurse, and home demonstration agent. Meetings with the teachers were held and the list discussed. In Calvert County three schools have consolidated so that had to be considered, as only two had been enrolled in the project last year. By careful selection, enough equipment was obtained to serve 110 children in place of those in the original 1-room schools. The county superintendent had a hot-lunch room built into the new consolidated school and installed a sink with hot and cold water.

The parent-teacher association is making the serving of hot lunch their main project for the year. The district agent and home demonstration agent helped to plan, suggested equipment, and are acting as advisers to the woman hired to prepare the food. A small charge is being made for all the food served.

It is planned to have every school in Calvert County serving a hot dish. All new schools will have a room built in them to make it possible to serve the lunch conveniently. The whole county is interested in this phase of health work and every organization is cooperating.

In St. Marys County only one school of the eight enrolled last year is not carrying the hot-lunch project this year. The teachers are realizing that the children and parents are interested and will help finance the work. There are not as many organizations to help, and the schools are located in isolated sections where it is hard to raise funds, but in spite of the handicap the work started in December.

Boys Build Tables and Cabinets

Twenty-eight dollars covers the cost of all the equipment needed to serve 30 children easily. Boys in many of the schools are constructing cabinets, work tables, and shelves to use in the hot-lunch corner. The home demonstration agent in Calvert County displayed at the county fair the equipment to be used in one of her schools. A work cabinet held the equipment. The cabinet was painted white inside and out. Curtains were of green print. The 2-burner stove was in the color scheme as its enamel finish was of soft green. Every mother and every school child stopped to admire the attractive corner and to read the posters. One poster showed the hot-lunch corner in most of the schools last year, together with pictures of the lunch being served.

It will be interesting to have the report from the health workers, the truant officers, teachers, and home demonstration agents next spring. The work in 1930–31 reached far beyond the original hopes of all the committee. The test will come this year when the schools are financing it themselves.

National 4-H Club Radio Program

Saturday, April 2

4-H poultry pays. By club boy.

Planning the home garden. By club girl.

What 4-H club work has meant to our community. By community leader.

Significant accomplishments of 4-H club work. By Gertrude L. Warren, Field Agent, Office of Cooperative Extension Work.

AMERICA'S COUNTRY DANCES

A Virginia Reel.

Oh! Susanna (*Foster*).

Captain Jinks.

Turkey in the Straw (*Transcribed by Guion*).

Sailors' and Fishers' Hornpipe.

Arkansas Traveler.

Old Zip Coon.

Money Musk.

Old Dan Tucker.

Pop Goes the Weasel.

Good Pictures Taken by County Agent

This check plot shows fertilized corn on the left which produced 70.3 bushels per acre whereas the unfertilized corn produced only 65 bushels

The winner of Missouri's annual contest in extension photography, J. Robert Hall, county agent of Linn County, has been asked by the editor of the EXTENSION SERVICE REVIEW *to tell how he gets his pictures and what use he makes of them. Mr. Hall is nearing the completion of his eleventh year of continuous service in Linn County and his fourteenth year in countyagent work in Missouri His training in photography has been gained concurrently with his work as an agricultural agent and, largely through this experience, supplemented, as he says, by instruction from representatives of the Washington office. His own statement follows.*

NO COUNTY program of extension work will go over in the largest way without local pictures, and they must be good. I have never been able to get as many persons as I desired to see the best demonstrations; but where 40 have come to a meeting and seen a good demonstration, I have photographed its essentials and shown it to 4,000, explaining details with the film strip. The use of good local pictures made into film strips is the reason for photography.

Each year I have a film strip of about 50 frames made and show it to farm people in 18 community meeting places and before business and civic organizations as a summary report and program-building feature. The cost of the film strip this year under the United States Department of Agriculture contract was $13.50, and was the best work we have ever had.

A film strip is dead to an audience if there are no persons in the picture. A film strip should contain pictures taken in every part of the county where it is to be shown. It will draw large and interested audiences where demonstrations can be talked in terms that are familiar to all.

Pictures Have News Value

Not all pictures are good enough to make clear frames on film. I take about 250 pictures a year and have finished more than 1,000 at a cost of more than $100. This seems expensive, but many of them have news value and sell for more than enough to pay the entire cost. It is expensive to have a picture reproduced locally in print but when a farm paper or magazine prints one the cut is available without cost and, with proper credit, can be printed locally.

To get better pictures should always be the aim of every extension worker. This can be accomplished only by taking more pictures and profiting by every mistake. Improvement can be accomplished only by knowing the principle of the camera and exactly how to operate it.

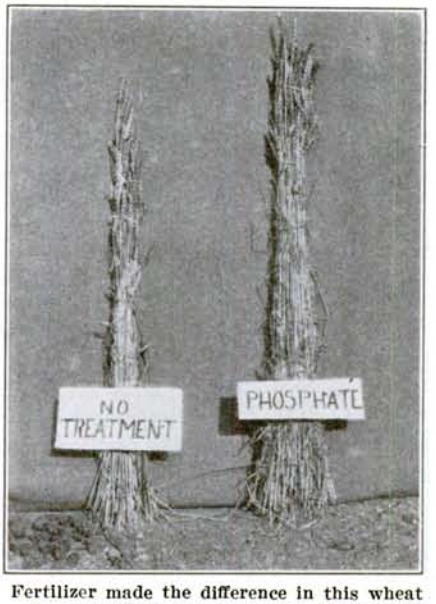
Farm Photography

Farm photography is difficult because of the variability of all factors, such as speed, light, background, size, and distance.

I do not try to take pictures without a tripod. It should be as high as will permit a view into the finder. The top should be swiveled to permit a quick set-up. The best photographers never hurry. Set up at a point that will reveal some shadows so the picture will have definition and depth. The light directly behind the camera usually makes a flat, dead picture. Have an object of well-known size in the picture, such as an animal, person, fence, yardstick, crops; and other objects in the picture will thus be shown in their true size. Have in the picture only the things necessary to tell the desired story, but be sure they are there. They can be cut out and enlarged or used on a film frame at the exclusion of the undesirable.

Choose the background well; get out undesirable objects by moving the camera or the object, setting upon a step-ladder or building and shooting down, getting the camera low down or opening the diaphragm wide, cutting down the time and focusing accurately by measurement. Seldom take a picture less than 25 feet distant without knowing that the distance is within a foot of being correct.

Nearly all pictures can be taken with an exposure of one twenty-fifth of a second, but if there is any doubt, place the camera on a tripod or other support and use one-tenth of a second or more. These longer exposures used with smaller diaphragm opening usually result in better negatives than when snapshots are used.



Fertilizer made the difference in this wheat harvested from the same area, 150 pounds of phosphate increasing the yield from 12.6 to 18.5 bushels per acre

Two recently introduced products have been helpful to me in taking good pictures—the supersensitive film and the flash bulb. The latter permits me to get inside and night pictures satisfactorily.

THE MIDDLESEX COUNTY EXTENSION SERVICE SAYS:

"KNOW YOUR GROCERIES"

Are You the "Goop" who Orders:

"A can of peas——"

"Oh any brand, it doesn't matter."

"Just send the regular size, numbers don't mean anything to me."

OR

Are You the Sage who Investigates:

"It's worth my trip to find this grade of food so reasonable today."

"And this new dark bread! How my family will enjoy it!"

There were given to grocers in Middlesex County 200 posters and 10,000 blotters bearing this message. The posters were displayed in a conspicious place in stores, and the blotters were inclosed with grocery purchases

"TO EVERY Middlesex village and farm the slogan 'Know your groceries' has become familiar during the past year's county-wide program on marketing," says Regina Feeney, home demonstration agent, Middlesex County, Mass.

In a recent survey taken among home makers in the county two important problems were found to be saving of time and money; in the words of the home maker, "stretching the family income," and "finding time to do all the things I have to do with some time for leisure."

Taking these two objectives as a basis, a 5-year program of work was planned through the cooperation and advice of the executive board of the home makers' section composed of nine home makers, the advisory council, which includes the officers of all extension units, the State home management specialist, Mrs. Harriet J. Haynes, and the three county home demonstration agents. Mary E. Foley, extension nutritionist, also assisted with subject matter and plans.

The emphasis last year was placed on shopping for groceries, and the problem was how to reach the entire population, the hundreds of home makers who did not come to extension meetings.

Another conference—and then the idea came. They all have to buy groceries. Why not ask the merchants to help? Preliminary visits to a number of progressive grocers, explaining the idea of a poster to be accompanied by a window display met with unexpected enthusiasm on the part of the merchants. They were eager to do their part in improving practices in shopping, and it was particularly interesting to see the grocer in the small community store thinking of certain large families with limited incomes who would profit by such an exhibit.

Window Exhibits

Two hundred large posters were made and 10,000 blotters, 3½ by 6 inches, were printed with the slogan "Know your groceries." Each grocer received a large window card and a supply of blotters to be stuffed in with grocery purchases. The window exhibits included package goods versus bulk supply, various grades of dried fruits, canned goods, and an exhibit of the contents of the various cans. Each individual display carried a small tag stating weight, quality, and price.

To reenforce these displays news articles, explaining the home makers' program in marketing and stating that the exhibits would be seen on a certain date, were sent to the local newspapers.

Local leaders played a vital part in putting across this project by visiting merchants in their communities and planning with them for a store-window exhibit.

As a result, this piece of work served its purpose by bringing to the attention of large numbers the importance of wise buying.

New Motion Pictures

SEVERAL new films produced and distributed by the office of motion pictures of the United States Department of Agriculture, which were designed primarily to aid in the work of the extension and field workers of the department and cooperating State institutions, have been released in the past few weeks. These pictures, now available to extension workers, include the following:

Preparation and Marketing of Dressed Poultry (two reels), sponsored by the Bureau of Agricultural Economics, shows methods of guarding live poultry at country feeding stations; methods of feeding and care of the feeding room; slaughtering, picking, precooling, and packing; a short synopsis of the Long Island duck industry; the cold storage of poultry; and Government grades for dressed poultry.

Marketing Live Poultry (one reel) points out the necessity for culling on the farm; contrasts old marketing methods with modern methods and shows care ot live poultry en route to market, and killing and dressing in the city slaughterhouses. Government inspection of poultry in New York is pictured.

Inspection and Canning of Poultry (one reel) also sponsored by the Bureau of Agricultural Economics, shows in detail new methods used in canning whole chicken and various chicken products from the time the poultry is received at the cannery until it is cooled, labeled, and packed.

How the Federal Inspection of Imported Seed Protects the Farmer (a 2-reel motion picture), sponsored by the division of seed investigations of the Bureau of Plant Industry, shows how the Federal seed act keeps out bad seed and thus protects the farmer from loss due to poor seed and foreign weeds. How the tests for purity and germination are made are shown in detail, and the workings of the seed act in regard to imported seed are explained. This film is of interest to farmers, importers, and the general public.

Wool, "the world's comforter since the days of the patriarchs," is featured in the new 3-reel motion picture sponsored by the Bureau of Agricultural Economics, entitled "Wool Marketing and Manufacture." The film shows the essential steps in the proper handling of wool from flock to market and covers the whole process of manufacture.

These films are "silent." They are available in the 35-millimeter size. Borrowers pay transportation charges to and from Washington, D. C. To insure bookings, borrowers should apply well in advance of date of showing to the Office of Motion Pictures, United States Department of Agriculture, Washington, D. C., and give first and second choices of films desired.

·ACROSS · THE · EDITOR'S · DESK·

How They Make Money

"FARMERS KNOW that if they make a big crop, they may make money. If they get a small crop, they certainly won't make money. It is usually the man who gets the high yield who makes a profit." It is thus bluntly and to the point that Director B. H. Crocheron of California sums up what his State has found out about the conditions under which the individual farmer can make money and what volume of business he must have to give him a chance to produce profitably.

Not a New Policy

IN READING the address given by Chairman Stone of the Federal Farm Board before the National Cooperative Council in January I note a statement on governmental aid of unusual significance. It requires neither comment nor amplification. He says "Certainly, the Agricultural Marketing Act can not be charged with inaugurating a new Federal policy of putting the Government in business. Look at what has been done in the past for industry through the tariff, for the railroads, for the banks, for shipping, for the automobile industry through the building of good roads, for labor through immigration restrictions, and other protective laws—just to mention a few. I think this policy of our Government in the past has been sound. I am for it, but I want agriculture, too, to be a beneficiary of that policy."

Every Pantry a Bank

TWO EXCEPTIONALLY good slogans came to my desk not long ago. They were from Mildred Horton of Texas. One reads, "Every pantry is a branch bank where the farm family cashes its check for wholesome and palatable foods." This slogan, I am sure, had not a little to do with the placing of 15,000,000 containers of home-grown foods in the pantries and storage cellars of Texas in 1931. It helped, also, in getting Texas bankers to ask for demonstration pantry exhibits in the lobbies of their banks, where all who came could see what a well-filled pantry should look like.

The second slogan, "Every farm a factory every week in the year," sums up the objective of the continuous and intensive efforts of county extension agents in Texas for the past several years. To make this slogan a reality they have sought through well-planned and well-placed demonstrations to bring about the growing of sufficient food and feed supplies and income-yielding products to support in adequate fashion man and beast on every Texas farm.

He Is Optimistic

JAMES LAWRENCE of Pottawatomie County, Okla., was at work as county agent when the Smith-Lever Act was passed. The way he feels about present conditions and the future of extension work has encouragement, I think, for all of us. Invited to speak over the National Land-Grant College radio program in January, he said, "Even in this trying time I haven't lost faith in farming. As a business it is fundamental and permanent. Our children's children will find farmers on the job and, I think, too, that they will find county agents or men who do the sort of work that county agents do now, working with the farmers of their day."

As to the immediate future, Lawrence said to his audience, "Our farm trouble in large part is that economic development is forcing radical changes in every line of business in every part of the world. In the next few years we, county agents, will be bringing you much more information on farm management, accounting, and planning production."

How Are We To Do It?

GEORGE W. BARR, Arizona's extension economist, suggests a thought on the popularization of research as an aid to effective extension work. In 10 years grapefruit exports from Arizona increased from 65 to 500 carloads. This rapidly expanding industry demanded facts. Extension agents needed to know what to tell growers. Research was necessary. A study was developed in which 30 citrus growers made their groves available for necessary observations. As the study progressed the extension agents kept in close touch with all the steps taken. This information they passed on to each of the cooperating growers. When the study was completed, the extension agents were ready to bring the results to the attention of all grapefruit producers in their counties. In doing this, their position was much strengthened by the fact that their leading growers already had the information. Furthermore, the growers understood the research on which the extension recommendations were based and were willing to support them in talking with their neighbors. I hear some one say, "But in most cases, it wouldn't be practical to conduct research in this way." Perhaps not, yet it is admitted, I think, that there is a grave need for linking research and extension more closely together in the popular mind. Just how are we to do it then?

About Reducing Costs

"HERE'S sound agricultural economics for you," was what George E. Farrell had jotted down on a copy of the Illinois Extension Messenger for January 27 that he sent to me. I knew that it was bound to be something about reducing costs. It was. As the States in his territory know, that's what Farrell is insistently hammering on at present and rightly, too.

On page 3 of the Messenger, he had marked a statement by L. J. Norton I'll give it in part. I quote, "The outstanding problem which any business engaged in marketing faces at this time is how to adjust to the lower price level which has developed over the last two years. The quicker marketing agencies recognize this fact and make the adjustments in their charges and costs the quicker they will make this contribution to business recovery without which they can not long prosper. Farmers can influence the process in many ways. They may see to it that the cooperatives to which they belong make the right type of adjustments. They may support their cooperatives in bringing pressure on distributing agencies to lower costs. They can see that through their general organizations the existing situation and the nature of needed adjustments are brought to the attention of all marketing and transportation agencies." R. B.

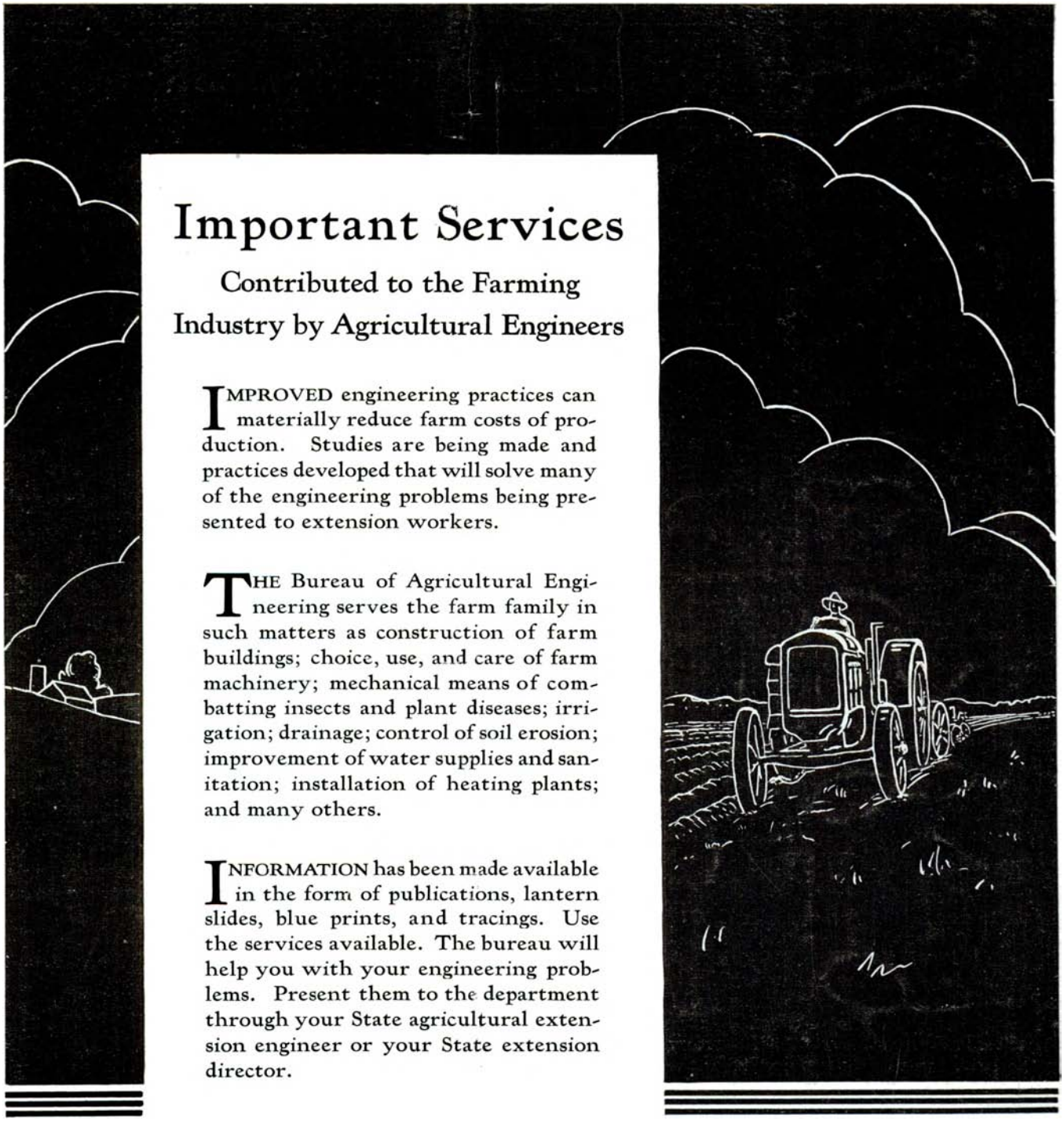
Important Services

Contributed to the Farming Industry by Agricultural Engineers

IMPROVED engineering practices can materially reduce farm costs of production. Studies are being made and practices developed that will solve many of the engineering problems being presented to extension workers.

THE Bureau of Agricultural Engineering serves the farm family in such matters as construction of farm buildings; choice, use, and care of farm machinery; mechanical means of combatting insects and plant diseases; irrigation; drainage; control of soil erosion; improvement of water supplies and sanitation; installation of heating plants; and many others.

INFORMATION has been made available in the form of publications, lantern slides, blue prints, and tracings. Use the services available. The bureau will help you with your engineering problems. Present them to the department through your State agricultural extension engineer or your State extension director.



Bureau of Agricultural Engineering, United States Department of Agriculture
Washington, D.C.

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Extension Service Review

VOL. 3, NO. 4 APRIL, 1932

PLANNING, PLANTING, AND CARE MAKE UP THE RECIPE FOR ATTRACTIVE SURROUNDINGS

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

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In This Issue

DO FARMERS who have access to the services of a county agent make a greater use of the practices recommended than do those farmers who do not have the services of an agent available? That's the question to which R. R. Thomasson and C. C. Hearne give an answer as a result of a comparative study made by them of two Missouri counties. Coming as it does from the original "Show Me" State, this answer ought to convince.

IT'S NOT a new thing to increase the butterfat production per cow by introducing purebred sires into dairy herds and through making purebred bulls available to groups of dairymen with small herds through well-organized bull clubs.

A good many counties in the State of Washington, though, are getting just this thing done in a rather thorough way. This is well illustrated by the progress that's been made by the extension agents working in Clallam, Skagit, and Thurston Counties.

CLUB WORK in Virginia has come of age. That's how President Julian Burruss opens his review of 21 years of 4-H club work in his State. 4-H annual membership in this period climbed from 75 members in the first year to 23,194 in 1931. Club work, President Burruss asserts, has been highly successful in developing the right kind of leadership among Virginia's rural boys and girls. "While the agents supervise, the club members themselves lead," he comments. It's a good augury, he thinks, for Virginia's future.

THERE'S A LOT of talk nowadays about the problems of land utilization. Five farmers in Franklin County, Ky., had such a problem in common. They got together about it.

With the advice of County Agent R. M. Heath and Earl G. Welch, extension agricultural engineer, they dug a drainage ditch that reclaimed several hundred acres of rich bottom land on their farms. Last year, these reclaimed fields produced 65 to 75 bushels of corn per acre and 1,600 pounds of tobacco per acre. In consequence, some of the less productive fields on these farms probably went uncultivated. So we are left with a problem for the experts to solve. Did these five farmers do the right thing in land utilization?

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On the Calendar

MAY 1 HAS BEEN designated as National Child Health Day for 1932 with "Support Your Community Child Health Program" as the keynote. Material for use in observance of the day may be obtained from American Child Health Association, 450 Seventh Avenue, New York, N. Y.

THE WEEK May 1 to 7, inclusive, will be National Music Week. Suggestions for programs and other aids may be obtained from National Music Week Committee, 45 West Forty-fifth Street, New York, N. Y., or from the music service of National Recreation Association, 315 Fourth Avenue, New York, N. Y.

WOOL GROWERS in three Pennsylvania counties organized a local cooperative marketing association in 1920. It's still going strong, marketing around 60,000 pounds of wool a year. The association handles 75 per cent of the total wool crop in its territory. It is one of 28 such organizations now operating successfully in Pennsylvania.

PULASKI COUNTY, ARK., gives us a striking example of how to tell in words and pictures the story of extension results in a county. Pulaski County has an adequate organization to do a real extension job; county agricultural agent and assistant county agricultural agent, home demonstration agent, and assistant home demonstration agent. And, covering a period of eight years, they have real results to show.

IN WHAT WAYS can I improve my ability to do extension teaching? Is further study on my part necessary? If so, what shall I study? Where shall I get this further training? What courses shall I select? These are pertinent questions that C. B. Smith would raise in the mind of the man or woman who seeks to increase his or her efficiency and earning capacity as an extension teacher.

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

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

Extension Service Review

VOL. 3 WASHINGTON, D. C., APRIL, 1932 NO. 4

What Shall the Extension Worker Study?

C. B. SMITH

Assistant Director, Extension Service, United States Department of Agriculture

THE extension worker seeking professional improvement is confronted immediately with two questions. They are, "What shall I study? What courses shall I select?" The answer depends on his previous training and on the needs of the particular situation the extension worker occupies. Individual desires likewise must be considered. Moreover, if the extension agent wants to fit himself or herself for some particular line of work, certain choices must be made. In general, the first inclination may be to study in some special field of agricultural or home-economics subject matter. Such specialization is essential, of course, if the extension agent wants to enter the resident teaching or research field. But, if he is going to stay in extension work, it would seem that his first consideration should be to perfect his training for this work. As an extension worker, he should know more about economics, including farm management and marketing, as well as certain phases of rural sociology. Then he may be equipped to correctly diagnose situations and problems and develop solutions which are practical and economic. Such solutions should help farm people readjust their farm and home organization and management in line with economic situations and trends.

Learning About Teaching

Moreover, the extension worker wants to know more about teaching people so that larger numbers may win success and satisfaction, and improve their situations. Extending, explaining, or demonstrating information alone influences change of conduct little. The extension worker should know what learning is and how learning is brought about. He should know how to plan his work so that the people who should be influenced recognize a problem, move to do something about it with success and are taught to cope by themselves with other problems. Study of the psychology of learning and the principles of education will help the extension agent to plan his activities so that these results are won. He will also want to understand the organization, administration, and supervision of extension work that he may play his full rôle in the great extension system. With all this, naturally, the extension worker will want to study the broadening objectives in extension work, attain a fundamental philosophy of the need and field for extension work.

Using Teaching Aids

The aids on which extension workers depend the most are the public press, demonstrations, meetings, extension committees, and circular letters and other direct mail matter. Fortunate are those who have had training in using these agencies. Certainly no extension worker who is planning graduate work can afford to omit studies or courses which would help him acquire knowledge and skill in employing these agencies. The extension worker's potential learners can not be grouped in class units. His or her teaching must reach them in their communities, in their homes, and on their farms. Therefore, extension agents must learn to use these agencies and many others that they may continually bring to their people material which will start them and carry them along on the road to learning those adjustments and experiences most appropriate and fruitful for them.

Extension work as a profession requires, then, experience and training in extension procedure as well as in agricultural and home-economics subject matter. So the extension worker who wishes to study and obtain further training for this field will find it desirable to elect courses, or pursue studies in psychology and education; the objectives and philosophy of extension work, organization, and administration; method in extension teaching; news writing, and preparing and using circulars, circular letters, and direct-mail matter; public speaking; and the organization and use of extension committees. In the field of agricultural economics subject matter, he will find much to help him in determining the deeper problems of the farm as a business and the needs of a more satisfying country life.

Correspondence Courses

If the extension worker can not follow supervised courses, as in summer school work or as a regular graduate student, he may gain help from another source. Several universities and colleges offer correspondence courses which would enrich the knowledge of extension workers and guide them in acquiring valuable experience and skill. Supervisors of extension agents, moreover, would gladly help district groups of agents pursue systematic reading and discussion of appropriate texts. Indeed, one group of agents in a Central State last year got together once a week with a professor of education in a near-by small college. With his guidance and instruction, they studied their work in a systematic way and organized it on a more truly educational basis. These agents paid $15 each for the course and reported that they were well satisfied.

Last, but not least, extension workers may block out courses in reading and study for themselves in the fields mentioned here. Side by side with agricultural and home-economics texts and bulletins, extension workers should place standard texts and source books on educational psychology, organizations, administration, office management, public speaking, letter writing, news writing, and others that will give needed helps in perfecting extension procedure. Many agents are adding to their store of books of this nature every year. They are as up to date in their knowledge of how to do extension work as they are in their knowledge of agriculture or home making.

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The Office of Cooperative Extension Work will help any extension worker obtain information on college courses, studies, and helpful guides and texts. The directors of extension work under whom an extension worker may serve will help him in considering the possibility of leave for graduate study. The colleges mentioned in my article in the REVIEW for February will send information on the courses offered upon request. The opportunities for professional improvement are many and varied, including summer courses, graduate study during the regular college year, correspondence courses, district conferences, and home reading and study. Greater success in extension work, more satisfaction with the profession will result. What action will the extension worker take?

Club Boys Diversify

In boys' club work in South Carolina a careful study of record book results shows an interesting trend in the continued progress of the work. The number and value of the cotton demonstrations, which have heretofore been by far the largest single crop demonstration, are decreasing, and club work with corn, calves, and swine, is growing at such a rate that even with the lowered prices everywhere, these three enterprises together brought a larger profit this year than in any other previous year of club work.

The white 4-H club boys of South Carolina last year, based on completed records submitted by them through their county agents to the State club agents, produced enough crops and livestock to place a 57-acre farm stocked as follows in each of the 46 counties in the State: 7 cows, 40 hogs, 311 chickens, 3 sheetp, 2 hives of bees; and each farm would have produced 1,194 bushels of corn, 23 bales of cotton, 385 pounds of tobacco, 87 bushels of potatoes, 33 bushels of peanuts, and would have had a garden. The corn production was 37¾ bushels per acre as against a State yield of 14.3 bushels; that of cotton was 505 pounds of lint per acre against 250 pounds for the State average.

High producing cows, unofficially tested, gave 8,000 pounds or more of milk, with a butter yield of more than 450 pounds. Corn worth 50 cents per bushel sold for around $1 per bushel when marketed through demonstration-fed hogs. The 57-acre farms per county would have made an average profit of $1,245.40, an excellent result record for 1931 when prices were so low.

Wool Cooperative Aids Producers

ORGANIZED in 1920 by local producers of three counties who were dissatisfied with the existing marketing system, the Lawrence County, Pa., Cooperative Wool Growers' Association (Inc.) has handled 645,850 pounds of wool for its patrons in 12 years.

Under the old system of selling wools to local merchants, a flat price was received regardless of quality. The desire to market wool on a graded basis was a powerful incentive in bringing into existence the cooperative.

After discussing the problem and obtaining information regarding the type of organization which would fit the needs of growers, a meeting of those interested was called. At that meeting a constitution and by-laws were drafted and a board of directors elected. The organization later was incorporated under the laws of the Commonwealth.

Growth Steady

Although there have been some fluctuations, the growth of the association has been comparatively steady. In 1920, the first year of operation, 203 producers pooled 51,761 pounds of wool. The last year the pool consisted of 246 clips, totaling 61,218 pounds. Seventy-five per cent of the wools produced in the territory served now are marketed by the organization. The largest amount ever pooled was 62,403 pounds in 1926, but there was 1,603 pounds rejected that year compared to 933 pounds last year.

Year	Total weight	Amount of rejections	Poolers
	Pounds	*Pounds*	*Number*
1920	51, 761	3, 903	203
1921	52, 774	1, 034	198
1922	45, 283	514	172
1923	50, 781	967	198
1924	45, 882	780	198
1925	59, 080	899	231
1926	62, 403	1, 603	231
1927	59, 208	940	217
1928	54, 648	932	194
1929	50, 291	755	213
1930	52, 512	774	209
1931	61, 218	933	246

Grading at the point of receipt has influenced in a marked degree the amount of rejections. In the first year the rejections totaled 3,903 pounds. The very next year with more than 1,000 pounds more wool marketed the rejections decreased to 1,034 pounds. Never again did they exceed 1,000 pounds except in 1926.

The accompanying table gives a complete statistical story of the operations for the 12 years the association has been in existence.

Contributing to the success of the organization have been the following factors:

A board of nine directors handles all the business of the association. These directors are elected at the annual meeting and are chosen as much as possible so that geographically all sections of the territory served are represented.

Each director is in charge of the sheep-improvement work in his community. By placing such responsibility on the directors they develop pride in the association and community spirit which contribute to success.

Wools have been handled for approximately 1 cent a pound each year. This reasonable charge includes labor, rent of warehouse, insurance, and incidental expenses. Each director distributes paper twine in his community.

The wools always have been sold f. o. b. New Castle and the poolers have received their pay promptly upon receipt of the draft for the wools.

A great deal of effort has been expended by the directors in establishing favorable business relations with the mills and wool dealers. The purchasers recognize the uniform grades and good business practices of the organization.

Grading Wools

Grading the wools as pooled gives the growers an understanding of how to improve their clips through better breeding, proper feeding, and correct care of the wools after shearing. The use of paper twine is required. The grading work has created such a demand for better blood that a purebred ram sale is conducted each year at New Castle. Grading the wools as they come gives each producer an opportunity to see how his own wools qualify and also to compare his clip with those of other members.

The Lawrence County association is one of 28 such organizations in Pennsylvania which this year marketed more than 600,000 pounds of wool for about 4,000 farmers.

ORDINARY tasks, done in ordinary ways, are simply work; but ordinary tasks, done in a better way, spell growth and satisfaction and make a contribution to life.

4-H Club Work in Virginia

JULIAN A. BURRUSS

President, Virginia Polytechnic Institute

FROM 75 TO 23,194 in 21 years! Surely 4-H club work in Virginia has reached the voting age and has elected itself to the highest sort of position in our agricultural extension service. That this position is fully merited has been proved over and over again by the truly wonderful results produced by this army of boys and girls.

To recite all of the reasons for the outstanding success attained in this interesting and valuable form of extension education would require a long story, much longer than can be told here. While there is much in common, every one of the thousands of participants can probably tell of some different experience, all worth while.

One of Virginia's community 4-H clubs

Club work represents an ingenious scheme for educational development through study and practice in agriculture and home economics and related branches. Through it the flower of our teen-age population are taught better farm and home practices, and are imbued with the finer and more significant considerations of rural life. Social and recreational development, with training in group action according to parliamentary procedure, are secured at home through practical and wholesome employment. Social isolation and undesirable individualism of rural young people are broken down through participation in group as well as individual enterprises and community activities, which fit them for responsibilities as citizens while making them better farmers and home makers. Indeed, it also prepares the foundation for occupations other than those directly associated with the farm and home, if perchance they choose some profession or business.

In this time of adversity, when frugality should be encouraged in every proper way, these clubs have a special opportunity, which they undoubtedly will meet in their usual efficient manner. Our county agents and other extension workers are aiding in an important and timely way, by setting before these young people an example of thrift and by teaching them to do carefully the things they like to do, and which bring some money return.

Club Members Are Owners

Every boy and girl who becomes a 4-H club member and fulfills club requirements becomes an owner of something. They also establish credit. Bankers say that the percentage of loss on money lent to members of the various clubs, such as the calf, pig, sheep, and poultry clubs, is very small. Being a member of a club of some sort stimulates pride in achievement and possession, and creates a desire for ownership rather than for wages.

Those of us who keep more or less continuously in touch with it are pretty well convinced that club work offers one of the most effective solutions of the perplexing problem of how to keep older boys and girls on the farm and away from the city. Still more important, it tends to keep them in the home, and directs their attention to the higher and better things of life.

It seeks this through creating a spirit of cooperation among the boys and girls, so that they are led to regard the duties of the farm and home as a pleasure and an opportunity rather than as drudgery. Instead of a required task to be avoided, it becomes something that brings with its successful accomplishment both financial reward and the satisfaction of a thing well done. Our county agents are thus starting every year hundreds of farm boys and girls on paths that are leading them to positions of trust, honor, and prosperity in the community.

Club work dignifies labor; it makes it an interesting game, and sets high standards of achievement. It trains for community leadership and stimulates social life of the right kind, resulting in better civic conditions. "To make the best better" is the slogan for both work and play, for both the individual and the group. This gives the right attitude toward life in the impressionable age. With this motto constantly before them, club members try each year to improve upon the year before.

As president of our State agricultural college, I have had opportunity to observe 4-H club activities in Virginia. Each summer the State short course brings about a thousand fine boys and girls, leaders and county agents, to our campus, and we look upon this as one of the most interesting and important events of the year. I also have occasion to read the annual reports of the State club agents and the county farm and home demonstration agents. I have been profoundly impressed with the worth of 4-H club work in Virginia, and I believe its contribution to the State in the development of leadership among club members is valuable beyond all estimation.

Good Leadership Essential

Good leadership is essential in maintaining progressive and satisfying country life, and therein lies our greatest need. Our State extension and county agents have been unusually successful in developing the right kind of leadership among our rural boys and girls. At our camps and short courses I have marveled at the easy way in which the club members themselves take charge of practi-

(*Continued on page 52*)

New Jersey County Increases Profits on Tomatoes

EXTENSION WORK in Cumberland County, N. J., has increased the profit of can-house tomato growers by developing the practice of earlier planting and thereby increasing the yield about 2 tons per acre, says D. M. Babbitt, county agent.

This program was worked out in the spring of 1928 when it was decided to give special consideration to the can-house tomato industry, since it represented a larger acreage than any other truck crop in the county.

There were 5,000 acres devoted to the growing of can-house tomatoes, and the crop ranked third in value of all the truck crops in 1926. The value of the can-house tomato crop, $420,000, was exceeded in value only by lettuce, string beans, and peppers. A survey made in 1925 by the experiment station showed that the cost of producing an acre of can-house tomatoes was $131.69. The average yield in 1925 was 7 tons per acre and the average price $17 per ton, making a return of $119 per acre. This represented a loss to the grower. The 5-year average yield was 5.4 tons per acre and the average 5-year price was $18.80 per ton, or a return of $101.52 per acre.

Early Planting

These figures were presented to the vegetable committee of the county board of agriculture and extension service. It was agreed that something must be done to improve the return per acre received from the crop. In surveying the situation, it was found that the growers in the county usually planted their tomatoes in the field during June, a great many being planted in the latter part of the month, yet studies had shown that the most important step in increasing yields per acre was early planting. It was therefore decided to center the program around early planting of tomtato plants.

The committee first considered the methods to procure these plants which would be ready to go in the field early. The accustomed method was for the grower to grow his own or have them grown in a community plant bed, but since these plants in both cases were grown in the open they could not be planted until the first of April and would not be ready to transplant in the field until about Decoration Day. The specialist recommended sources of plants, such as southern-grown plants, plants grown under glass or muslin, and spotted plants grown by commercial plant growers. The last source was quite expensive and for that reason was not encouraged. The methods followed during the season consisted of demonstrations on the construction of cold frames, both glass and muslin covered; circular letters; publicity on the construction of cold frames; general meetings of tomato growers to create interest in early planting and many individual farm visits where growers were shown how to grow plants in cold frames.

Increased Yields Obtained

The results obtained during that first year were fair, but not until the spring of 1929 were real results obtained. In 1929 the largest canner in the county who purchased tomatoes from approximately one-half of all the tomato acreage in the county was interested in the project. This canner contracted with a commercial plant grower to grow sash plants for early planting. This same procedure has been followed by this canner for the past three years. Figures taken from our 1931 annual report, which were furnished by this canner, show the following trend toward early planting by this firm, which is representative of the industry of the county:

	Time set		
	Before June 1	After June 1	Total
1929			
Acres	944	1,516	2,460
Per cent of acreage	39	61	100
1930			
Acres	1,864	1,438	3,302
Per cent of acreage	58	44	100
1931			
Acres	1,135	429	1,564
Per cent of acreage	72	28	100

The following figures for Cumberland County during the past two years show the effect of early planting on yield:

	1929	1930	1931
	Tons	*Tons*	*Tons*
May 1 to 15	8.2	7.68	4.77
May 16 to 31	9.5	7.20	3.70
Average for May	9.3	7.44	4.27
June 1 to 15	7.06	5.96	3.46
June 16 to 30	7.08	5.70	2.80
Average for June	7.07	5.80	3.41

Under most conditions there is about 2 tons per acre difference between the yield of plants set in May and June. Figuring this at an average price of $15 per ton, there is enough to spell the difference between profit and loss in the business of can-house tomato growing.

Producing the crop with early plants is only slightly higher in cost than producing it with late-set plants. The early plants cost approximately $3.50 a thousand, and considering replants there are approximately 3,000 necessary per acre, making a charge of $10.50 per acre. The outdoor-grown plants which are used in June planting cost approximately $1.50 a thousand or $4.50 per acre. By using early plants there is an increased charge of $6 per acre. Other charges are the same whether the crop is set early or late.

4-H Club Work in Virginia

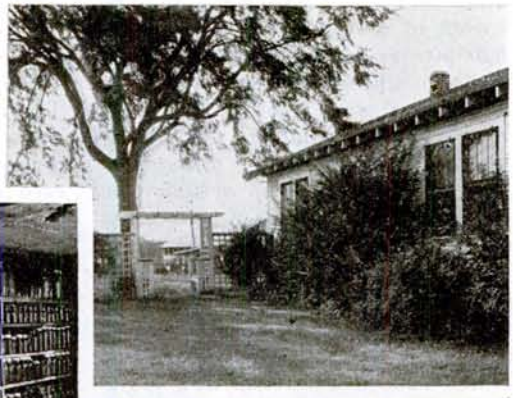
(*Continued from page 51*)

cally all of the public meetings, direct the recreation, and conduct the vesper services. Back home, too, while the agents supervise, the club members themselves lead.

Training for leadership is the outstanding feature of 4-H club work in Virginia. No wonder I am enthusiastic about it! Is there any higher aim?

AN IOWA 4-H CLUB, The Blue Grass Sunshine Workers, breaks into print on the cover page of Wallace's Farmer, issue of December 26. This club has had a very fine record since it was established in 1920 and won 4-H laurels by becoming the banner club in 1930. There are 31 girls in the club taking part in the county rally day, county 4-H glee club, exhibiting at the Mississippi Valley Fair and making 161 dresses and coats, 73 undergarments, and 41 made-over garments last year. Their demonstration team represented Scott County at the 1931 State fair.

The Story of Pulaski County, Arkansas in Pictures and Words



AGRICULTURAL extension work in Pulaski County, Ark., has a long-time program emphasizing two important objectives. The first objective is a system of farming involving a larger number of cash crops, improved home conditions, greater food and feed production, and soil conservation and improvement. The second objective is the development of trained leadership, using rural boys and girls who would put into practice the basic principles of this farming system when they become farm owners. This program is being carried on under the leadership of J. W. Sargent, county agent; G. W. Cowsert, assistant county agent; Flora Ferrill, home demonstration agent; and Doris Whittington, assistant home demonstration agent. The results of this program in Pulaski County since 1919 are shown as follows:

To-day there are approximately 42,000 acres of rolling land properly terraced as compared with an almost negligible terraced acreage in 1919.

This year $1,400,000 worth of whole milk has been sold as compared to $500,000 worth sold 12 years ago.

No cream was sold to plants in 1919, while $82,000 worth of cream was sold last year to various companies.

A high grade of hogs has taken the place of the 1919 razorback.

There are 200 highly bred poultry flocks in the county to-day whereas there were no purebred poultry flocks 12 years ago.

The sale of hatching eggs which was not practiced in 1919 brought in $35,000 to the county last year.

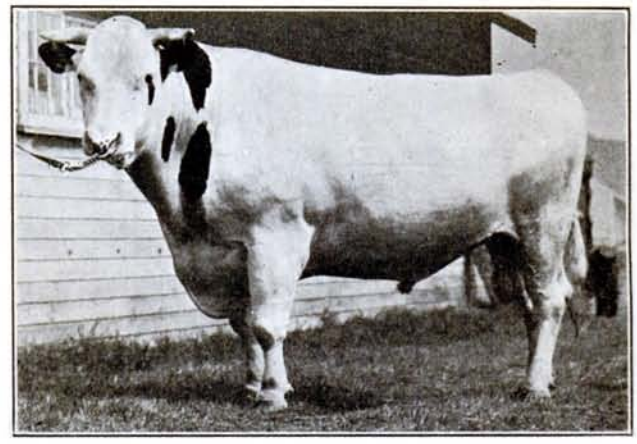
More than 200 registered dairy bulls have taken the place of scrub bulls.

The 4-H dairy calf club which has been organized since 1919 now has a membership of 60 and has won the State dairy demonstration for the past 2 years.

A cow-testing association organized 3 years ago now has 400 dairies under test.

The number of grass pastures in the county has grown from 78 in 1919 to more than 400 in 1931.

Placing Purebred Sires in Washington



An improved Washington herd sire

PLACING purebred sires or making them available to livestock owners in the State of Washington through the work of county extension agents is rapidly proving its real value in increased butterfat production per cow.

Two general ways being used to introduce purebred sires into the dairy herds of the State are by making a purebred bull available to a group of dairymen with small herds through a well-organized bull club and by placing a purebred sire in the larger dairy herds after showing the owner the value of such an animal and helping him to obtain it. The biggest obstacle encountered in placing purebred bulls is not found in a prejudice against blooded animals but rather the financial outlay required. Many dairymen have not been educated to the fact that a purebred bull usually will repay in his daughters many times the difference in the purchase price between a good sire and a poor one.

Purebred Bull Association

One of the most practical means of counteracting the reluctance on the part of dairymen to pay the higher price demanded for a purebred animal is the organization and operation of a purebred bull association, such as was started in Clallam County in 1927 by A. W. Holland, county agent, and the county agricultural council.

The Clallam County agricultural council purchased the sires, all of which were of exceptional high quality and backed by records of 600 or more pounds of butterfat. The council in turn leased the bulls to the managers of the various bull clubs. The managers of the different clubs were made solely responsible to the council for the care and management of the bulls and for the annual payment of the lease charge.

The lease charge was determined by taking the average price of the bulls and dividing it by six or the number of years which the contract was to run. The yearly lease charge came to about $60 on the average purebred bull. In addition to the lease charge paid the council, $60 was to be paid the manager for keeping and caring for the bull. The total of $120 was raised by assessing each cow in the club a service charge which would meet the lease charge and the keep of the purebred sire. If 40 cows were on the list of the club a service charge of $3 would be made. The manager was required to pay a service fee for his cows the same as the other members of the club.

Following his selection and approval by the county agricultural council, the manager of each club entered into special contracts with his neighbors at the low service fee of $3 per cow. The contract between the manager and his members called for 1-year service fees in advance from each member at the time of signing the contract. This amount insured paying the service fees in advance and protected the manager from loss on account of some member unexpectedly dropping out.

One of the managers has five heifers from the club bull which are averaging 40 pounds of butterfat, each with their first calves. All of the daughters are better than the dams. The same manager had seven heifers of ordinary breeding, only one of which was good enough to keep.

Dairy-herd improvement association records are the key to all better-sire movements, according to C. W. Krassin, assistant extension agent in dairying, who has done some excellent work in this field in Skagit County. Testing, he believes, is the sure way of proving the need for better sires. One year after the organization of a testing association in Skagit County in 1924, a definite demand for better sires had been created. Shortly afterward, 3 Jersey bull associations were organized and 11 mediocre bulls were replaced by 3 purebred animals. A number of purebred Jersey herds now in the county attest to the effectiveness of the work.

List of Breeders Kept

Every strong dairy county in the State has on file in the county agent's office a list of reliable breeders where purebred sires and stock may be purchased. The county agent keeps in contact with approved breeders so that he will be able immediately to refer the demands for purebred animals to the proper person. If some unusually good values in purebred sires are to be had from a certain breeder, a circular letter is sent to a list of dairymen who might be in the market for such an animal. Occasional surveys are also made to find out if any dairymen are in the market for a purebred sire. If so, they are referred to the proper breeder. Fred L. Thompson, assistant county agent in dairying in Thurston County has one of the best files in this respect, having been instrumental in placing six purebred sires since January, 1931.

Another valuable asset in the placing of purebred sires is the recording and listing of all proven sires. No intelligent dairyman will overlook the opportunity of breeding to a proven sire, if one can be made available. Dairy Agent Thompson proved four sires in Thurston County in 1930. The daughters showed an average increase over their dams of 100.5 pounds of butterfat. Eighty daughters were obtained from the four sires, estimating conservatively. This means an added 8,040 pounds of butterfat per year due to these sires or $4,020 additional returns per year. As the average milking life of a cow is about five years, the increased product credited to the four proven sires over this period of years would amount to $20,100. Proven sires can be made available to a large number of dairymen through a little extra effort on the part of the county agent.

The Mountain Advocate at Barbourville recently published a live-at-home edition which was almost wholly devoted to the campaign of Earl Mayhew, county agricultural extension agent of Knox County, Ky., to encourage greater production of food and feed. The edition contained many articles about gardens and crops that can be grown in Knox County. Merchants and other concerns indorsed the live-at-home program in their advertisements.

Nursery School Methods in the Rural Home

MARY STILWELL BUOL

Assistant Director for Home Economics, Nevada Extension Service

CAN NURSERY school methods in child training and care be made available to the rural and small-town mother who geographically and financially is beyond the reach of an organized nursery school or child-guidance clinic? Is the average busy rural mother capable of adopting these methods and adapting them to the needs of her own home and children?

The Nevada Extension Service and some of the rural mothers of the State believed that the answer to both questions was "Yes." At least it was well worth a serious attempt.

A number of nursery schools and child-guidance specialists were consulted, but little encouragement was received. The consensus of opinion seemed to be that only long years of specialized training fitted a person to attempt to apply modern psychological methods to the problems of child care and training, and that anyone else might do more harm than good. The Bureau of Home Economics of the United States Department of Agriculture at least encouraged us to make the attempt and helped us to procure the services of a young woman, with both home-economics and nursery-school training and experience, to act as one of our home demonstration agents and also as part-time specialist in child training and care.

Specific Demonstrations

We are breaking into a new field and had few precedents to follow in choosing a point of attack or methods of procedure. Because of our profound belief in the result demonstration as the foundation stone of extension teaching we decided that this new work should be established on the basis of a few specific home demonstrations with the mother, child, and specialist working out each small problem as it arose. Perhaps ultimately the experience gained through a number of these home demonstrations would clarify our ideas as to the fundamental problems involved, give us a basis for judging the practicability of adapting nursery-school methods to the home and also enable us to gradually develop effective extension methods. Above all, we felt that in this preliminary work we should proceed cautiously, attack each problem with an open mind, and judge our results without bias, so that in the end we might have a real basis for future decisions.

In order to have an unself-conscious point of attack and some immediate means of judging progress, physical development was taken as the basis for beginning the work and the project was called "Good growth and development," as that title had proved effective in our neighboring State of California. Around the central theme of good physical development we hoped, unobtrusively, to group a number of habit-formation problems as the necessity for each appeared.

Our only specific goal was to develop a constructive attitude of mind in the mothers who were acting as home demonstrators so that they would study their own problems from a more objective, less emotional point of view and, with the specialist's guidance, attempt to apply a few nursery-school methods to their own problems.

Homes Visited

During the first year (1929–30) the project was confined to the one county in which our specialist acted as home demonstration agent. Only seven home demonstrations were established, and six of these were successfully carried on throughout the year. The ages of the children ranged from 1 month to 5 years, so a wide variety of supplementary problems were encountered. The home-visit method was applied. The agent visited each home once or twice a month, according to need, weighed the child, and conferred with the mother regarding diet, sleep, rest, exercise, and any other problems which the mother brought up. All the children made an average or more than average physical development and a number of specific habit-formation and disposition problems were successfully solved, ranging from thumb sucking to tantrums. All of these mothers seemed proud of each success achieved and eager to try to solve the next problem.

Above all, the year's work seemed clearly to indicate the following things:

1. That there is a decided parental interest in the problems of child training and an active desire for information as to practical methods of applying modern child psychology to every-day home problems.

2. That the physical development of the child offers an effective and self-conscious point of attack that opens the way into the whole field of child-parent relationships.

3. That success in securing right physical development and establishing a few simple physical habits builds up self-confidence and confidence in the specialist's advice. This develops a willingness to reveal other more complicated psychological problems and a desire to receive help in their solution.

4. That there is a great need for keeping detailed "case histories" of each home demonstration as a basis for developing extension technique in the modification of nursery-school methods to meet rural-home conditions.

During the next year (1930–31) we planned to extend these results to one or more counties under partial supervision of the State specialist, but the White House Conference on Child Care and Protection aroused such an intense interest in this whole subject that we were compelled by popular demand to enlarge our plans. Every county wanted the good growth and development work; therefore the home demonstrations were extended into 5 new counties, 2 under the supervision of the State specialist and 3 under the direction of 2 agents, 1 of whom had had somewhat similar training along this line. This year we set as our specific goals wholesome parental attitude, good physical development, and the establishment of four sets of habits regarding food, sleep, rest, and the toilet.

Personal Conferences

In one county, with a compact rural population and good roads, office conferences at specific hours were substituted for home visits, and proved almost as satisfactory. In another county a group of active young mothers with small children organized a special good growth and development club, where the whole group studied child-training problems together with personal conferences before and after the meetings. They are getting excellent results. In the other counties the home-visit method is being continued.

In all, 54 home demonstrations were carried on in six counties with excellent results as regards physical development and encouraging results in regard to habit formation and personality adjustments, confirming the previous indications that physical development is an effective means of approach to child-training problems.

Growth and Development Work

Public demand for more good growth and development work led also to the adoption of another tentative subproject called "Prepare for school round-ups." This was established on a community demonstration basis in an effort to reach a larger proportion of the population. The goal was to see that children entering school in the fall would be in good physical condition and have toilet habits well established. There was widespread interest in this work; 39 communities taking part, and 292 children were reached and given a physical examination, usually by the State public health service, and sometimes with the assistance of local physicians. A check up was made of food, sleep, rest, and toilet habits with special emphasis on the latter. Some follow-up work was done during the summer and in the fall, 224, or 70 per cent of the children, were reweighed and examined when they entered school. Results show a keen interest on the part of both schools and parents and, in spite of the severe economic depression, some improvement in physical conditions (about 10 per cent) was obtained, and in general the children were better prepared for school. Also, there is an active demand that the work be repeated this coming year.

Conclusions Reached

From the above experiments in this new field of child training we have drawn these tentative conclusions:

1. That there is keen interest in the problem and a real desire for help.
2. That at least some of the nursery-school methods can be modified to meet rural-home conditions.
3. That home demonstrations are the best means of getting definite results, but that the general population can be reached on a few points by means of some form of community demonstration.
4. That there is a decided need for printed suggestions indicating effective methods regarding specific problems in habit formation and personality adjustment.
5. And last and most important, that this is a rich field challenging extension folk to make an experimental study of effect, motivation, and methods.

The Trench Silo in New Mexico

WITH THE RECENT low prices of feedstuffs, interest is being revived in the trench silo in New Mexico as being the cheapest possible means of storing feed for stock for winter use. Realizing the benefit to New Mexico farmers of this cheap and effective device, its development has been a part of the extension program since 1922 when the first six silos were built and proved a success with corn silage. Pictures were taken and slides made, which were used in several counties, showing the method of construction, the finished silo, filling, and tramping. Estimates of the cost of these operations were very small and included chiefly the labor of the farmer himself. This cheap method of preserving feed appealed to the farmers when reminded that in dry years a large part of the forage that did not mature was lost in the field or feed lot from winds, dry weather, or excessive moisture for short periods in winter. Many farmers were already convinced of the value of silage but could not afford the construction of an overhead silo or a concrete, underground pit silo, but readily decided to construct the cheaper type when plans, pictures, and other information were made available.

A trench silo ready to be filled on a farm at Trujillo, San Miguel County, N. Mex.

After an increased number of silos were constructed, tours were organized within the different counties at the time the silage was being fed out, and large gatherings of farmers were induced to visit these completed silos where feeding was in actual operation. The county agents not only procured speakers to guide the farmers on these tours, but at each demonstration the farmer who had put in the silo gave the costs and results obtained from handling silage by this method. The use of the trench silo spread rapidly over the State, the number increasing from 6 in 1922 to 139 in 1925, 42 of which were built during the last named year. When the price of feed was low, these silos were used extensively, but with the advance of prices for different feeds, many farmers felt that more profit could be obtained by selling their crops than by feeding them to livestock; hence, a falling off in the number of silos, but they are now rapidly coming back into favor again.

MRS. KATE HANKINSON, who as Kate Owens, was the first girl to sign up for tomato club work with Marie Cromer in Aiken County, S. C., in 1910 is still an enthusiastic home-demonstration worker. She sells regularly at the Augusta market and is sending her son to Clemson College on "market money." She says the Boston brown bread made by an extension recipe sells as fast as she can make it.

THE LIVE-AT-HOME program was so strictly observed in Perry County, Ark., that 75 per cent of the farm families used the meat from their own animals this winter, states John W. Bell, county agent.

How Effective Is County Agent Work?

R. R. THOMASSON

Assistant Director, Missouri Extension Service

DO FARMERS who have access to the services of a county agent make a greater use of the practices recommended by the college of agriculture than do those farmers who do not have the services of a county agent available? A study of conditions made by C. C. Hearne, State extension agent, Missouri College of Agriculture, and myself in two Missouri counties would indicate that such is the case. This study also indicates that the use of these recommended practices results in greater economy of production.

In this study two counties, with as nearly similar natural conditions as possible, were selected; one with a county agent and one without. The county with an agent is designated as "M" and the one without an agent is "S." "S" county has never had a county agent and does not border on any Missouri county that has had a county agent in the last five years. "M" county had had, at the time the survey was made, two agents over a period of nine years. The present agent had served six years as agent in the county at the time the study was made.

In making the study a State highway was followed across the center of each county in an effort to interview every farmer whose homestead was located on the highway. The result was 47 farmers interviewed in "M" county and 43 in "S" county. Repeated visits to some farms failed to locate the farmer at home.

Farmers in "M" county were using a total of 663.2 recommended practices of those studied, while "S" county farmers were using only 508.3 practices, per 100 farms. In other words, "M" county farmers were using 154.9 more practices per 100 farms than were "S" county farmers. The number of recommended practices being used per 100 farms in the two counties are shown in Table I.

General Factors

There are some general factors in connection with the farm and the farm home which may indicate the prosperity or progressiveness of the individual. These were given consideration in this study. "M" county farmers had 14.1 per cent more telephones, 7.4 per cent more cars, 6.5 per cent more tractors, 2.8 per cent more taking daily papers, 2.5 per cent more taking county papers, 17.8 per cent more belonging to farm organizations than in "S" county. "S" county had 9.9 per cent more farmers with radios, 2.4 per cent more with water systems, 2.8 per cent more with light systems than did "M" county. In this comparison there are six factors favoring "M" county and five favoring "S" county. The percentages in favor of "M" county are slightly greater than those favoring "S" county, the average percentages in the two counties being 8.5 per cent for "M" and 6.08 per cent for "S."

> "IT WILL NOT BE doubted that, with reference either to individual or national welfare, agriculture is of primary importance. In proportion as nations advance in population and other circumstances of maturity this truth becomes more apparent and renders the cultivation of the soil more and more an object of public patronage. Institutions for promoting it grow up, supported by the public purse; and to what object can it be dedicated with greater propriety? Among the means which you have employed to this end none have been attended with greater success than the establishment of boards, composed of proper characters, charged with collecting and diffusing information, and enabled, by premiums and small pecuniary aids, to encourage and assist a spirit of discovery and improvement. This species of establishment contributed doubly to the increase of improvement, by stimulating to enterprise and experiment, and by drawing to a common center the results everywhere of individual skill and observation and spreading them hence over the whole Nation. Experience accordingly has shown that they are very cheap instruments of immense national benefits."—George Washington in a speech to Congress on December 7, 1796.

Some other general indications show "M" county in a much better light. In "M" county 79.5 per cent of the farmers were reasonably well satisfied with conditions on the farm, whereas only 70.2 per cent were satisfied in "S" county. This does not mean that any of the men were absolutely satisfied.

The 20.5 per cent in "M" county and 29.8 per cent in "S" county were dissatisfied without apparently attempting to correct the situation. Their attitude was that their condition was more or less hopeless.

The general appearance of the farm and farmstead may be taken as an indication of the success of the farming operations of the individual. Four classifications were made. There were 14.9 per cent of the farms presenting an excellent appearance in "M" county and 7.2 per cent in "S" county, a difference of 7.7 per cent in favor of "M" county. In the class of good appearance, there were 34 per cent in "M" county and 30.9 per cent in "S" county, the difference of 3.1 per cent being in favor of "M" county. The 34 per cent classifying as fair in appearance in "M" county as compared to 30.9 per cent in "S" county leaves a difference of 3.1 per cent in favor of "M" county. There were 17 per cent in "M" county and 30.9 per cent in "S" county in the last class of poor appearance, and 13.9 per cent difference again being in favor of the "M" county farmers.

TABLE I.—*Recommended practices used per 100 farms in 2 counties*

	Average
Soils and crops "M" county	91.3
Soils and crops "S" county	27.7
Difference	63.6
Sheep "M" county	261.1
Sheep "S" county	175.7
Difference	85.4
Hogs "M" county	143.3
Hogs "S" county	107.1
Difference	36.2
Poultry "M" county	197.8
Poultry "S" county	167.5
Difference	30.3

Improved Farm Practices

The study of improved farm practices covered typical factors in connection with the poultry, animal husbandry, and soils and crops projects. These projects were approximately equal in application to the two counties.

As can be seen from Table I, "M" county farmers were using more recommended practices in each project than were farmers in "S" county.

Out of eight practices studied in the poultry project only two were found to

be more prevalent in "S" county than in "M" county.

Two practices were considered in the hog project. Both of these projects were being used by a much larger percentage of "M" county farmers than by "S" county ones. One of these questions dealt with the number of farmers feeding protein supplement, and 93.3 per cent of "M" county farmers were following this practice, whereas, only 78.6 per cent of "S" county farmers were doing so.

Of the five practices studied in the sheep project only one was used more in "S" county than in "M" county. "M" county farmers used 261.1 practices, whereas "S" county farmers used only 175.7, or a difference of 85.4 practices in favor of "M" county.

Of the soils and crops practices studied "S" county farmers excelled "M" county farmers in only one instance, namely the growing of alfalfa. "M" county farmers surpassed "S" county farmers in point of numbers growing sweetclover, using lime, and using fertilizer.

In every instance, as shown by the following table, the recommended practices have proved superior to the practices ordinarily used. This is the average of all farms in both counties.

TABLE II.—*Results of various practices in 2 counties*

	Average
Pigs raised per litter:	
On clean ground	7.2
On old ground	5.8
Difference	1.4
Price per hundredweight on lambs sold:	
Before July 1	$13.90
After July 1	12.02
Difference	1.88
Eggs per 100 hens per day:	
When fed mash	28.7
Without mash	19.6
Difference	9.1
Per cent chicks saved:	
When raised on clean ground	80.8
When raised on old ground	70.2
Difference	10.6
In movable brooder house	78.6
Without movable brooder house	72.0
Difference	6.6

One definite conclusion can be drawn from the study, and that is that "M" county farmers, with the services of a county agent available, are using a great many more of the farm practices recommended by the Missouri College of Agriculture than the "S" county farmers. Also, the evidence seems to be conclusive that those recommended practices in general give better results than other methods followed by the men who pay no attention to these recommendations.

A County Terracing Program

THAT DEATH AND TAXES will always be with us, County Agent Roy I. Coplen, of Lafayette County, Mo., agrees, but he sees no reason why destructive soil erosion should be placed in the same category, in spite of the fact that it, too, has been always with us. Like many other counties, Lafayette had dabbled with terracing for a number of years. In 1929 a conservatively planned and fairly well built set of terraces was established about the time that Coplen took over the county. These really did the work and gave rise to calls for more; incidentally, also, for bigger and better terraces. Toward the end of 1930 Coplen wrote:

"The reason I plan for a terracing school is to relieve myself of a lot of work that seems necessary to take care of terracing demands. I have six or eight men ready to go at any time, and I am confident that the work with these men will only increase the demand for a great many more. Consequently, I can see myself spending too much time on this project unless a school is held and a number of men learn how to do this work."

Terracing School

The school was held in August, 1931, following a 1-day county tour of terraced fields. Some of the field jobs were good, some bad, but every one was an object lesson to the 75 in attendance. Thirty-eight adults were on hand in the high-school building at Higginsville at 9.30 for the morning school period, and during the afternoon field practice this number swelled to 85. The interest throughout was keen, and later results were gratifying to Coplen, who reports: "Seven men, I think, have been taught sufficiently by the school to work out most of their problems and to actually lay out the lines and construct terraces."

Regarding his plans for 1932 Coplen states, "I am planning to spend 42 days on this project. Naturally, I will want to get as much accomplished for this time spent as possible. I wonder if a tour and school such as we held last year would be advisable, or would it be better to hold a school in about 14 different communities. I believe the program might be further advanced by my spending more time in holding community schools than in proceeding as before in assisting in laying out and constructing terraces."

The following plan is being carried out in Lafayette County in 1932. A preliminary three-day canvass of the county was made in January to determine if sentiment was sufficient to warrant the plan. Publicity for the canvass was begun in November, 1931.

Meetings Held

The plan of work is to hold 10 meetings during the year, devoting three days to each meeting. All interested are invited to attend during as many days as they care to. From among those reached during the preliminary canvass and those attending the first day three men who are willing to lead in the work will be chosen, and the three days' effort will be confined to the three farms represented. In accepting leadership these men will agree to follow instructions, to pool and obtain necessary equipment, including rod and level, to help one another, to help others in their communities on any cooperative basis that is mutually agreeable, and to report their terracing activity to the county agent. During the three days the terracing solution for one field on each farm will be determined as class field practice, and at least one terrace will be built on each field. The county agent will devote an additional 10 days during the year to follow-up work to help local leaders with particular problems and to check up on local effort.

Demonstrations to Be Established

Immediate results of this plan will be the establishment of 30 successful demonstrations. Their locations will be chosen carefully, so that no farmer will be more than a few miles from one or more demonstrations, the value of which he may observe and discuss with the owner. Thirty competent leaders will be developed whose skill will be of benefit in the upbuilding of the soils of the county.

Past experience of the extension service shows that this method of attacking the problem of soil-erosion control may confidently be expected to result in the rebuilding of Lafayette County soils at a rate appreciably greater than the tearing-down processes of nature now in effect. The plan will be continued long enough to safeguard all farms in the county.

NEVADA TURKEYS have returned $544,728.73 to the members of the Nevada Turkey Growers Association in the four years of its existence.

A Home Program for Sedgwick County, Kansas

Mrs. Laura I. Winter

AN ALL-ROUND program for the health, comfort, and satisfaction of the farm family reaches 75 per cent of the homes of Sedgwick County, Kans., under the leadership of Mrs. Laura I. Winter, home demonstration agent. Women in all parts of the county take part in the plans for convenient kitchens, healthful living, beautiful homes, successful gardens to supply the necessary fresh fruits and vegetables, becoming and economical clothing, and better use of the income. The varied activities are made possible by a group of well-trained and enthusiastic leaders developed by Mrs. Winter in her seven years of service in this Kansas county.

Sedgwick County is thickly populated, having 3,333 farm homes with a rural population of 25,011 and, as Mrs. Winter says, is "picturesque with large white farm houses, red barns, many trees, and the level open or slightly rolling fields of grain either in green, yellow, or gold as the season changes."

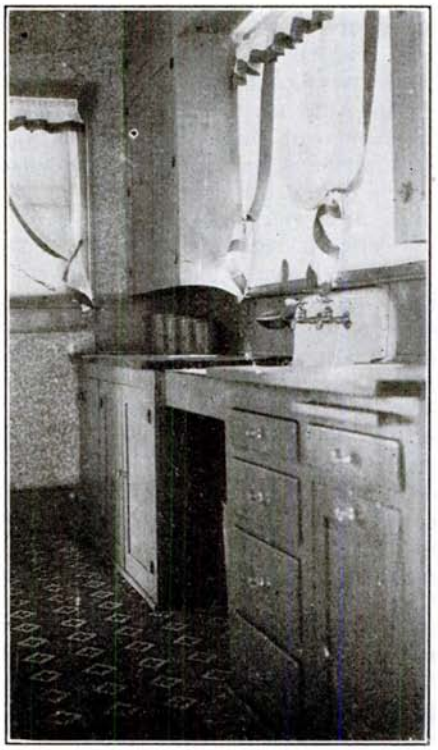
Running Water

Running water in the farm home was one of the early ambitions of Mrs. Winter both on the prairies of Kansas and in the rugged Wyoming country where she had previously served as home demonstration agent. With this in mind one of the first things she did in Sedgwick County was to work out a plan with the extension rural engineer, Walter G. Ward, whereby an increasing number of homes in the county could be helped with their problems of water systems, septic tanks, plumbing, and plans for remodeling and building their homes. They made many, many visits to farm homes, drew up plans, made suggestions and established demonstration homes. Some of the plans made four years ago materialized last year, much to the surprise and pleasure of these two workers.

Since 1925 when the work was begun more than 480 farm kitchens have installed a better water supply and in other ways have demonstrated more convenient arrangement and equipment. One of her best methods of interesting the farm people in good kitchens has been the model farm kitchen, water system, and septic tank exhibit and demonstration now a regular feature of the Power Farm Equipment and Road Show, an annual event in Wichita each February for the last 30 years.

Nutrition

Foods and nutrition work is now in its seventh year in the county and has accomplished much during that time. At several of the unit meetings Mrs. Winter asked the women what project had been the most valuable to them. Fifty



A corner in a Sedgwick County improved kitchen

per cent of them answered "Foods and nutrition, because a knowledge of foods resulted in better health for the family." Some of the more tangible resuls of this work show 1,086 persons reporting better health because of better food selection, 266 farm houses with an adequate supply of fruits and vegetables for winter use, and 198 individuals scoring 85 to 100 in food habits in 1931.

The home vegetable garden began as part of the foods and nutrition project in 1928. When the nutrition project emphasized the need of fruits and vegetables in the diet, the leaders insisted that in Kansas a garden did not pay because of the dry intense heat of the summer months. After talking it over, they agreed that perhaps gardens had not been given the right chance to develop, so in 1928 11 demonstrators promised to follow garden instructions and see what could be done. These were so successful that each year the enrolled demonstrators increased until in 1930 there were 35 community garden demonstrators. By this time a large number of the farm bureau membership were convinced that it was not only possible to grow a good garden in Sedgwick County, Kans., but that it paid well for the time, money, and energy spent. In 1931, the average return per garden was $128 and the average cost was $26. There were 227 women who practiced some fundamental of good gardening as laid down in the garden project and 303 stored some of the vegetables for fall and winter use. To take care of the garden surplus, 17 vegetable storage cellars were built or remodeled. One of the ways of arousing interest was the tour attended by 247 women.

The interest in vegetable gardens grew until it included flower gardens and the farm women have staged an annual flower show for the last three years. Each of the home-demonstration units has chosen a flower and grows this flower in as many places on her home grounds as possible. By 1930, 50 women were willing to enroll in a 5-year home beautification demonstration, promising to follow a definite plan worked out with the help of the agent and specialists. Some of these demonstrations are already beginning to show some truly lovely developments in rock gardens, picturesque pools, and the grouping of shrubs and trees. Last year each unit selected a leader in home beautification and had monthly instruction on the subject.

Homes Improved

The home management project has fitted in with the other lines of work. The first few years the work was carried under local leaders, the comfort and efficiency of a convenient kitchen were emphasized and in 1928 alone 91 kitchens were improved in some particulars. The next year, the living room was studied, reaching 702 women in the county, 207 of whom reported changes to make their living room more comfortable and beautiful. Last year the bedroom received attention with all of the 21 farm bureau units in the county represented. There

(*Continued on page 60*)

Develop Drainage Project

A DRAINAGE ditch which opened up several hundred acres of rich bottom land in Franklin County, Ky., was completed in the spring of 1931 through the efforts of County Agent R. M. Heath with the cooperation of the extension agricultural engineer, Earl G. Welch, and the five farmers who owned the swampy land. These reclaimed fields produced 65 to 75 bushels of corn per acre and 1,600 pounds of tobacco to the acre in the fall of 1931.

The five farms are located in the valley of a deserted channel of Elkhorn Creek. Four miles of the valley are contained in the drainage project which has a drainage area of 1,300 acres with 400 acres directly benefited. At the head of the drainage area is an enormous spring which in addition to surface drainage from adjoining hills kept the land below in a water-logged condition. Each landowner had made an attempt to provide good drainage through his property, but because of the lack of concerted action the old channel was never put in good condition throughout its length. The soil of the valley, according to soil specialists, contains far more plant food per acre than the average soil of the county. One hundred acres of land directly below the spring had at one time been drained with an open ditch and at that time produced excellent crops. This section of the ditch had been completely filled with sediment and the adjoining land was worthless. Because of the swamp above, the lower levels were fast becoming swamp areas.

A meeting of the five landowners was arranged by the county agent and it was decided to deepen and straighten the old channel and construct a new one where the old channel had been completely filled. A trip was made over the entire project for the purpose of establishing this fact.

Landowners Make Agreement

A working agreement was reached in which each landowner agreed to bear the expense of the work on his farm according to plans made by the extension engineer and to assist in making the necessary survey.

Since the old channel was as a rule dry during the fall months, it was decided to do the necessary grading with teams and scrapers, and 1.3 miles of the project was completed by this method when winter rains stopped the work.

The work done on the lower end of the ditch with teams and scrapers was very satisfactory and increased the desire on the part of the group to complete the work. However, continued heavy rains prevented it. Since a contractor with dredging equipment could not be interested in the job at reasonable figures because of the small amount of earth to be moved, a demonstration was arranged to show the landowners the possibilities of ditching with explosives. In the spring of 1930 the remaining 2.85 miles of ditch was blasted at a cost of 8 cents per foot of ditch or 20.8 cents per cubic yard of earth removed. Five men, under the direction of an engineer from the company furnishing the dynamite, completed the work in 51.1 hours. The average size of the completed ditch is 2 feet wide at the bottom, 5 feet wide at the top and 3 feet deep. One mile of the blasting project was new channel, and 9,797 feet was deepening work in the old channel.

The drought of 1930 followed the completion of the project and the new ditch had little surplus water to remove. However, it served to carry the water from the spring at the head of the ditch through the five farms thus providing them with water for their livestock, where otherwise it would have been necessary for at least four of the cooperating farmers to haul water during the entire summer.

Yields Improved

All the five landowners have profited by the new ditch, but the value of the project to Mrs. Bradburn, owner of the 100 acres directly below the spring, is of special interest. The cost of constructing the mile of new ditch through her property was $4.25 per acre. About 50 acres of the 100 acres reclaimed was planted to corn this year and the rest to tobacco and hay crops. The corn yield repaid Mrs. Bradburn's entire expenditure for drainage and left her a net profit after the cost of producing the crop was deducted. The crops of tobacco and hay also were excellent.

The entire ditch project will receive constant attention which will eliminate the possibility of its returning to its former condition.

As a result of this demonstration three other smaller projects were completed on other farms in 1931 and several others are planned for 1932.

THERE NOW ARE 1,500 acres of alfalfa in Bourbon County, Ky., and much more will be sown this year. When the county employed its first farm agent, in 1925, there were 197 acres. "The goal now is enough alfalfa to feed the livestock on every farm," says County Agent P. R. Watlington. Acreages of sweet clover and red clover increased from 1,341 in 1925 to approximately 4,000 last year.

Korean lespedeza, grown the first time in the county in 1930, is attracting much attention. Four men saved 6,500 pounds of seed last year.

A Home Program for Sedgwick County, Kans.

(*Continued from page 59*)

were 38 leaders at the first leader-training meeting and they aroused much interest. A tour to visit some of these demonstration bedrooms brought out 596 women. Besides the farm bureau membership, 444 other women took part in the bedroom improvement work.

Other features of home-demonstration work in Sedgwick County are the keeping of household accounts by 33 women, the annual farm women's camp in August, the clothing study, and the work in home health and sanitation.

Mrs. Winter believes firmly that people should enjoy living, particularly in the country. Once a woman asked Mrs. Winter if she should cut a window in a kitchen door. Mrs. Winter said, "If it will make you happier to do it." A couple of years later Mrs. Winter stopped at the place and the woman said, "Do you remember what you told me about the window?" Mrs. Winter replied that she did and the woman said, "Well, it has made me much happier, as now I have plenty of light and can see out of doors." That statement is the key to the success of Mrs. Winter's 16 years of service in extension work.

Twenty-four women, carrying their shoes in their hands, and wearing rubber boots and slickers attended the regular meeting at which a home-garden program was outlined in Brittany Community, La. It takes more than rain and muddy roads to dampen the interest in home gardens of these home demonstration women.

The Sheep Industry in Idaho

IN THE last quarter century the sheep industry of Idaho has presented a swift-changing scene. New problems have arisen constantly. Immediately after the war, when lamb and wool prices dropped sharply, growers thought more seriously about production costs. The State Wool Growers' Association in 1924 launched, with the cooperation of the extension division, an ambitious cost of production study. The aim was to obtain figures which would guide sheep operators in developing efficient protection programs. For the range sheep industry this study has covered seven years, and for farm sheep a shorter period. Each year from 1924 to 1930, inclusive, data have been assembled on 150,000 to 250,000 breeding ewes, representing 36 to 67 outfits. In 1930, due to the extensive development of cooperative marketing under the agricultural marketing act, it was possible to study data on 9,000,000,000 pounds of wool and 852,120 head of lambs.

Organization and teamwork are keynotes of the sheep industry in Idaho. Range operators function in a close-knit State organization, the Idaho Wool Growers' Association, which is affiliated with the National Wool Growers' Association. Farm operators function through several vigorous county and district cooperative groups to which county extension agents are giving helpful assistance.

Sales Held

The extension division has assisted the Idaho association in its two annual ram sales, one at Filer in August and the other at Pocatello in September. These sales have been developed by the State association as convenient sources for obtaining breeding stock. Idaho ranks second to California as a producer of early lambs and has more purebred Hampshires than any other State. The extension division has not limited its activity to helping sheep operators produce; it has helped them in improving demand for their product. The State home demonstration leader and her staff have boosted lamb the length and breadth of the State, and this work has materially stimulated consumption of this important Idaho product.

When the agricultural marketing act was enacted by Congress, the extension division quickly organized its forces to carry over the State information about this new development. The result was the formation of two wool-marketing cooperatives in the State, one in western Idaho and the other in the eastern part of the State. These cooperatives were instituted as units of the National Wool Marketing Corporation. In 1930, the two cooperatives signed 8,615,959 pounds of wool, divided as follows: Eastern Idaho, 4,085,139; western Idaho, 4,529,820. The Idaho wool production that year was 18,768,000 pounds. This last year the two cooperatives obtained 8,053,833 pounds of wool, as follows: Eastern Idaho, 4,783,631 pounds; western Idaho, 3,270,202 pounds. The production for the State in 1931 was 19,909,000 pounds. In addition to these totals a unit of the national cooperative outside of the State obtained considerable wool from the southwestern and northern part of the State.

Marketing Wool

Wool pools were an important aspect of the sheep industry in Idaho prior to the advent of national cooperative wool marketing. "As near as we can learn, the first wool pool organized in Idaho was in 1904," says E. F. Rinehart, extension animal husbandman. "This was organized by the range sheepmen of the Upper Snake River Valley, but they made provision to take care of the small operator. This pool operated until the organization of the present Federal marketing system, which it joined.

"Another pool dating back to early days is that of Mountain Home, where the wool has been assembled, though the custom has been to sell each man's clip separately by auction. Two other sections developed pools fairly early. One was the Boise Valley and the other the Minidoka project. Both were organized about 1916, 1917, or 1918. The Minidoka project pools are still operating, one in Minidoka County and one in Cassia County."

Development of cooperative lamb marketing among farm flock operators has put farm sheep production in Idaho on a more efficient basis. "There is no question but that the development of the lamb pools has improved management and feeding of farm flocks," declares C. W. Hickman, animal husbandman of the Idaho Agricultural Experiment Station. "It has encouraged the use of better rams and has resulted in higher quality lambs. Also it has opened up to the small producer a direct route to the big central markets in place of the indirect route he was previously forced to take."

The educational benefits of these lamb pools have been pronounced. For example, one farm operator has 100 lambs. When the selecting committee for the pool visits his place and takes only 10 lambs, yet selects 60 lambs from the 100 head of his neighbor, he wonders what is the matter. As he investigates the cause for this discrimination he usually finds where his operating system needs remodeling. It may be that different breeding methods are needed; it may be that different feeding practices are desired; or it may be due to other causes.

Lamb Pools

One of the outstanding results of the pools has been the development of more uniformly high-quality lambs. When the first lamb pools were formed the farm sheep industry was about as uniform as Jacob's coat. Lambs were born all the way from January to June. There were all breeds and grades of sheep in one community. Gradually a change has been effected. Breed and time of lambing and other points necessary to successful operation have been standardized. The result has been that the farm sheep industry has been elevated from a minor place on the farm to a major industry. The farmers have learned what the market wants and have been assured that with sheep entitled to a permanent place in the farming picture it is worth while to think as much about quality as does the range operator.

"As far as we are able to determine, the first lamb pools were organized in the Minidoka project during the years 1916 to 1918," says Mr. Rinehart. "They were discontinued for several years, reorganized, and are still operating. In 1918 and 1919 the counties of Canyon and Ada organized pools with the help of the county agents. These pools still operate, one in Canyon County, the other embracing Ada County and a part of Canyon. Definitely organized lamb pools are now in operation in the following counties: Ada, Bingham, Canyon, Cassia, Elmore, Gem, Gooding, Lincoln, Minidoka, and Twin Falls. Some lambs are shipped in a pool from Blaine and Power Counties, although they have not the definite, well-organized pools of the others."

The records for 1931 show 65,431 lambs shipped by these county pools. Of this number 36,666 lambs sold as tops, 4,374 as culls, with 24,391 going out as feeders. The Gooding County pool consigned the largest number, 19,207 head. This pool has been the largest and one of the most successful in the country. It was founded by and is under the able direction of O. E. McConnell, Gooding County extension agent.

The large percentage of lambs bringing top prices in 1931 indicates a significant value of the pool. In a district where pools are in operation and the lambs graded for shipment, the producer "cashes in" on his top lambs. In another district where there are no pools and the producer must sell for the best price he can get at home the top lambs do not bring their full value. The lot is taken at a flat price and the price for the lot is often set by the lower grades.

One of the men figuring in the success of the sheep industry in Idaho is E. F. Rinehart, extension animal husbandman, who is one of the veterans in extension work. He is in the field early and late during the spring, summer, and fall seasons holding meetings, visiting farm flocks, lambing camps, loading stations, and feed lots. In 1930 he made more than 1,166 such visits in addition to conducting 123 meetings and demonstrations attended by 2,926 people. Range and flock operators have grown to welcome the assistance of the men who come out in the field to bring the help of the extension division.

Idaho's sheep industry has been aided by the work of the experiment station. Annually for a number of years lamb-feeding experiments have been conducted at the Caldwell and Aberdeen substation farms under the direction of Professor Hickman and Mr. Rinehart. These studies have sought lamb-fattening rations that would combine feeds grown in Idaho in the most economical manner. Each year the results of these investigations are carried to the producers and lamb-feeding operations in the State have been guided to a large extent by this experimental activity.

Five-Year Home Demonstration Goals

County home-demonstration committee meeting in Muscatine County, Iowa, in session

FIVE-YEAR goals for home demonstration work in Iowa are being adopted by the county women's committee at the time of the annual program meeting, reports Neale S. Knowles, State home demonstration leader in Iowa. The setting up of a long-time goal is a new development in Iowa, but has been taken up by practically all the township organizations. The township goals are used as a guide in formulating the county goals which in turn are summarized for the State goal.

Some of the things which these home demonstration women in 1,612 Iowa townships plan to accomplish during the next year are:

1. To grow enough vegetables and small fruit on every farm to supply the family.

2. To serve at least one hot dish for lunch in rural schools.

3. A yearly health examination for children under 10 years of age.

4. To carry on home-improvement work with a study of color, refinishing furniture, making the kitchen more convenient, and beautifying the home grounds.

5. To safeguard the health by wearing correct service shoes, maintaining good posture, and yearly health examinations.

6. To keep home accounts and to make a study of buying.

As clubs, they plan to devote more time to music appreciation, folk games, and wholesome recreation, and to cooperate with the public health service libraries and other organizations for the betterment of the community.

Illinois Women Sell Produce

ILLINOIS HOME BUREAU markets had a very successful year in 1931, bringing to the farm homes more than $110,000 according to Grace B. Armstrong, specialist in foods and nutrition, Illinois Extension Service.

Markets operated by farm women in Illinois may be divided into three general types: First, those having the booth system in which each contributor sells her own products; second, the pool system where all the produce is put together and then persons assigned to sell certain products; and the third type, which is rather a recent development, might be called the coffee shop. There are three counties in which this last type is used. In Macon County the market has become almost exclusively a cafeteria. Champaign County, in which there is a regular booth market open on Saturday, also has had a coffee shop open six days a week since about the 1st of August. Coles County has a market with the booth system open Wednesdays and Saturdays and a coffee shop open on the same days.

The products sold from these markets include dairy products, poultry and eggs, baked goods, and almost everything in the line of food which the women have or are able to make.

The gross sales for 1931 were as follows:

Adams County	$16,646.27
Champaign County	23,204.58
Coles County	13,796.82
Fulton County	8,970.00
Iroquois County	50.00
Kane County	1,226.67
La Salle County (not in yet)	9,347.49
Macon County	29,169.62
Macoupin County	3,714.00
McDonough County	3,324.00
Total	109,449.45

BECAUSE THE SCARCITY of feed in South Dakota makes it impossible for many boys to enter 4-H livestock clubs this year, a special project has been planned for their benefit by H. M. Jones, State club leader. This project is called the "Handicraft Club," and the members will devote their time to making and repairing articles for the farm and home.

The Month's Best News Story

J. V. Highfill of Franklin County, Ark., furnishes us our example in news writing this month. Apparently, he is one of those agents who, as he goes from community to community and from farm to farm, recognizes news and promptly reports it. One of his farmers demonstrates successfully the growing of burr clover for pasture and hay. He reports the results in a short local news item, letting the farmer himself tell when burr clover should be planted, how it reseeds itself, and what an ideal summer pasture it furnishes. Somewhere else in his county, Agent Highfill holds a field meeting. Twenty-five farmers attend. They observe the results of using a certain recommended fertilizer mixture on 5 acres of cotton. To heighten the interest a guessing contest is organized. The average of the guesses is that the field will yield 1,264 pounds of seed cotton per acre. All this we learn in two short paragraphs, and, doubtless, so do a thousand or more other farmers in the county when they read this item in the local paper. Finally, Agent Highfill notes that Frank Pendergrass has had 86 head of feeder hogs vaccinated. Pendergrass, it seems, has a surplus of feed. He is planning to market it through hogs. As he has obtained his hogs from several different sources, he is afraid of cholera infection and is having them vaccinated. So, through one short news paragraph, Agent Highfill reiterates to the whole county his program for marketing surplus feeds profitably through livestock with proper sanitary safeguards. It would certainly appear that Agent Highfill appreciates the local community news item as a medium of extension teaching and knows how to use it.

J. A. BRADLEY, southeast of Charleston, has demonstrated the value of burr clover as a pasture and hay crop very forcefully this spring. Mr. Bradley has been growing burr clover 19 years, and this spring he fenced off 2 acres of his pasture, which was well set to burr clover, and a few days ago he cut it for hay. From these 2 acres of clover he secured 3 tons of hay from this cutting, and in a short time will have an excellent Bermuda pasture, as the Bermuda which was held in check by the clover is now beginning to grow. In addition to this he has practically all of his pasture land seeded to burr clover, and he says that it reseeds itself from year to year without any attention on his part and makes a very satisfactory supplement legume for pasture purposes.

Mr. Bradley says that farmers should not expect too much burr clover the first year, as it does not seem to do its best the first year, but gradually takes hold, and in the course of time establishes itself firmly in the pasture. He says it should be seeded in the fall in order that it will make an early grazing pasture, and then die down in time for the Bermuda, which should form the basis of all pastures to make a good growth and furnish pasture the remainder of the summer.

Twenty-five farmers gathered at the farm of T. A. Watson, 2 miles north of Branch, September 14 and saw a cotton demonstration Mr. Watson is conducting. Mr. Watson has a ¼-acre plot that received no fertilizer, another ¼-acre plot that received at the rate of 300 pounds of acid phosphate and 50 pounds of muriate of potash per acre. Then he has a 5-acre plot that received 300 pounds of acid phosphate, 150 pounds of nitrate of soda, and 50 pounds of muriate of potash per acre before the cotton was planted, with 150 pounds of nitrate of soda as a side dressing at chopping time.

The fertilizers show marked differences, with the 5-acre plot showing up the best. A guessing contest was conducted and the average of all the guesses was 1,264 pounds of seed cotton per acre. Individual guesses ran as high as 1,500 pounds per acre. After the cotton is picked $5 will be awarded to the farmer who guesses nearest the yield per acre of the 5-acre plot.

Eighty-six head of feeder hogs were vaccinated for Frank Pendergrass at Peterpender last Friday. Mr. Pendergrass has a surplus of feed on hand and is planning to feed it to hogs in order to sell it. He bought the hogs from different sections and was afraid to take chances with cholera, so they were given the double anti-hog-cholera treatment, which renders them immune from hog cholera for life.

THE VALUE of the products raised by 175 Williamson County, Ill., 4-H boys and girls during the past year will exceed $3,000, according to Farm Adviser Dee Small. The youngsters raised 40 pigs valued at $493, and 1,908 head of poultry valued at $1,451. In addition, $800 was added to the value of 40 acres of land which they terraced. The members also produced 1,517 bushels of corn on 58 acres.

A NEW YORK forestry club boy with a record is Maurice McCarthy who now has plantings of 11,000 trees of white pine, red pine, and Scotch pine. His father started the planting for him on some idle land and Maurice has kept it up, planning to continue as long as idle land is available. Reforestation is a very active 4-H project in New York with 3,931 boys and girls working at it. More than 4,000 acres of forest trees have been planted on the home farms or on land acquired by club members for the purpose and each planting is receiving protection and care. The first year of forestry club work in New York requires the planting of 1,000 trees of commercial value in a compact group on land unsuited for agricultural crops where no forest growth is now standing or has been recently cut off. The club member also protects the trees from damage by stock and keeps a record of the work done and the cost.

MORE THAN one million young trees have been distributed at cost to Colorado farmers for windbreak plantings in the past 15 years by State Forester W. J. Morrill of the Colorado Agricultural College.

Most of them were planted on eastern Colorado farms. Had these trees been planted a rod apart on each side of a road, the planted highway would extend 1,563 miles—a distance about equal to that from Denver to Washington, D. C.

Again this spring 18 varieties of seedling trees are being offered Colorado farmers at low prices. Western yellow pine is proving very successful in dry regions as well as the American elm or honeylocust. Where some water is available, the Chinese elm and the Russian olive are popular.

Home Demonstration's Big Three

"THREE PHASES in the home demonstration plan of work have proved their value in the South over and over again and are now being emphasized by home demonstration agents," says Ola Powell Malcolm, field agent for the Southern States in the Office of Cooperative Extension Work. The home demonstration's big three, according to Mrs. Malcolm, are food for the family, marketing farm home products, and improving farm homes. Many counties have materially improved their economic status even in these times by giving attention to these three things. The following accounts of how several counties have provided food for farm families is just a sample of what has been done on this score in many counties. Other short accounts of what has been done in marketing surplus farm produce and improving the farm home will be run in a later issue.

Gardens in Tennessee

In Madison County, Tenn., under the leadership of L. Bertha Corbitt, home demonstration agent, an adequate garden was the chief objective for the year. "No startling or original plans were worked out but the fact that practically all of these chairmen kept 'eternally at it' was responsible for the success of the project," says Miss Corbitt.

Of the 326 women who made garden reports 267 had each planted and used from 2 to 11 vegetables that they had never grown before and 298 prepared vegetables in new ways. Hundreds of women filled all their old jars and bought new ones to preserve the products of their gardens and orchards for the winter's food supply. One leading wholesale merchant said his sales increased five times, another one and one-half times over last year's sales. These two merchants sold 34½ carloads of jars this year, and one local chain store retailed more than one carload not purchased through those wholesale dealers. At the end of the season, 347 women reported 82,086 quarts of canned and 41,068 pounds of dried fruits and vegetables and 1,427 gallons of fruit juices.

Texas County Cans

The year's food supply for Hockley County, Tex., was assured by concerted effort under the leadership of the farm and home agents, W. T. Magee and Marie Tarwater. Each of the 300 home demonstration club members, at the request of the county home demonstration council, agreed to help three other women who were not members of a home demonstration club to make out a food budget, to use a steam-pressure canner and automatic sealer, and to give them general information in regard to canning. In this manner all of the 1,344 farm homes were reached.

The next thing was to prepare an additional amount of canned products for use in cases of want which arose in the county. Farmers donated fruit and vegetables to be canned in the school home-economics laboratory for this purpose. Out of this plan evolved the one of helping each farm family to help themselves. A public canning kitchen was equipped and the commissioners' court arranged to distribute cans, to be paid for in canned products; a hardware company sold 10,000 cans on time payments, and many business men gave out cans to be filled on halves. The county may have lacked some things during the winter, but it did not lack food.

THE ARKANSAS EXTENSION programs in home grounds and home gardens reached the stage when it seemed desirable to call on all State agencies and organizations interested in this work to cooperate in spreading the influence of lovely home grounds and gardens. The first state-wide extension school on this project was therefore called last January with the State Federation of Garden Clubs, State Federation of Women's Clubs, State Federation of Business and Professional Women's Clubs, State department of education, division of buildings and grounds, farm papers, newspapers, broadcasting stations, home-demonstration clubs, and nurserymen taking part.

Twenty-one home-demonstration agents attended the school one or both days. A total of 112 men and women registered from all sections of the State. The school was planned jointly by the extension specialist in horticulture and the State home-demonstration agent.

COUNTY extension agents in Indiana made a good record in getting in their monthly reports, 95.5 per cent of the reports having been received in the State office on time, which date is the fifth of the following month. Of the 105 agents, 75 never had a late report.

National 4-H Club Radio Program

Saturday, May 7

How my purebred litter was raised. 4-H club boy from Indiana.

4-H handicraft activities. 4-H club girl from West Virginia.

4-H club work helped me to decide my vocation. County extension agent from West Virginia.

4-H club work and vocational adjustment. W. A. Lloyd, Extension Service, United States Department of Agriculture.

America's Favorite Songs

Carry Me Back to Old Virginny	Bland.
My Old Kentucky Home	Foster.
I'll Take You Home Again, Kathleen	Westendorf.
O Promise Me	De Koven.
The Rosary	Nevin.
Silver Threads Among the Gold	Danks.
A Perfect Day	Jacobs-Bond.
On the Road to Mandalay	Speaks.

A Colorado Nutrition Slogan

"Plan, plant, preserve, and prosper," a Colorado nutrition slogan is being kept in the foreground these days. The following simple and effective explanation of the project was used on a letterhead coming to the editor of the REVIEW recently:

$ PLAN
$ PLANT
$ PRESERVE
$ PROSPER

You can
INCREASE WEALTH
PROTECT HEALTH
by

BUDGETING for future needs;

PLANTING a good big garden;

CANNING, drying, and storing according to plan;

SERVING daily:
One green or leafy vegetable.
Potatoes at least once.
One other vegetable.
Tomatoes or fruit twice.

· ACROSS · THE · EDITOR'S · DESK ·

Until Prosperity Returns

IN AN EDITORIAL in The Progressive Farmer some weeks ago, I came on this statement, "The services of the county agent and the home demonstration agent are of far less importance in times of prosperity than in times of stress like these. They are needed more right now and will earn a larger proportion of the total revenues of the county than when times are prosperous."

It's a statement which, naturally, you and I, as extension workers, appreciate. It is more than pleasant reading to my mind. It's a challenge all down the line to produce daily indisputable proof that this particular statement about us is true. Just what evidence have we this month—this week—to-day, that we are contributing to the eventual return of prosperity? What facts and figures can we muster? Are they indisputable? Are they assembled in a form that any man or woman may read and understand? Do they constitute real news of practical results obtained in the county? Or have we just got together a string of pleasant words about ourselves? Or, maybe a hand-out of advice without evidence that it is based on sound and convincing local experience?

"I think," says one of my correspondents, "that it might be well to wait to tell what we have done to help the farmer until we can point with pride to obvious prosperity." Unless we are being of real practical help to-day and are letting our public know what is being accomplished, how many of us do you think will still be in extension work when obvious prosperity returns?

Enough Intelligence For Any Problem

HOW MUCH intelligence and ability do rural women have? Mary Buol of Nevada believes they have enough to enable them to tackle successfully any task however difficult that concerns vitally the welfare of their children. That is what she told me when I chatted across the desk with her in Reno last summer. And, it wasn't idle talk. She had proof that her faith was not misplaced.

Two years ago she undertook an experiment in extension teaching in child training. The rural mothers of her State, for the most part, are not within reach of an organized nursery school or a child-guidance clinic. She proposed to aid them in adopting nursery-school methods to the home training of little children. She had scant encouragement from her professional acquaintances. It was, they said, a hopeless task.

Here in Mrs. Buol's own words is what resulted:

"I was sure that if we found the right way to present our ideas the mothers would respond and would be fully capable of making successful adaptations of nursery methods. We established the work on the basis of a few specific home demonstrations. We sought a constructive attitude in the mothers we worked with, and we were not disappointed. Each problem of disposition and habit from thumb-sucking to tantrums we attacked with an open mind. We found these mothers proud of each success achieved and eager to solve the next problem."

That last sentence, to me, epitomizes the final objective of extension teaching. Can any of us get any farther in our teaching job than Mary Buol did? I ask you.

What Would You Do?

LAST YEAR, Roy I. Coplen, county agent for Lafayette County, Mo., had the problem of getting needed terracing done on the farms in his county. As he wrestled with this problem he wrote a series of letters to G. E. Martin, State extension agricultural engineer. Let's follow him through. First he says, "I can see myself spending too much time on this terracing project unless a school is held and a number of men learn how to do this work." So in August he held a 1-day school. This school was preceded the day before by a county-wide tour of fields already terraced. After the school was held, Coplen wrote, "Seven men have been taught sufficiently by the school to work out most of their problems and to lay out the lines and construct terraces."

This brings us to his teaching program for 1932. He says, "I am planning to spend 40 days this year on this project. I wonder if a tour and school such as we held in August would be advisable or would it be better to hold a school in 14 different communities? I believe the program might be farther advanced if I spent more time in holding community schools than proceeding as before in assisting in laying out and constructing terraces."

What do you think he finally decided to do? How would you have handled this particular job of extension teaching?

She Was Happier

LAURA WINTER of Sedgwick County, Kans., believes, first and foremost, that country people should enjoy living. One of her farm women asked her one day whether or not she should cut a window in her kitchen door. "If it will make you happier, do it," was Mrs. Winter's reply. A year or so later, Mrs. Winter stopped in to see this woman and the latter said, "Do you remember what you told me about the window?" "Yes," said Mrs. Winter and the woman continued, "Well, as you see, I had that window put in and I am now much happier. I have plenty of light now and I can see out-of-doors." Which causes me, in my turn, to ask a question. Do we recommend, advise, and admonish to the end that a perfect project or an improved method may be carried out in beautiful and efficient exactitude or do we mainly suggest these things to make people happier? There's a difference.

About Farm Mortgages

THERE'S A THOUGHT on farm mortgages that I think is well worth passing on. I found it in an editorial in The Ohio Farmer of January 16. It's something you can tie to. Here it is: "The craze for liquidity brought the farm mortgage into disfavor because it could not be converted immediately into cash. To-day the realization is gradually coming to those who direct our financial institutions that the farm mortgage, while it may not qualify under the modern definition of liquidity, is after all about the safest and surest investment. No calamity, social, political or economic, can destroy the security. It remains for man to convert to fill human needs and wants long after many of the so-called liquid investments have been washed up on the sands of time." R. B.

NOW IS THE TIME TO BEGIN TAKING PICTURES FOR YOUR LOCAL FILM STRIP

County extension agents are finding film strips a vital teaching aid in conducting their programs for farm and home improvement. In many States they are producing successful film strips from their own pictures of local extension activities and teaching material.

TO PRODUCE SUCCESSFUL FILM STRIPS:

1. SELECT SUBJECTS FOR FILM STRIP SERIES THAT WILL STRENGTHEN YOUR PROGRAM OF WORK.
2. PREPARE A LIST OF PHOTOGRAPHS NEEDED. INDICATE THE MONTH THAT EACH PICTURE SHOULD BE TAKEN.
3. CONSULT THE LIST OFTEN. TAKE EACH PICTURE WHEN THE PROPER TIME ARRIVES.

Remember that the effectiveness of your film strip as a teaching aid will depend in great measure upon the pictures you take.

Write for information about cost of film strips and methods of organizing photographs, charts, and other illustrative material for film strip production.

OFFICE OF COOPERATIVE EXTENSION WORK

EXTENSION SERVICE, UNITED STATES DEPARTMENT OF AGRICULTURE

WASHINGTON, D. C.

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Extension Service Review

VOL. 3, NO. 5 MAY, 1932

A 4-H CLUB GIRL HAPPILY OCCUPIED IN HER GARDEN

ISSUED MONTHLY BY THE EXTENSION SERVICE
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WASHINGTON, D. C.

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In This Issue

WHAT DO THE Hoover Dam and the Boulder Canyon project mean to western agriculture? That's the questionthat Director C. W. Creel of Nevada answers in a vivid and fascinating word picture. Through his eyes we see coming out of this enterprise new wealth, greater population, and a vastly larger market for the products from the farms and ranges of the Western States.

WHAT ARE extension agents doing to aid farmers and their families in augmenting their sources of income? The home-demonstration agents reply this month. Last year in North Carolina, with their assistance, farm women received $236,517 in sales through curb markets, car-lot shipments, and individual sales. In South Carolina farm women sold $293,738 worth of surplus garden, orchard, and poultry products. Ten markets in Illinois sold more than $110,000 worth of products for the women running them. So it goes. The total of such sales for the whole country for 1931 isn't available as yet, but it will be something to talk about when we do have it.

"IT'S NOT always that the work of a county agent can be measured in terms of dollars and cents return to the individual farmer," says W. A. Lloyd, and then proceeds to set out the remarkable showing made by Y. Baron Goto, county agent in Hawaii County, Hawaii. Mr. Lloyd shows item by item how Agent Goto netted last year a saving of $182,500 for the coffee farmers of his territory. Put *that* in your pipe and smoke it.

SETTING UP an egg auction organization was the answer egg producers of Bucks County, Pa., made to their marketing difficulties. H. N. Reist and C. O. Dossin, State marketing and poultry specialists, respectively, cooperated closely with County Agent N. F. Greenawalt in aiding the producers to organize the auction and operate it on a business like basis. The 141 members of this cooperative group are now selling 450 to 500 cases a week in this way.

PETTIS COUNTY, MO., recently celebrated its twentieth anniversary of extension work. All of the four former agents of the county were present and joined with Mrs. Claire L. Montgomery, home-demonstration agent, E. E. Brasfield, county agricultural agent, and the people of the county in observing the anniversary.

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On the Calendar

THE American Socity of Agricultural Engineers will hold its twenty-seventh annual meeting at Columbus, Ohio, June 20–22. Conferences of research and extension agricultural engineers will precede the general convention.

THE twenty-fifth annual meeting of the American Home Economics Association will be held in Atlanta, Ga., June 20 to 25, inclusive.

THE Sixth National Boys' and Girls' 4-H Club Camp is scheduled for June 15 to 21, inclusive. It will be held, as previous camps were, on the grounds of the U. S. Department of Agriculture, in Washington, D. C.

THE POPULATION of Clarendon County, S. C., depends almost entirely on agriculture for its living. A farmers' market bureau, organized in the county in 1923, now handles more than $100,000 worth of farm produce. That's one of a number of things that County Agent F. M. Rast has aided the farmers and business men of his county in doing in the effort to increase the county's volume of profitable business.

KENTUCKY seeks to bring especial assistance to young men and women on the farms between 20 and 30 years of age. This is a group that has been left somewhat out of extension reckoning in the past. It has fallen between the intensive effort with boys and girls, 10 to 20 years of age, and that carried on with farmers and farm women of maturity, who have been for some time running their own farms and households. Utopian Clubs, as they are called, have been organized for this group in 12 of Kentucky's counties with 167 young men and 176 young women enrolled at the present time. It's an experiment worth watching.

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

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

Extension Service Review

VOL. 3 WASHINGTON, D. C., MAY, 1932 NO. 5

Women Market Farm and Home Products

FARM AND HOME produce marketed by women is reaching an imposing figure in spite of a generally decreased consumer purchasing power. Last year women in North Carolina received $236,517.68 from market sales through curb markets, car-lot shipments, and individual sales. In South Carolina 45 out of 46 counties carried on a marketing project which assisted 17,481 persons in selling $293,738.04 worth of surplus farm garden, orchard, and poultry products. Seventy-three of these women sold more than an average of $50 per month. The 10 markets in Illinois sold more than $110,000 worth of produce, and markets in Tennessee brought in $5,114.06. The latest tabulated figures for the country as a whole are for the year 1930, when 38,894 women sold products valued at $1,707,515, according to the annual reports of that year. These markets have been organized and carried on with the help of county extension agents, whose reports give a picture of the size and importance of this work.

The owner of a tourist home in Hampshire County, W. Va., knows just what is happening in her business each day

Curb Markets

Curb markets are the most common and simplest form of cooperative marketing organization. These markets are usually open one, two, or three days a week at specified hours. A charge of about 5 per cent of sales is charged to cover operating costs, and often a manager is paid to be in charge. The amount of grading and standardizing done varies greatly but usually is rather simple. In some markets an attempt is made to keep prices uniform and in accordance with prevailing market prices, while in others there is no check on price. The women in some markets sell their own produce whereas in others the goods to be sold are pooled, graded, and checked and the women are assigned to designated counters to sell the goods.

The best sellers on the curb market seem to be poultry and eggs. Other items selling well are butter, cheese, baked goods, preserved and canned goods, flowers, cured meats, and fresh fruits and vegetables.

When the market in a temporary location is successful, the next step is a permanent and convenient place to hold it. The permanent home has been financed in some places through an accumulation of a surplus in commissions, by gifts from the city council, the Rotary or Kiwanis Club, or by a special levy on sellers. Sometimes, such equipment as scales, tables, twine, paper cartons, bags, ice and refrigerators, and glass show cases are added to better display the goods and make selling more efficient. These markets are advertised in the local papers, and leaflets describing the market are sometimes printed and distributed. The Spartanburg, S. C., market featured a number of special days such as daffodil day, Easter market, and Christmas market to increase the volume of their sales. In the Darlington, S. C., market the women adopted white Hoover aprons as uniforms and found the duplicate slip system of great benefit in their bookkeeping. Fourteen of the women contributing to this market signed contracts to put up a soup mixture. Five thousand cans were bought in the county and sold to the women at cost. This gave 87 cases of a standard product for the market labeled with the South Carolina label and scored by the marketing specialist from the college. The product scored between 89 and 97. The women of the Goldsboro, N. C., market have made arrangements with the county board of health to inspect the sanitary conditions on the farms, and each woman seller displays a card certifying that the product was prepared under sanitary conditions.

Home Industries

Among the better organized markets are the Mountain State Home Industries Shops of West Virginia. There are now five of these shops in different cities of the State which did $50,000 worth of business in 1930. Each one is managed by a county chairman of home industries work and has a paid manager who devotes her time to selling in the shop. An executive committee aids in establishing standards for the produce and in finding new producers and patrons. They plan to always have a supply of certain staple articles on hand which the regular sellers contract to bring in.

This organization also encourages the production of certain standard goods under the Mountain State brand. Their specialty is Mountain State blackberry jam which has been developed from a standard receipe. Each woman wishing

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to use the brand sends in a sample to be scored by the specialist from the college. If it scores 90 points or more she can sell the product under the Mountain State brand label. Schools and demonstrations are held throughout the State to teach women how to make these standard products which they want to market.

Handicraft Articles

In some counties women have been especially successful in marketing articles of handicraft such as hooked rugs and pine-needle baskets. Women of Hamilton County, Tenn., sell between $4,000 and $6,000 worth of hooked rugs each year. They make a definite effort to keep these rugs of standard quality of workmanship and design and they have always been able to sell as many as they could make. The same dyes are used by all cooperators so that a rug can be ordered by sample colors and will always prove to be the same color as ordered. Last year four demonstrations in rug making were held in different parts of the county in order to keep up the quality of rugs offered for sale and also to secure more cooperators. These demonstrations were attended by 47 women and girls.

Pine-Needle Baskets

In Clay County, Ala., the women have made and sold $30,000 worth of pine-needle baskets within the last four or five years. At first, these baskets were marketed through the women's clubs in near-by cities, the women's clubs of Birmingham, Ala., being the first to become interested. The Clay County basket makers employed two of these women to introduce the product to department stores and gift shops in a number of eastern cities, and they were very successful in doing this. A woman was also employed to help pack and ship the baskets. These women cater especially to holiday trade.

A home demonstration shop, Lake County, Fla.

Another form of cooperative marketing which is proving successful is the assembling of poultry and eggs at some central point for shipping in carload lots. Poultry is shipped both alive and dressed and is usually graded and packed at the shipping point. Car-lot shipping to wholesalers is especially well organized in Louisiana and North Carolina. In Beaufort County, N. C., 375 women in 25 communities participated in the sale of poultry. Cars came about every two weeks, making several stops to gather up the birds. The returns from these sales in 1930 were $11,184.29. The Louisiana Poultry Association, an organization of both men and women, helped in the marketing of poultry and eggs. The association makes shipments at monthly and other stated times from different points. At these points the produce is examined, sorted, weighed, and crated. A New Orleans firm contracts with the association for all the poultry and infertile eggs available. Shippers can expect a regular market, and they know the price in advance, as they are paid as they crate the birds.

Another interesting form of cooperation is found in the Mountain State Tourist Homes of West Virginia. Last year 14 women agreed to maintain certain standards in regard to beds, food, cleanliness and sanitation, and to display a uniform Mountain State Tourist Home sign. They entertained approximately 4,000 tourists during the past season and have been so successful that 20 or 30 others are planning to become Mountain State Tourist Homes. The standards are kept up by thorough and regular inspections.

Coffee Shops

A new development in these cooperative markets is the opening of coffee shops. These are usually held in connection with a well-established market and are an outgrowth of the market. All kinds of cooked fresh foods, baked goods, and canned and preserved goods are sold in these coffee shops with lunches and dinners a specialty. Sometimes the coffee shop is open only on market days and sometimes it is open every day even though the regular market is closed.

A home demonstration club market, Wayne County, N. C., and a roadside market for cooked foods, York County, Me.

What the Hoover Dam and Boulder Canyon Project Mean to Western Agriculture

CECIL W. CREEL
Director, Nevada Extension Service

THE SOUTHERN Nevada desert bordering the Colorado River, for years visited only by the occasional prospector or tourist, has been the scene of great activity during the past 14 months. In this short space of time, Boulder City, a model community, has been built by the United States Reclamation Service to house 5,000 people, while a newly completed Government railroad and paved highway lead to Black Canyon, 6 miles away, where 3,500 men are now at work preparing for the erection of the highest structure of its kind in the world—the Hoover Dam.

Although preliminary construction work is already a half year in advance of schedule, many months of work are still ahead before the dam itself can be started. The four great tunnels, 50 feet in diameter and nearly a mile in length, driven through the canyon walls, two on the Arizona side and two on the Nevada side of the river, while already nearly completed, still must be lined with cement before they are ready to perform the work of diverting the stream from its accustomed channel, then upper and lower cofferdams must be built to confine the river to the tunnels and dry the former river bed at the site of the great structure.

With an extent of 650 feet at its base, and a width of 950 feet from canyon wall to canyon wall, the Hoover Dam, when it is finally completed in 1938, will tower 727 feet above bedrock and 582 feet above the present river surface. The immense reservoir back of the dam will be 115 miles in length, covering 145,000 acres of land in Arizona and Nevada.

Publicly Owned Land

Of this great area, all is publicly owned and withdrawn from entry with the exception of a few scattered mining entries and some 12,000 acres of agricultural and grazing lands, which must be purchased by the Government. The towns of Kaolin and St. Thomas, Nev., together with adjacent farms and ranches, are destined to be under from 25 to 100 feet of water, and, consequently, must be abandoned, their inhabitants being compelled to seek other homes in the West.

This loss of agricultural lands in Nevada is small, however, in comparison with the immense areas in Arizona and California which can eventually be brought under cultivation through the use of the stored water from the reservoir.

Lands in Arizona include the Parker-Gila Valley project in the southwestern part of the State with a gross area of more than 600,000 acres, an investigation of which was authorized by Congress under the terms of the Boulder Canyon project act; the Parker project of about 116,000 acres, near Parker; Mohave Valley, which has an irrigable area of nearly 33,000 acres across the river from Needles, Calif., and the Cibola Valley with 16,000 acres in Yuma County. The Yuma project has about 55,000 acres irrigated at the present time, and a total ultimate irrigable area of 112,000 acres, including about 45,000 acres of undeveloped mesa lands.

In California, the All-American Canal, which will be constructed from the Colorado River to the Imperial Valley, is to be a part of the Boulder Canyon project. To be built at a cost of $38,500,000, it will increase the irrigable area of the valley from 515,000 to 800,000 acres. The Coachella Valley has an irrigable area of 72,000 acres, which can be served by a branch of the All-American Canal. The Palo Verde Valley furnishes an additional 79,000 acres also susceptible of gravity irrigation from the Colorado.

Reclamation by Pumping

While Nevada has but a few thousand acres which can be irrigated from the Colorado River by gravity, there are large additional acreages in the southern end of the State susceptible of reclamation by pumping. Among these are the Las Vegas Valley, and directly north of Needles, Calif., the Searchlight Valley. Other southern Nevada valleys susceptible of reclamation by pumping ground waters include the Amargosa, Indian Springs, Pahrump, and Pahranagat Valleys.

It will thus be seen that the Boulder Canyon Reservoir will store sufficient waters to reclaim nearly 2,000,000 acres of new lands at some future date, when economic conditions and growth of population make necessary this increase in our agricultural area.

In addition to its value for irrigation, the great reservoir will forever check the disastrous floods which have, in past years, swept down the Colorado, threatening destruction to the Imperial Valley.

An outstanding feature of the Boulder Canyon project will be the great hydroelectric plants at Hoover Dam, capable of generating over 1,000,000 horsepower or nearly twice the amount of electrical energy produced by Niagara Falls, N. Y. Contracts for the sale of this power insure payment to the United States Government of the cost of the dam and power plant, together with interest, within a period of 50 years.

Industrial Communities

Farmers and livestock producers of southern Nevada, southern Utah, southern California, and northern Arizona have, for the past several years, been looking forward eagerly to the time when work would start on the Boulder Canyon project, knowing that the industrial communities to be created at Boulder City and Las Vegas would furnish excellent near-by markets for their products. With the utilization for manufacturing and refining purposes of large quantities of power at or near the dam site it seems certain that the new industrial population in southern Nevada will not only remain after the dam is completed but will continue to grow, thereby furnishing a steadily increasing market for the crops and livestock of the near-by agricultural districts.

With the power lines radiating in all directions from the dam to the mining camps and industrial centers of the four States, agricultural communities will find little difficulty in tapping these lines, thus making available cheap electrical power for their homes and ranches.

The benefits just mentioned are of a necessity limited to the few thousand farmers and stockmen living within a radius of 300 miles of the dam. "In what way, if any, will the building of the Hoover Dam benefit the Oregon dairyman, the Idaho potato grower, the Washington poultryman, the Montana cattleman, or the New Mexico sheepman?" Everyone of these producers will be benefited through the stimulus to the population growth which the Boulder Canyon project will give the entire Southwest, more particularly the south Pacific coast cities.

Food Being Exported

Each of the 11 Western States is now shipping foodstuffs to southern California and will continue to do so in steadily increasing amounts, if the rapid growth of population continues. It is

(Continued on page 68)

Kentucky Clubs for Older Boys and Girls

Officers of the Kentucky Utopia Club for young men and women above 4-H club age. From left to right, Ruth Snider, president; Edwin Miller, vice president; and Elizabeth Limeback, secretary

THE UTOPIA CLUBS of Kentucky have come through their first year with colors flying. There are 167 young men and 176 young women organized in 12 counties, all enthusiastic about their club and their project. The age of this group is generally from 19 to 25, though there is one very active member 34 years of age. The upper age limit depends upon the local club and local conditions. The purpose of the club is fourfold—educational, vocational, economic, and social. By organizing extension work for this particular group, the members are taught to work cooperatively for mutual helpfulness and to study the better practices of agriculture and home economics.

Special effort was made to interest the young men in some specialty to conduct along with general farming, such as dairying, purebred flocks, certified seed production, or small fruit growing. The projects were outlined and supervised by the State specialists and planned as result demonstrations. Some idea of the scope of the work undertaken can be gained from the dairy-herd-management project in which each member owned five registered females, two of which were in production; kept an accurate account of feed and production; grew at least one acre of legume for each animal and acted as leader for a 4-H dairy calf club or as leader in a regular extension project. Other projects, such as poultry management and room improvement, are worked up along similar lines. Boone, Taylor, Simpson, and Kenton Counties have had excellent results with their project work. Harry Rickerson of Taylor County reported a net profit of $2 a hundred pounds on his ton-litter of 11 purebred Poland-China pigs. His litter weighed 2,175 pounds when 6 months old. This is his first experience in extension work. The Gallatin County Utopia Club put on several plays in their local communities and have been very successful in their social activities.

The goals for this year emphasize leadership, a study of rural economics and sociology, help with the county 4-H clubs, better project work, and more Utopia clubs.

Though training for good farming and leadership is the primary object, some emphasis is placed on social and recreational activities. The State camp, educational and recreational tours, picnics, dramatics, parties, and athletics are given a place in the programs.

Hoover Dam and Boulder Canyon

(*Continued from page 67*)

generally admitted that southern California, with its favorable climatic conditions, enormous oil reserves, and excellent water and rail transportation facilities, will continue to grow in population and expand in commerce and manufacturing, if the present limiting factor, lack of water, can be overcome. With the water resources of the neighboring mountains, coastal plain, and the Owens Valley already fully utilized, Los Angeles, Long Beach, Pasadena, San Diego, and neighboring cities are compelled to look eastward across the mountains to the Colorado River for any future increase in their water supply.

Hoover Dam, therefore, holds the key to the water situation in southern California, and through control of the water, control of the economic destinies of its flourishing cities. It is proposed that a portion of the flood waters of the Colorado River, now running to waste in the Gulf of California, be impounded in the Boulder Canyon Reservoir as a domestic water supply for the southern California cities. These waters will then be released and allowed to run down the river channel to a point near Parker, Ariz., where, with power supplied by Hoover Dam, they will be pumped across the mountains to the great coastal plain of southern California, there to create new wealth, greater population, and a larger market for the products from the farms and ranges of our Western States.

The Country Child

They are privileged children who grow up on a farm. Practically the whole period of childhood to maturity is concerned with educational processes and growth. There is something about agriculture and country life that makes for sound foundations for practically any future superstructure.

Any consideration of the education and training of youth in rural areas must take into consideration at the outset the things inherent in and contributed by the farm and the open country itself. It is there that many of the great basic things of life are learned. As you sow, so shall you reap. Do men gather figs from thistles? By their fruits shall ye know them. The foxes have holes and the birds of the air have nests. In the sweat of thy face shalt thou eat bread.

From the time the country child is big enough to bring in the kitchen firewood, feed the chickens, and gather the eggs, to the day he drives the team at his father's plow or feeds into the thresher the gathered grain of the year, he is being educated and trained in the fundamentals and verities of life. To romp the fields with a dog and explore is an educational process, to rob a bumblebee's nest, or throw stones at a hornet's nest is to acquire knowledge. To know the ways of minnows in the creek and the fishes of the lake, to know the meaning of rain and frost and drought on crops and income, to know the names of plants and birds, the haunts of squirrels and muskrats and woodchucks, to know the silence of the night, the fields, and forests, is to grow in knowledge and to develop the soul. All these things are learned in more or less degree by the rural child not from teachers or books but from contact with things as they are. The things thus learned stick through life.—C. B. Smith.

Extension Pays Dividends in Hawaii

"IT IS NOT always, perhaps not often, that the work of a county agent can be measured in terms of dollars and cents return to the individual farmer," observes W. A. Lloyd, regional agent in charge, Western Section, Office of Cooperative Extension Work. "Many of the results of extension work," continues Mr. Lloyd, "are intangible and in counties with a diversified system of farming it is often exceedingly difficult and usually impossible to give a monetary value to the help given any individual farmer."

In far-off Kona, on the island of Hawaii, Mr. Llyod cites a remarkable example of extension work that can be measured approximately. In the area covered by this agent, Y. Baron Goto, there are approximately 1,000 farmers. Each of these farmers is growing coffee and his entire farm, usually not more than 5 to 10 acres, is completely occupied by coffee trees with barely sufficient area reserved on which to build a house.

A Low Coffee Price

During the past 20 years the price of coffee has varied from $4.50 to $1.25 per hundredweight. The present low price is a result of the breaking of the Brazil coffee pool which forced down the world market. At the present price a coffee grower loses $0.81 for each 100 pounds produced, as under present conditions it costs $2.06 per 100 pounds to produce coffee. Coffee is the only source of income as the land occupied by the coffee trees, an old lava flow, is not adapted to any other system of farming. A serious situation existed and this story shows what one agent did in such an emergency.

First, the agent ascertained by an investigation of the books of one of the large coffee factors, that the price for picking coffee had been consistently $1 per hundred regardless of the price of coffee. Through an organization of the growers effected by the agent and through conferences with the pickers, the price of picking was reduced to $0.75 per hundred. This effected a saving of $137,500.

Second, there are about 2,000 school children in the Kona schools. Now it happens that the school term coincides with the coffee-picking season. The agent interviewed the public-school authorities and suggested that school be adjourned for four weeks that the farmers might have the use of home labor in picking the coffee. After considerable negotiations the school authorities agreed to adjourn the schools for three weeks. On an estimate that only one-half of the children picked coffee during these three weeks, there was a saving in wages to the farmers of $20,000.

Third, coffee requires very high fertilization; as much as 2,000 pounds of high-grade fertilizer with a value of $50 to $75 per acre is necessary. Heretofore the fertilizer bags had been a waste. The county agent found that with slight changes these old fertilizer bags could be made to answer for coffee bags. New coffee bags cost 20 cents a piece. Seventy-five thousand fertilizer bags were salvaged. This effected a saving of $15,000.

Combating Rats

Fourth, the most serious pest in connection with coffee production is the annual devastation by rats. It had been conservatively estimated by growers that the annual depredation due to rats amounted to $100,000 per year. Before the organization of the extension service there was no effort to prevent this loss. It was accepted as one of the incidents to growing coffee. The agent, in cooperation with the public schools and through boys' and girls' 4-H extension clubs, organized a rat-killing campaign. To finance this he asked his member in the Territorial Legislature at Honolulu to appropriate $3,000 to pay bounties on rat tails. This was the most ridiculed bill in the legislature. The legislature laughed when it was introduced; all Honolulu laughed, all Hawaii laughed; but the legislators took a trip over the Territory in connection with which they visited Kona and the county agent was ready for them. He was a member of the reception committee, and he had his automobile loaded with coffee branches damaged by the rats. He had figures and he showed the legislators what it was costing the coffee industry. He had some farmers present and they corroborated his testimony. The result was that when the legislators returned to Honolulu, the most ridiculed bill was passed without a dissenting vote by the legislators; but they hinged a provision in their act that for every dollar subscribed by the Territory, an offsetting dollar must be subscribed by the farmers, and this created another problem. The farmers had no money. To ask them for $3,000 cash was impossible, but they had coffee and the county agent developed a plan whereby they agreed to put 40 pounds of coffee each in a pool to offset this rat fund. This coffee had a value equal to the appropriation made by the legislature. Then the county agent organized the boys and girls of the district and got to work. Rats were trapped, rats were poisoned, rats were shot, and some of them were run down and hit with a club, but altogether during the short campaign 25,000 rats were accounted for, and conservatively they would have destroyed not less than $7,000 worth of coffee, and to this of course must be added the $3,000 help secured from the legislature.

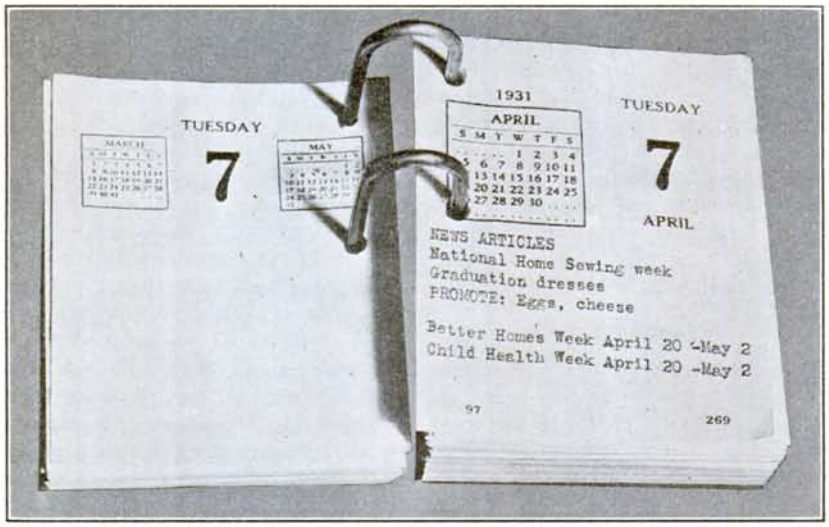
(*Continued on page 70*)

The young men's coffee club, Kona, Hawaii. Each young man has charge of 120 coffee trees, which he cares for under the direction of the county agent

A Promotion Calendar Makes For Balanced Publicity

NORA M. HOTT

State Home Agent, Colorado Extension Service



JUST as a department store makes out its advertising and sales promotion calendar six months or a year in advance to make sure that each department receives its due share of advertising, and that opportunities for seasonal promotions such as football season, aquatic sports, pre-Lenten festivities are not overlooked, so the home demonstration agents of Colorado have their promotion and publicity calendar to insure that timely topics will not be neglected.

Small, but colorful desk calendars, an ornament to any office, were issued to home demonstration agents by members of the State staff at Christmas time. Each specialist and the State home agent typed in significant dates.

First of all, holidays were listed, such as Washington's Birthday, St. Valentine's Day, and Mother's Day. This is a reminder to the agent to include in her news notes suggestions for valentine parties or to issue programs for Mother's Day. Next the dates for national weeks were added, such as Better Homes Week, National Music Week, May Day, Child Health Week, Home Sewing Week, National Cotton Week, and National Wool Week. An advanced announcement asserts "Now is the time to lay your plans for Better Homes Week."

Next, suggestions for timely topics were added by each specialist. "In the spring the air is laden with the perfume of violets and fresh gasoline," says the clothing specialist who goes on to suggest an article on dry cleaning, or perhaps she writes, "Now is the time to wage war on clothes moths." The nutrition specialist warns us to prepare now for our food needs next year, or through her suggestions for publicity she intrigues us into trying recipes for delectable dishes made of Colorado sun-ripened berries.

The horticulturist speaking of home beautification says, "In the spring a young gardener's fancy lightly turns to thoughts of love-in-a-mist, lemon lilies, lilacs," which is just a poetic way of stating that now is the time to give advice on the planting of shrubs and flowers and for making plans for garden tours or flower shows.

The home management specialist brings us back to earth through her "Hints on house cleaning" and calls to our mind that as the long winter evenings are approaching "Why not start replenishing our bedding by making warm comforts of homegrown wool," or "Why not utilize discarded garments in attractive rugs which the home demonstration agent can teach you to make."

The calendars also are reminders of when reports, plans of work, and other routine matters are due.

After the State specialists have made out a calendar, the home demonstration agent inserts the dates of special importance in her own county. She makes a note when special publicity should be conducted on projects, on achievement days and other project activities. She also notes special days in the county, such as graduation, chamber of commerce luncheons, field meets, Apple Pie Day, strawberry festival, Apple Blossom Day, Cherry Pie Day, Autumnal Exposition, Pinto Bean Week, and other activities in which she cooperates.

Under this plan, agents have conducted very effective publicity in campaigns to boost Colorado products as well as special project publicity such as "Grow a home vegetable garden," "What 4-H club work really means," "Speed-up your sewing," and "Make your kitchen work easier." Home demonstration agents feel that the calendar has made a better balanced plan of publicity and has helped them to remember holidays and other special events. All agents report having made use of the suggestions contained in the calendar. One agent reports that a scrap book containing all clippings of informational items used in former years has proved invaluable. Home demonstration agents are further spurred to greater efforts by the informational contest conducted by the college editorial office for county extension workers.

Extension Pays Dividends in Hawaii

(*Continued from page 69*)

Here is the total of $182,500 of actual saving in hard cash that the coffee farmers of Kona have in their pockets because there was a county agent on the job. It amounts to $182.50 for each farm in the district.

This was not all that this agent did in relation to the coffee industry. He is conducting tests in relation to fertilization; to cheapen, if possible, the fertilizer cost. He is conducting demonstrations in pruning and in the control of the black blight. Progress was made in all of these things but they are the kind of things that it is difficult to measure in terms of dollars and cents. The agent devoted about 90 per cent of his time to work with coffee and this percentage of his time meant many long days, and few holidays or Sundays. He did find time to organize and help conduct 16 boys' and girls' extension clubs with a total of 329 members, and brought through to completion 69 per cent. Four of these were coffee clubs, 9 were vegetable or garden clubs, 2 were poultry clubs, and 1 frog club.

Twenty-One Years in Dallas County, Ala.

John Blake

JOHN BLAKE, of Dallas County, Ala., last month completed 21 years of service as county agent. From his years of experience he has this to say about his work:

"A farmer is no richer than the soil he cultivates. The bedrock of successful agriculture is a rich soil, therefore I have given much time to soil building.

"The greatest progress has been made where we sell ideas to communities through their own leaders. This has come about by organization. After the program has been sold to leaders, ocular demonstrations are used to teach the lesson to others.

"A successful program depends on the cooperation of the business man and farmer. In Dallas County all friction has been gradually eliminated. Every civic club and the chamber of commerce are behind the work. Each of the three members of the county board of revenues is a farmer and member of the farm bureau.

"I firmly believe that the future of agriculture depends on the carrying out of the program of the extension service and farm bureau leaders. It is only through cooperation that we can progress, not only among farmers themselves, but between farmers, business men, bankers, and merchants." Extension work in Dallas County has consistently developed in accordance with these principles.

Soil Improvement

To-day the entire South benefits from the pioneering work done in this county with winter legumes. One of its chief exponents is John Blake.

More Biloxi soybeans are planted than in any other county in the State. Its use of basic slag is the largest of any county in the South. Thousands of acres have been properly terraced and drained, and yearly much progress is made in this direction. The use of explosives has been introduced to help in digging ditches.

Increasing Cotton Yield

Prior to 1915, no county in the State ever came closer than 3,000 bales of having Dallas County's cotton crop. Since the advent of the boll weevil, the trend with this crop has been to the Tennessee Valley in the northern part of the State. However, in 1930, 100,000 Dallas County acres produced 38,000 bales. Many other crops have grown in importance. The county is consistently shipping more than 1,000 cars of hay each year. One year 1,300 cars were shipped from Marion Junction, which is the largest shipping point for Johnson grass hay east of the Mississippi River.

In 1911 there were three small dairy herds selling milk at retail in Selma. One milk station in 1930 paid to 49 shippers $160,000 for dairy products, which was one-tenth of the value of the cotton crop. Three other milk plants and other outlets for dairy products contributed their multiple thousands to the economic welfare of the county. The first creamery in the South was started in Selma in 1914 with a capitalization of $2,500.

Beef Cattle

During this period the beef cattle industry started and has grown until in 1930 the Selma Stock Yards sold $396,000 worth of cattle for stockmen in this section. The county is third in the State in milk, and second in beef cattle. Hogs are sold cooperatively at 10 sales per year. Ninety per cent of the county's hogs are sold at these sales.

The rapid growth of the livestock industry has been made possible by the elimination of the cattle tick. This was done in cooperation with the State veterinarian, and the United States Department of Agriculture. During recent years the county is listed as being entirely free of bovine tuberculosis. A recent test has been made of every animal in the county.

The sheep industry has grown until 1,000 lambs are sold yearly. There were no commercial poultry flocks in the county in 1911. To-day carloads of live and dressed poultry go to the large markets of the country. Five cars of turkeys are sold cooperatively each fall to the holiday trade.

Pecan Industry

Twenty years ago there were relatively few pecan trees in the county. To-day this industry is of major importance, the county being third in the State. Under the leadership of Mr. Blake the growers largely market the nuts cooperatively. One of the first fire and forestry marshals of the State was located in Dallas County.

This period of years has seen many changes in the use of farm machinery. One farmer now runs twenty-three 2-horse cultivators. Several combines cut and thresh oats simultaneously. A hay-curing plant has been built to remove the weather hazards from the hay crop.

With the backing of the civic organizations of Selma, 4-H club work has become an influence strongly felt. Many of the earlier club members are among the best farmers of the county to-day.

Eight years ago the Dallas County Farm Bureau was organized and has grown until in 1930 it did business in excess of half a million dollars, and 7,500 bales of cotton were pooled.

Farm Leadership

Mr. Blake says that the success of the Dallas County Farm Bureau is due to its policy of adhering strictly to farm leadership, and the fact that no one man or group of men control its affairs. Eighty per cent of the white farmers of the county are members.

Due to the interest of the farmers of the county for more knowledge about their problems, the board of revenues in 1929 appropriated $44,000 to buy 1,115 acres of land for the Black Belt subexperiment station. This land was given to the Alabama Polytechnic Institute for this purpose and is now under the direction of K. G. Baker.

Mr. Blake was born and reared in Alabama. In 1911 he took up the duties of county agent of Dallas County, being one of the first agents in the State. By 1916 the work had grown to such an extent that an assistant was necessary. Since that time five men have served in that capacity. It is interesting to note that each of them is still in county agent work. He has served as director of the National Pecan Growers Exchange and is now on the finance committee of the National Pecan Marketing Association. He is county agent representative for the third Alabama district. Almost every civic group in Selma and Dallas County has him among their advisers.

Since coming to this county many changes have taken place. Good roads connect farm with market. Automobiles lessen the isolation of the farmer. Consolidated schools train the rural children. Seventy-five per cent of the homes of white landowners are equipped with electric lights, running water, and screens. A network of rural telephone lines connects all communities. These many improvements were made possible by the economic advancement of the people, and the work of the county agent has made a material contribution to this advancement.

A Paid Farm Management Service

F. W. PECK

Director, Minnesota Extension Service

IT HAS likely been the dream of every farm-management specialist, either in extension, teaching, or research work, to sometime, somehow, develop an advisory farm-management service, supported entirely by fees from farmers and farm owners as a distinctive farm-management service.

The writer can vividly recall discussing with such early farm-management men as Dr. W. J. Spillman, W. F. Handschin, E. C. Parker, Thomas Cooper, and Andrew Boss, rather definite organization plans for the setting up of such a service. In this instance, and in perhaps others of more recent times, the plans did not mature above the discussion stage.

However, there have been a number of attempts to develop this type of advisory service on the fee basis, and some of them have developed into successful service organizations. There is the Doane Service with headquarters at St. Louis, which has developed an enviable reputation in this field of work. A few years ago the Edgar Smith Farm Management Service agency in New York City was in active operation in providing advice and counsel along farm-management lines, but the writer is not familiar with the present status of this organization. Doubtless there are a number of others in active operation, wholly on the commercial basis of offering a service which land owners and operators support through payment for services received.

In more recent years, initiated in the Central West by the Illinois College of Agriculture, there has developed a cooperative plan between the colleges and groups of farmers to combine research, extension, and an advisory paid service into a definitely organized type of farm management investigational project.

Group Organized in Minnesota

In one area in Minnesota about 200 farmers have been organized into a farm-management group, in which each farmer contributes $16 annually toward the support of the service. Under the direction of the research department in farm management at the experimental station systematic records are kept by each farmer covering his farm business operations, and with the cooperation of the agricultural extension service each farmer is offered assistance in the organization and adjustments of his farm business. The contributions from the cooperating farmers provide somewhat less than half of the total cost of the service, and the balance of the required budget for conducting the work is provided from public funds. In other States, I understand, there is a graduated basis of farm payments, dependent upon the size of business and the number of farms included in the group organization.

The development of this type of farm-management effort, combining the investigational, extension, and private-service phases, has succeeded in bringing the local extension agent and the farm-management extension specialist into the active plans of organization and operation of the farm business of the individual farmer. It is apparent that the extension values have been greatly enhanced by this plan of organization and operation, with the result that the extension agents in the counties in which the farms are located, have, at first hand, localized information, carefully procured and properly interpreted for extension use in the county. Cost of production data, farm organization plans, interpreted results as to size of business, quality of livestock, efficiency of labor and other factors represent valuable types of extension information that lend themselves to wide application on most farms in the counties included in the project.

Service to Continue

Unless rural economic conditions continue for some time in their present depressed state or grow considerably worse, it would appear that this type of farm-management service would continue indefinitely. It is true that the present returns from farm operations are not conducive to an expenditure of money for any outside service, particularly in those types of farming in which the principal sources of income now have extremely low prices and low purchasing power. But on the other hand, farmers experienced in using the results of these farm-management studies are apparently eager to adopt any practical plans that promise to lower their cost of production and permit larger net returns from their farm operations. Furthermore, each farmer feels much freer to adopt suggestions when he has paid for them directly and when he has been an active participant in the organized plan for studying the economic phases of his own farm business.

The continuance of this type of service and the success of the entire plan rests primarily upon three factors:

First, the manner in which the project is outlined, organized, and put into operation by experienced personnel in charge of the project.

Second, the interpretation of the data and their translation into a form that will permit their most valuable use by the farmers who pay for the service.

Third, the extent to which extension agencies use the results of such studies in applying the practical interpretations to farms in similar types of farming areas.

Club Round-Up

Forty-three 4-H State champion club members of Wyoming and Colorado participated in the activities of the annual National Western 4-H Club Round-Up held at the National Western Stock Show, Denver, Colo., January 16 to 23. Team demonstrations, judging contests, and educational tours were the important events of the week. Outstanding livestock men and educators talked to the club members at mealtime.

Boys and girls from Wyoming, Kansas, Nebraska, and Colorado exhibited livestock. There were 243 head of fat steers exhibited, but the sifting committee allowed only 166 head to pass through the show ring. The 4-H club department is desirous of building up a quality department. At the 1932 show, breed classification was introduced for the first time. Ichio Matsutani, a little Japanese boy of Paxton, Nebr., was awarded the grand championship of the club class on his Hereford steer. The reserve championship went to Janet Welty of Berthoud, Colo., on her Angus steer.

Sixty-seven head of fat burrows were exhibited by 4-H club members in the swine department. In the dressed burrow contest in the open class, a 4-H club boy, Leo Florian of Washington County, Colo., exhibited the champion carcass.

MORE than 200 exhibitors entered 485 dozen eggs and 1,750 baby chicks in the baby-chick and egg show in Concord, N. H., recently. Proud of their success, 10 poultry men displayed their sweepstakes cups in store windows in several cities of the State.

Carrying Out A Poultry Program

J. C. Leedy

PLANNING effective county agent work is one thing and getting it done is another. In Douglas County, Oreg., according to W. L. Teutsch, assistant county agent leader, is found an excellent example of how a county agent, by organizing the forces of the community behind a particular movement, can speed up the agricultural development of that county.

At the beginning of the year 1930, a survey made by County Agent Leedy disclosed that there were 90,000 hens in commercial flocks in the county. By fall, careful estimates indicated that there were 150,000 hens in commercial flocks. In 1931 there were eight growers having 2,000 or more laying hens. At the beginning of the year, the Pacific Cooperative Poultry Producers' Association had 170 members in Douglas County owning 80,000 hens. At the close of the year this membership had increased to 232 owning approximately 100,000 hens, and in November, 1931, there were 266 members owning 110,000 hens.

Turkey Show

The Northwest Turkey Show was inaugurated in 1930 with 283 birds exhibited from Oregon, Idaho, and California, and last year 354 turkeys were shown representing nine counties in Oregon and sections of Idaho and California. This is the only exclusive turkey show held on the Pacific coast. Both years the grand championship prize was awarded to a Douglas County breeder. Through the inauguration of Government inspection and grading of turkeys and educational work among growers as to grade requirements, substantial progress was made in increasing the quality of turkeys marketed. A survey taken in the spring of 1931 also indicated a 10 per cent increase in turkeys.

Arrangements were completed whereby Douglas County Turkey Growers and members of the Oregon Turkey Growers became affiliated with the Northwest Turkey Growers, a regional federation of turkey-marketing cooperatives in eight Western States organized in accordance with the Federal Farm Board program.

Objectives

On December 1, 1929, the special poultry project for Douglas County was organized. The objectives set forth in this project provided that through educational meetings, local demonstrations, news items, and advertising matter the size of the poultry business in Douglas County should be doubled.

To reach this goal it was planned to work on an intensive poultry program over a period of three years.

Information Distributed

An informational campaign setting forth the reasons why the poultry business should be expanded in Douglas County was inaugurated at the outset. A circular letter was sent by Agent Leedy to 400 commercial flock owners urging them to expand their units. Prizes were given to the commercial poultry man having the largest percentage increase in size of flocks, the largest increase in total number of hens, the largest flock joining the Pacific Cooperative Poultry Producers during the year, to the beginner who raised the largest percentage of baby chicks purchased as well as to the veteran poultry man who raised the largest percentage of baby chicks, and to the poultry man having the highest production per hen. This contest, needless to say, has an important effect in stimulating interest in commercial egg production.

With the cooperation of the extension poultry man, a series of six poultry disease and management meetings was conducted attended by 317 and a 2-day poultry school was attended by 249 poultry men. At six poultry culling demonstrations 1,935 hens were handled. Two county-wide poultry picnics were held attended by 250. The county agent with 18 poultry men attended the State poultry convention at Corvallis. The county agent and seven poultry men attended the fowl-pox vaccination school, took the examination, and qualified to receive permits for using the virus for fowl-pox vaccination.

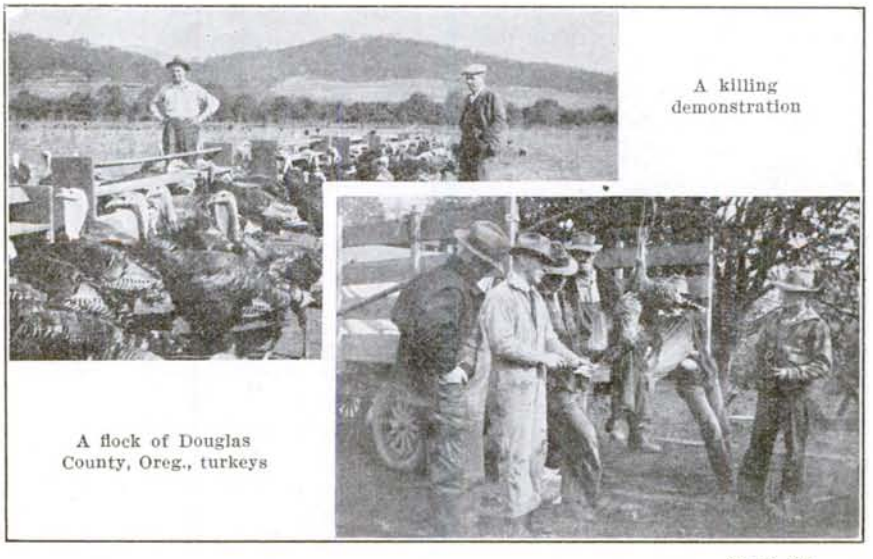
Six hundred bulletins dealing with the various phases of the turkey and chicken business were distributed to growers of the county in 1930 and 500 in 1931. One thousand circulars dealing with alfalfa growing were mailed out to poultry and turkey growers. Large numbers of both commercial egg producers and turkey growers are now planting small tracts of alfalfa to use as green feed.

Breeders' Association Organized

With the support of local turkey breeders, the Oregon Certified Breeders Association was formed in November, 1931. As a result of the turkey tatoo demonstrations 127 county growers have registered their brands with the State veterinarian and wing tattooed their birds. Killing and dressing demonstrations were conducted with an attendance of 208 growers, the first year of the poultry project and 195 last year. One hundred and thirty growers attended the grading school held in November and 60 persons took the examination to qualify as graders.

County Agent Leedy, in order to gain accurate knowledge of the cost of producing turkeys in Douglas County, inaugurated a cost of production study among 37 turkey growers.

This study, he believes, will be of invaluable assistance in the further promotion of the turkey industry in the county.



A killing demonstration

A flock of Douglas County, Oreg., turkeys

A Home-Demonstration Program Carries On

Florence P. Elliott

VALLEY COUNTY, MONT., farm women have found that the extension service is not just a fairweather friend. Here, where the drought hit particularly hard in 1931, Florence P. Elliott, home demonstration agent, has demonstrated the flexibility of the extension program and that when fundamentals are right, extension interest, extension support, and results are not all dependent on economic conditions or the size of the crop.

The total membership in home-demonstration clubs in Valley County, through which Miss Elliott's work is largely carried on, increased from 244 in 1928 to 508 in 1931, and actually gained 109 last year over the year before. The number of clubs in the different agricultural communities of the county increased from 14 in 1928 to 21 in 1930 and to 25 in 1931. All the 14 clubs that were started in 1928 were functioning in 1931, and eight of them gained in membership.

Why did nearly 30 per cent more women take an active part in extension work in 1931 than in 1930 in this county? Certainly it was not only because home-demonstration clubs are a source of help in difficult times, for before any signs of serious difficulty were apparent the year's work was under way. By the time hot winds from cloudless skies had seared the crops the work of the year was well along, nor did the enthusiasm or interest lag after it became apparent that 1931 would go down as one of the poorest crop years on record in the county.

The answer to the question seems to lie not in such things as weather, crops, dollars and cents, or good times, or poor times. The farm women of Valley County appear to want home demonstration clubs and the assistance of the home demonstration agent because of what they can obtain from them. They believe that health, comfort, and happiness are closely related to food, clothing, and the operations involved in the conduct and management of a home. The 1930 census showed 1,748 farms in Valley County. In 1931, more than 500 farm women there were members of home demonstration groups, earnestly and actively taking part in their programs. This shows that home demonstration work was serving directly a very substantial number of the farm homes of the county.

It may be well to point out, too, that the work with farm girls under the 4-H club program showed progress in 1931 as substantial as that with the farm women of the county. The enrollment in home economics 4-H clubs increased from 179 in 1930 to 210 in 1931 and the number of clubs from 16 to 19.

What did these women and girls and their organizations do? Well, they held meetings to discuss and demonstrate how to plan meals for the farm family. They worked on the labor and time-saving idea of 1-dish meals, placing stress on economy, nutritive requirements, and attractiveness. They studied the big subject of diets and such things as vitamins and minerals with the idea of using the means at hand to prevent and correct common deficiencies.

Clothing

Turning to clothing they started the year, prophetically or otherwise, with a series of meetings on the care and repair of clothing. Before the year was over they applied their newly acquired knowledge to the task of making the available clothing supply last through the winter, materially aiding their own families and their neighbors to meet the emergencies caused by the drought. Some of the subjects to which club meetings were devoted and which were later followed up in the home were home methods of dry cleaning, dyeing, laundering, folding, storage, darning, pressing, and clothes-closet construction. The 215 women engaged in these activities reported saving more than $3,000 as a result of the clothing project alone.

The work of the clubs on farmstead improvement and beautification had poor results because of the drought, but there were five meetings held on this subject, and 11 planting plans were drawn up for different farm homes. The well-organized school nutrition program started in 1930, in which 36 teachers signed up to carry on nutrition work among school children, was continued in the spring of 1931 under the direction of a newly ap pointed school nurse.

Recreation

Three county-wide picnics were planned. One had to be called off because of rain. Nearly 400 attended the two that were held, and others attended picnics in adjoining counties. Good music, as part of a county program on music appreciation, had a place in every adult and 4-H club meeting; and singing and folk dancing were customary forms of entertainment at most meetings. One of the most successful 4-H club camps ever held in the county with 225 club members attending the 3-day session of fun and instruction, featured the summer's activities.

Here, skimming the surface, is a picture of home demonstration work in Valley County, Mont., in the drought year, 1931. Was it worth while? Perhaps one answer to that question is that the 500 or more farm women enrolled in home demonstration clubs traveled an average distance of more than 10 miles going to and coming from their club meetings to obtain the information and instruction that they felt they needed. Perhaps an answer is found in the fact that in spite of the great need for budget paring in all local government affairs, the Valley County commissioners have approved continuation of the work for another 3-year period.

Girls Study Clothing

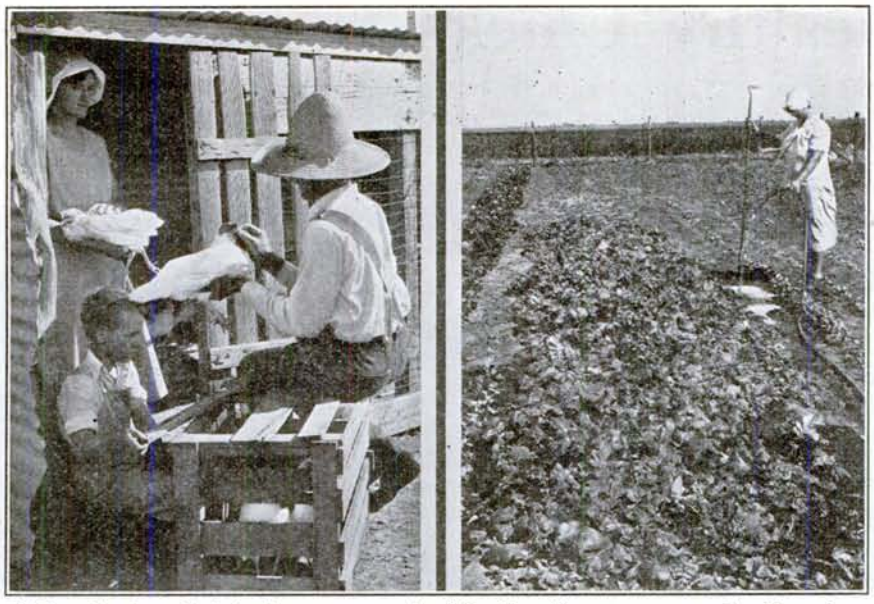
Fifteen hundred 4-H club girls in the State of Vermont are engaged in clothing work. A program covering seven years of work for these girls has just been arranged by Martha Leighton, assistant State club leader.

The first year's work is in the nature of home service, making of articles, care of clothes, and improvement of health. The work for the second year follows the same order under an advanced program. The third year marks another advance with emphasis on work connected with school life, then follow programs designed for four years of even more progressive work, entitled, "The Thrifty Maid," "At Home or Abroad," "4-H Club Outfit," and "Little Tots."

This plan for seven years of clothing club work provides an opportunity for membership by the older group of girls in whom the whole extension staff is interested in reaching. The plan does not imply that club girls will take the whole seven years but does provide, however, work of interest to many different types of club girls.

THE Brentwood Home Demonstration Club, Davidson County, Tenn., has planted 100 elm trees as part of its program in observation of the Washington Bicentennial, states Bama Finger, home demonstration agent.

Texas Lives at Home



Culling the farm flock in Texas as a part of the live-at-home program and a Texas home garden which helped to make the 45 per cent increase in gardens

"WITH THE IDEA of living at home in mind, Texas farm and home demonstration agents have helped Texas farmers to increase farm gardens 45 per cent in 1931 over 1930, to more than treble the amount of canning, and to extend the home production of meat to 75 per cent of the farms. At the same time they have helped develop beautiful homes and to build up supplementary cash incomes from poultry, dairying, and various home industries," states W. H. Darrow, editor, Texas Extension Service, in describing results in Texas. He characterizes the purpose of the Texas program as follows:

The half million farm families in Texas, if properly fed, will eat each year the entire gross proceeds from a 5,000,000-bale cotton crop at 10 cents per pound. Each farmer's own back door represents a steady market for $610 worth of food per year, of which $547 worth can easily be produced at home from a quarter-acre garden, a half-acre orchard, two milch cows, 60 pullets, and a few meat animals.

But this is only half the farm home market, for another quarter-billion dollars is in store if all the 500,000 farm families supply the comforts, conveniences, and beauty that can be brought to the home without cash, for only the expenditure of labor and ingenuity. Cheery living rooms, convenient kitchens, beautiful yards, and becoming clothes are as much a part of living at home as an ample food supply, say these extension service folks.

Presenting Economic Information

The first two days of the annual agents' conference at Stillwater, Okla., were devoted to the economic situation. The outlook on the price of the various commodities was reviewed from charts and explained by lectures. Teague Fisher, county agent for Washita County, summarized the suggestions on presenting economic information that were given. He says, "It was suggested that each agent should make a complete analysis of the economic trends of the agriculture of his county. This analysis should be the guide to the extension projects undertaken. Do not advocate any project that the income of the farmer does not justify. Know the reasons for the economic trends. Be able to list the products shipped out of the county and where shipped. Be able to list the products shipped into the county and from where they are shipped. Know whether the products shipped out could be processed within the county to the advantage of the farmer and whether or not the products shipped into the county could be produced within the county to the advantage of the farmer. Extension agents should interpret the economic situation on the following basis:

1. When prices are going up increase production.
2. When prices are going down cut expense.
3. The big loss to the farmer is stocking up when prices are high and selling out when prices are low.
4. Economic principles to observe when prices are going down:
   - (*a*) Watch investments.
   - (*b*) Avoid unnecessary expense.
   - (*c*) Produce living at home.
   - (*d*) Market products through livestock.
   - (*e*) Get products near consumer.
   - (*f*) Produce high-quality products.
   - (*g*) Produce concentrated products if far from market or products that are in demand if close.
5. Farm records should be kept that a greater net income may result from the farm operations as a whole.
6. Efficiency in production and marketing on each farm must be observed.
7. The net income from each farm enterprise and from the farm as a whole must be taken into consideration if the farm is to be successfully operated.

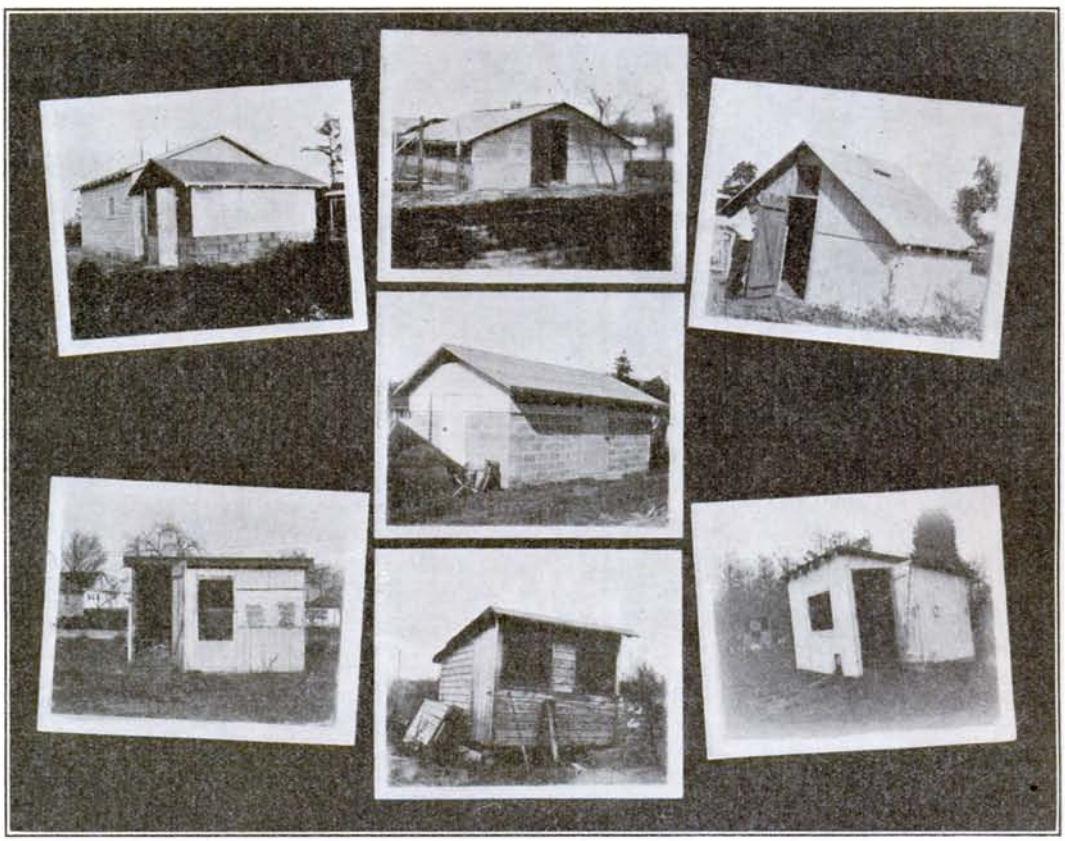
Here are some suggestions and cautions to bear in mind in presenting economic information:

1. Give information. Do not offer advice.
2. Economics is not an exact science.
3. Steps to take: Collect information. Get it to the farmers. Teach them how to use it. Study methods of approach and the proper use of lectures, pictures, and charts.
4. In using charts:
   - (*a*) Do not display charts until you are ready to present them.
   - (*b*) Show only one at a time.
   - (*c*) Face the audience. Speak to them, not to the charts.
   - (*d*) Know your charts. Do not read them.
   - (*e*) Use a pointer.
   - (*f*) Make sure that the charts can be seen.
   - (*g*) Have charts arranged in order in which you want them.
   - (*h*) Make comparisons.
   - (*i*) Know the scale, the time, and the unit of the charts.
5. Aim to get farmers to use the information.

Extension Results in Obtaining Healthy Chicks

Recently two accounts of successful extension work with poultry men on the healthy-chick project have come to the editor of the REVIEW. *These two counties, one in New Jersey and one in Indiana, are both poultry counties and both feel this is one of the best extension projects in the county. A comparison of the work in the two States gives an interesting example of how a fundamentally sound plan can be adapted to meet local conditions.*

PARTICIPATING in a state-wide poultry extension project, known as the Wage War on Worms and Disease campaign, County Agent Dwight Babbitt and his assistant, Francis Raymaley report excellent results for 1931 in the production of physically fit pullets in Cumberland County, N. J. Feeling that the most important factor leading to successful poultry keeping lies in the poultry man's ability to raise healthy pullets able to produce economically, these agents have endeavored to inform the 80 per cent of the farmers in the county who depend on poultry as a principal or minor source of income. That poultry forms an important phase of the county's agricultural program may be judged by the fact that the 1930 census estimates that 656,800 chickens valued at $1,250,000 are kept on the various farms.



Screened manure sheds being used by Cumberland County poultry men as a result of the sanitation campaign

Seven Points

Seven fundamental health practices formed the basis of the campaign. These were as follows:

1. Hatch early—before May 15.
2. Keep the brooder house clean.
3. Provide clean range.
4. Keep old and young stock separated.
5. Build a fly-screened manure shed for the storage of poultry droppings.
6. Wire the dropping boards with 1½-inch-mesh wire of 16 gage.
7. Clean the dropping boards daily during fly season.

In an attempt to enroll poultry men in the campaign, two letters were sent to the entire mailing list of 1,616 starting on March 14, 1931. As a result, 154 poultry men pledged their active support of the campaign. At various times throughout the rearing season a series of six timely tips was sent to each of those enrolled. In addition, a total of 15 news articles dealing with the campaign were published in the county newspapers. One of the features of the year's activities was a tour of the farms of six cooperators in August to observe the practical application of the recommendations. Sixty poultry men participated in this activity. In attempting to obtain a summary of the season's results, two circular letters were sent to the pledged cooperators and a general circular letter was sent to the entire poultry mailing list. To those letters 130 poultry men replied, giving the results of their experience. The tabulated results appear in the following table, and may be taken as a testimonial to the efforts of the county workers. In addition, there is left the feeling that they have had an appreciable part in assisting poultry men in their county to more successfully meet the challenge which faces every successful poultry enterprise, namely, that of healthy pullet production.

Results of campaign

Number of cooperators pledged	185
Number of chicks pledged	195,044
Reports received	130
Reports used	100
Chicks reported	127,937
Chicks lost during season	17,046
Per cent mortality	13.3
Number of good pullets housed	47,504
Number of cooperators vaccinating pullets	47
All seven points followed:	
Number of chicks	41,120
Mortality	3,028
Per cent	7.3
Good pullets	17,402
Per cent	42.3
Seven points except: Screened manure shed, wired boards, daily cleaning of boards:	
Number of chicks	76,906
Mortality	10,995
Per cent	14.3
Good pullets	27,775
Per cent	36.1
Seven points except: Clean brooder, clean range, old and young stock separated:	
Number of chicks	9,911
Mortality	3,023
Per cent	30.5
Good pullets	2,327
Per cent	23.5

FOR TWO YEARS, the "Grow healthy chicks" campaign has been conducted in Sullivan County, Ind., and County Agent M. K. Derrick says, "There has never been any project which has given me more enthusiasm to work hard and provided more real satisfaction than this one." Last year more than $3,000 was saved by farmers and poultry men of the county in the decreased mortality of baby chicks before they were 20 weeks of age. Completed reports included data on 65,000 baby chicks. The average decrease in mortality obtained by the cooperators who followed the recommended practices was 16 per cent. In addition, probably 600 farmers have adopted sanitary practices for the control of diseases and parasites common to young chickens. The full value of this campaign is difficult to measure.

Survey Made

Before beginning work on the project, a survey of the poultry situation was made which showed that one-third of the 750,000 baby chicks started each spring died before 12 weeks of age. In addition later losses were caused by retarded growth, slow maturity, parasite infestation, and lack of vitality. One purpose of the "Grow healthy chick" campaign was to enable poultry men to procure the desired number of early maturing, vigorous pullets with the least possible cost of production. The six points advocated were clean chicks, clean house, clean ground, clean litter, clean feed, and clean management. The goal which was to interest 250 farmers in the sanitation program was greatly exceeded.

One of the gratifying things about this campaign has been the effective organization of local leaders in a county poultry committee composed of two representatives from each township. The members of the committee helped in making the survey and then met to decide on a program which would meet the local needs. They secured enrollments, selected places for demonstration meetings, and advertised the poultry schools. Every community in the county took part with from 10 to 48 cooperators in each township.

The campaign began with the survey in January and was completed with a poultry school in September. Seasonal work was necessary in each of the intervening months such as chick brooding meetings, pullet demonstration meetings, and personal visits. Fifteen circular letters were sent out and 16 news articles prepared.

Six Counties Have Campaign

This campaign has been carried on in six counties in Indiana and is working into the complete poultry extension program satisfactorily. It has supplied some data for state-wide publicity and has been a factor in developing interest in the proper method of testing adult birds for pullorum disease. Data collected show that where all practices were followed there was 8 per cent mortality and where all but the "Clean chicks" practices were followed there was a loss of 15 per cent. Another group of flock owners followed all of the points except "Clean chicks and clean ground" and lost 26 per cent.

This type of project requires a large amount of the agent's time and in Indiana has been found advisable for him to have not more than one other major project planned for the spring season.

County Agent Uses Market Bureau

THE MARKET BUREAU as developed in Clarendon County, S. C., has been of tremendous help to him, as county agent, in putting on a constructive program and has won its way with his farmers, declares F. M. Rast. Up until its organization, there were only two products for which the farmer was assured of the correct market price—cotton and tobacco. Since then, the farmer has been able to get the correct market price of many agricultural products, such as hogs, poultry, peas, corn, and hay. Many new agricultural products have been developed, such as sweetpotatoes, hogs, string beans, and potatoes, by giving assurance to the farmer that these products would be taken care of at market prices when produced. In 1931 the county grew and shipped $37,547.66 worth of hogs, shipped approximately 35 cars of sweetpotatoes, about 20 cars of string beans and potatoes, and produced a surplus of such crops as corn, hay, peas, and oats. The organization now handles approximately $100,000 worth of these surpluses.

Organization of Market Bureau

The market bureau was established in the fall of 1923, shortly after County Agent Rast came to Clarendon County. He describes the organization as follows:

I secured the interest of a number of influential business men of Manning in trying to improve our local markets for our farmers. We are strictly an agricultural county, with no industries or large towns to offer inducements for sale of farm produce, and I realized that this market would have to be built on outside buying, necessitating an organization for shipping these products to the markets. The business men raised $930 as a revolving fund, rented a down-town office, and employed a secretary, with the provision that I give the organization, called the Clarendon County Market Bureau, close supervision until it could be worked up to pay its own way.

A board of nine directors was elected for a term of three years each, three directors retiring each year, and after expiration of his term no director is eligible for reelection for one year. The organization now requires the services of three full-time employees—a manager of shipping, a secretary, and a general service man. I wish to emphasize the fact that the organization is no stock company, never has been, and never will be, and does not pay dividends to original contributors. Sufficient commissions are charged to operate practically at cost, which has ranged from 1 to 4 per cent during the past, depending on the class of farm produce handled.

I find the market bureau a great help to me in trying out new projects. Many new crops have been tried, and many have failed, but some have become established, such as hog raising, sweetpotato production, and several truck crops. But perhaps the greatest benefit derived from this organization is the fact that we are now raising plenty of corn, oats, peas, and hay to make us a more self-sustaining people.

Our organization, wherever possible, affiliates with existing cooperatives of the State, acting as local representatives of these organizations in assembling, grading, and loading produce. It acts as the county representative of the Carolinas Sweetpotato Association, Carolinas Cooperative Consolidated, and State poultry-shipping association.

The organization, by careful management, has been able to create a surplus, which has been used, with the consent of the directors, in purchasing an office building and warehouse. The office building, known as the Clarendon County Community Home, supplies offices for the home agent, county agent, local veterinarian, county nurse, and the market bureau. The warehouse is used for the storage of surpluses until they can be sold.

FIFTEEN farmers in Saunders County, Nebr., celebrated the tenth birthday of the Saunders County Cooperative Bull Association the first day of March, according to County Agent R. N. Houser.

During the 10-year period the membership of the association has varied from 15 to 24 men. They have had four or five rings or blocks operating all the time. They have used 13 herd sires, exchanging them every two years between the blocks. At the annual meeting the members estimated that 800 daughters of the 13 bulls are still on farms of the county. The men also estimated that the production of the daughters would average 50 pounds of butterfat per year higher than the production of the dams.

THIS UNIQUE 4-H club of Woodland, Utah, are all members of the Winterton family. Wherever there is a livestock show of importance in the West, the Wintertons are there with prize animals. They won the lion's share of prizes this year at the fourth annual junior livestock and baby-beef show at San Francisco and at the Utah State fair won all the prizes in the 4-H baby-beef class. Mr. and Mrs. Winterton accompanied the 5 children club members and 15 winning white-faced baby beeves to San Francisco this year and made it a great old club and family excursion.

Producers Operate Egg Auction

BUCKS COUNTY, PA., poultry men have been selling their eggs through their own auction organization since July 13, 1931. The sales are held on Monday and Thursday afternoons in Doylestown, the county seat, about 30 miles from Philadelphia and less than 100 miles from New York City.

Previous to the formation of the Bucks County Producers' Cooperative Association, which conducts the auctions, the eggs were either sold to hucksters, who gathered them at the door, or shipped directly to buyers in the near-by cities. The majority of the hucksters operating in this county spent one or two days a week gathering eggs and the remainder of their time retailing them to city or suburban customers. This type of huckster welcomed the formation of any organization which would enable him to obtain with minimum effort the quality and quantity of eggs required for his trade. This organization also provided a means whereby the producer could be paid according to the quality of eggs produced.

The county agent, W. F. Greenawalt, assisted with the organization of the cooperative, set up a bookkeeping system, and gave the producers instructions in the production, grading, and packing of quality eggs. Closely cooperating with County Agent Greenawalt were Henry N. Reist, State marketing specialist, and Carl O. Dossin, State poultry specialist.

The capital needed to start the auction was raised by a $5 membership fee and a $10 loan from each of 14 charter members. The producer grades his eggs according to size and color and delivers them to the auction cellar. If several producers live in the same community usually one of them delivers the eggs of the other members for a small charge. The producer is given a receipt for his eggs when they are delivered to the auction cellar. A candler licensed by the Pennsylvania Bureau of Markets inspects 10 eggs out of each filler, a total of 100 eggs out of each case, to determine the grade under which the case is to be sold. He also checks on the weights of the eggs in the case. The eggs are sold under the Pennsylvania State grades.

Broken and rejected eggs are replaced by the cooperative organization, provided the number does not exceed five in a case. The producer must pay for all the replacements whenever they exceed this number.

A large label with the name of the organization, the gross weight of the case, the producer's number, the color of the eggs, the date eggs are sold, and the grade of the eggs in the case is pasted on one end of the case. The buyers can get all the information they need about the case from this label. All the cases of each grade are stacked together so that the buyers can tell at a glance after entering the cellar the number of cases of each grade to be sold.

Management of Auction

A licensed auctioneer is in charge of the sale, and the eggs are sold to the highest bidder. Each individual producer's eggs are sold separately, and not more than five cases are sold at any one time. One large flockowner consigns as many as 20 cases to a sale.

The eggs are paid for by cash or certified check before they are moved from the auction cellar. Checks are mailed to the producers the day after each sale.

The sales charge is 40 cents a case, provided the eggs are properly graded to size by the producer. If the inspector must regrade the eggs, an additional charge of 50 cents is made, which runs the total charge to 90 cents a case. The organization has been able to accumulate a small cash surplus from this handling charge and the membership fees.

Costs of operation at present approximate $120 a week and include salaries for the auction master, candler, helper, auctioneer, and such items as rent, light, heat, telephone, postage, and printing.

Members of the board of directors usually attend and assist without pay in conducting the auctions.

On the first day of selling, the cooperative had 28 paid members. In the fall of 1931, 141 members were selling 450 to 500 cases of eggs a week through their cooperative. The organization has sold more than $50,000 worth of eggs since it started business.

Our Cover

A 4-H garden champion from Lee County, Fla., is pictured on our cover page, Mildred Murray, winner of a district 4-H garden contest. Lee County lies in the winter truck-growing section, only about 80 miles from the southern extremity of the State, faces the Gulf of Mexico on the west, and is traversed by the Calloosahatchie River. Fort Myers and other resorts are within its borders. Citrus fruit growing is a major industry. Needless to say, Lee County club members are experts in the all-year garden work.

The Month's Best News Story

In last September's issue of the REVIEW *we ran a story on news writing schools for home demonstration agents as conducted by J. B. Hasselman and Muriel Dundas of the Michigan Extension Service. It looks as if the instruction given at those schools is bearing fruit for this month Agnes Sorenson, home demonstration agent for Kent County, Mich., shows us how news items about local meetings can contribute to extension teaching. First, we have a news item that gives advance notice regarding a series of meetings on child training to be held in the communities of Bostwick Lake and Sparta. We learn from the item (1) what the dates of the meetings are, (2) that they will be held in the afternoons and evenings, (3) what groups of people in the two communities should be most interested in attending, (4) that persons from other communities are welcome, and (5) that the child-training specialist from the Michigan State College will conduct the discussions. Most important, however, is the clear, concise outline given of the phases of child training that are to be considered and discussed at the meetings. The readers of the local paper in which this item appeared learn not only that the meetings are to be held but obtain a clear idea of the matters that will be discussed in case they wish to attend. Incidentally, 2,000 or more people living in other communities of the county learn by reading the item that there is such a thing as a child-training project in the extension program for the county and what its purpose is.*

The second news item deals with a local meeting that has been held by members of the Northeast Spencer Willing Workers Club. We learn who was hostess, who presided, and again, of most importance from a teaching standpoint what questions dealing with the problems of the home were brought up and discussed. As written up, this was not just one more meeting but a meeting at which the women of a locality came together and talked about matters of interest and concern to two or three thousand other home makers in the county who read the item in the paper in which it appeared.

Finally, as Exhibit C for Miss Sorenson, we give a news item on a meeting submitted to the local weekly by the reporter of the South Lowell Extension Club. Like the second item, this one tells with whom the club met, who conducted the meeting, what they had to eat, and when and where they were to meet next. It gave, also, like the previous item a clear, concise, one-paragraph summary of the club's main project for the year, namely, to work out problems in household buying. At the meetings of this club, so the reader learns, the members seek to learn where their money goes, how to budget their expenses, how to keep household accounts, and how to buy wisely. Yes, Miss Sorenson is doing a real job at getting home demonstration ideas across to the women of Kent County through news items about meetings that are held as a part of the extension program.

BOSTWICK LAKE and Sparta are to be the centers this winter for two different child-training projects sponsored by the Home Economics Extension Service of Kent County. Mrs. Lydia Ann Lynde, child-training specialist of Michigan State College, has been secured to conduct the courses. The meetings at Bostwick Lake are scheduled for October 15, November 18, January 14, March 20, and April 15. The dates for the Sparta meetings are October 14, November 17, January 13, March 19, and April 14.

"Understanding Your Child" is the title of the project to be given at Bostwick Lake. The first meeting will be an evening meeting open to everyone interested and will be a discussion of the place of the parent in the child's life. The plans of the project will be explained at this meeting. Subsequent meetings will be taken up of discussions of heredity and environment and their influence on the child's behavior; the child's emotions, fear and affection, their effect on behavior, and the possibilities of parental guidance; and a study of the disciplinary needs of the child and methods of discipline. These meetings will be afternoon and evening meetings—the mothers coming in for the afternoon session and the rest of the group coming for potluck supper and the evening meeting.

Fathers, mothers, nurses, teachers, doctors, ministers, and young men and women including high school seniors will find this project applicable to their daily lives and are invited to enroll. Although Bostwick Lake has been chosen as the center, anyone from neighboring communities or townships may join the group.

The Northeast Spencer Willing Workers met with Mrs. John Johnson of Dixon, October 29. The chairman called the meeting to order and the business of the day was dispatched, then the meeting was turned over to the leaders, Mrs. Walter Steffensen and Mrs. Bernard Norton.

The questions discussed were as follows: (1) Discussion on comparison of home maker with other business people as a financier; (2) items for which money is spent; (3) the classification into needs and wants; (4) the classification according to uses; (5) possible avenues of income; (6) definition for a budget; (7) explaining methods of keeping accounts; (8) the process of planning expenditures; (9) each member was to estimate her food expenditures for a year, also the amount supplied from farm or garden.

After all discussion was finished a lovely luncheon was served by Mrs. Levi Petersen and Mrs. Hiram Bristol. The next meeting is to be with Mrs. Arthur Petersen and Mrs. Ivan Sprague, and Mrs. Howard Rasmussen will serve. There were 2 members absent and 18 present.

Fourteen members of the South Lowell Extension Club met with Mrs. Myrtle Klahn, November 6, with Mrs. Bertha Rittenger and Mrs. Pauline Kilgus as hostesses.

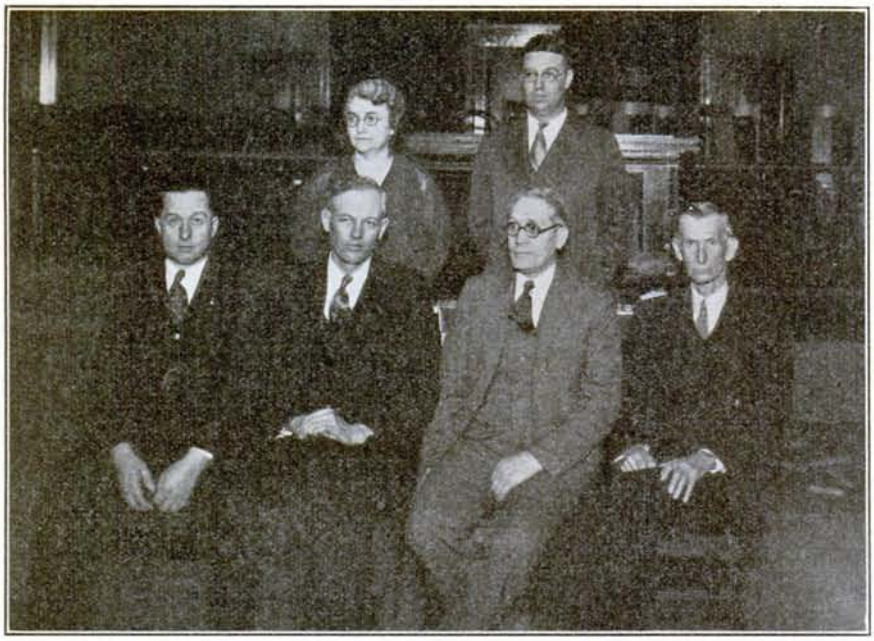
A delicious luncheon of chop suey, rolls, fruit salad, pickled apples, pumpkin pie, and coffee was served at noon.

The meeting was called to order by the chairman, Mrs. Lizzie Wieland. After a short business meeting our leader, Mrs. Agnes Bartlett, and assisant leader, Mrs. Bertha Rittenger, gave very interesting discussions.

The extension project this year is "Problems of the household buyer." This plan is to try to put the home on an economic basis, to have a budget plan in the home and keep accounts, so one has an idea where the money is spent, and to use good common sense when buying, and spend wisely so the whole family will be provided for.

In closing, songs were sung.—Mrs. Harold Rittenger, secretary-treasurer (also club reporter).

A HOME PRODUCTS banquet attended by more than 100 farmers and business men aroused a great deal of interest in Sequoyah County, Okla. All food, with the exception of seasoning, was grown in the county and was prepared by the members of the farm women's clubs under the direction of Mrs. Lenna Sawyer, home demonstration agent. 4-H club girls of the county served the banquet.



Twenty Years of Extension Work

A GROUP of veteran extension workers gathered to celebrate the twentieth anniversary of extension work in Pettis County, Mo. At the extreme right is Sam Jordan, the first county agent who began extension activities 20 years ago. He is now lecturer for the Missouri State Board of Agriculture and lives at Columbia. Second from the right is C. M. Long, second county agent, who left the extension service to join the National Holstein-Fresian Association forces and later to organize the educational bureau of the Blue Valley Creamery Institution. He is now operating the Milk Man's Service Co. in Lafayette, Ind., with his son. William T. Angle was the next agent and left Pettis County to go with the Producers Livestock Commission Co. of St. Louis and was then made manager of the Kansas City office of that company when it was formed. On the left of the front row is Robert S. Clough, county extension agent of Jackson County, Mo., who has been president of the State County Agent's Association and is now a member of the executive committee of the National Extension Workers' Association. In the rear is E. E. Brasfield, present county extension agent, and Mrs. Claire L. Montgomery, present home demonstration agent. Mrs. Montgomery is past president of the Missouri Home Demonstration Agent's Association.

Junior Leadership Club Uses Radio

The Marion County, Ind., junior leadership club is holding its monthly meetings on the first Saturday of each month so that the members can get the national 4-H club radio program. They hold the regular business meeting from 10.30 to 11.30 a. m. and listen to the radio program from 11.30 to 12.30, writes Dorothea W. White, an enthusiastic club member who was one of those chosen to represent Indiana at the National Club Camp last summer.

This club also plans to present a gift to the girl making the highest score on the music identification broadcast by the United States Marine Band during the 4-H club radio program of Saturday, July 2. At each meeting these junior leaders report how many of the girls in their own clubs are listening in on the national radio program.

There are about 40 girls in the club—"a bunch of live wires interested in any new work pertaining to 4-H clubs," says Miss White. They are all junior leaders in the county assisting the adult leaders in club work.

HOME DEMONSTRATION WORK conducted in North Dakota in 1931 reached 16,295 rural women through 460 homemakers' clubs. Of the 16,295 women, 7,788 were members of the clubs, and 8,507 were not members but received indirect assistance through the club groups.

National 4-H Club Radio Program

Saturday, June 4

How I Won my Trip to Washington. 4-H club boy from Oklahoma.

How I Happened to be Selected for a Delegate to the National 4-H Club Camp. 4-H club girl from Connecticut.

What Our Delegates to the National 4-H Club Camp Have Done. State 4-H leader from Connecticut.

The National 4-H Club Camp This Year. G. E. Farrell, Extension Service, U. S. Department of Agriculture.

National 4-H music achievement test—America's favorite composers.

Semper Fidelis	Sousa
At Dawning	Cadman
March of the Toys	Herbert
To a Wild Rose	MacDowell
Narcissus	Nevin
Song of the Marching Men	Hadley

"AGRICULTURAL Explorations in Ceylon, Sumatra, and Java" is a silent motion picture in two reels sponsored by the Bureau of Plant Industry and just released by the Office of Motion Pictures. It shows, in their native surroundings, many of the little-known and interesting tropical fruits and ornamental plants being investigated for possible introduction into the United States.

Activities of department plant explorers, David Fairchild and J. H. Dorsett, in Ceylon, Sumatra, and Java, in connection with the investigations of fruits, such as Bael fruit, Jackfruit, the Nawasa and King coconut, make scenes of interest and informational value. Unusual trees, such as the Palmyra palm and the Cannonball tree, operations in a tropical turpentine forest, and scenes of native life, foods, and industries, also add interest. According to the film, as a result of these explorations many plant species have now been established in Florida, the Canal Zone, and the West Indies.

The film is lent free of charge except for transportation to and from Washington, D. C. Prospective borrowers should apply to the Office of Motion Pictures, Extension Service, U. S. Department of Agriculture, Washington, D. C. Schools, colleges, and interested organizations may purchase prints made from the department's negative at approximately the cost of printing.

·ACROSS · THE · EDITOR'S · DESK·

No Trouble To Understand

HELEN JOHNSTON of Alabama speaks on the results of home demonstration work in her State in a language that anyone can understand. In two short sentences she accounts for tangible results from home demonstration work amounting to a cool half million dollars and over. Here they are:

"From October 1, 1930 to October 1, 1931, our 18 farm women's curb markets report total sales to the amount of $347,652. Sales of poultry products by 7,548 women and girls cooperating with us amounted to $257,594."

Has any other State or county on tap a statement on the results of home demonstration work as short and convincing as this? I'm listening.

Are They Overpaid?

THERE'S BEEN considerable discussion as to whether officials of the national commodity cooperative marketing organizations are being too highly paid for their services. Doubtless, the question is being talked over in a good many counties. Here's what Chairman Stone of the Federal Farm Board has to say:

"For cooperative marketing to succeed, the thing most needed is competent and honest management, a management equal to or better than that of the association's competitors in the private trade. The only way a cooperative can get such management is by paying salaries comparable to those offered by private business institutions engaged in the same line and handling a comparable volume of the product. Those who object to farmers marketing their products would like nothing better than for Congress to place large-scale cooperatives in a position where they can not compete for the caliber of men needed to run their business. Certainly such action against agriculture would be thoroughly indefensible unless Congress were prepared to impose similar restrictions on all other beneficiaries of Federal aid. This would mean putting the same provision in the Reconstruction Finance Corporation Act so that banks, railroads, and other borrowers from the $2,000,000,000 fund could not pay salaries to officers and employees in excess of $15,000 (a thing which Congress already has refused to do). It would mean that shipbuilders borrowing Government funds for construction purposes could not pay salaries to their officers and employees in excess of $15,000. It would mean that airplane and shipping companies receiving millions in direct Government subsidies through mail contracts could not pay salaries to officers and employees in excess of $15,000. It would mean that great industrial concerns receiving tariff protection could not pay salaries to officers and employees in excess of $15,000. It would mean that newspapers and magazines participating in the ninety-odd million dollar annual subsidy to second-class mail users could not pay salaries to officers and employees in excess of $15,000."

It's Proper Seasoning

A STORY on adjustments in the home demonstration program in his State came to me recently from John Dexter, Montana's extension editor. In the story, he touches on the question of how far extension workers are justified in encouraging and assisting with the recreational activities of farm people.

Speaking of the situation in Montana, he says: "Recreation is being recognized as of particular importance at this time and efforts in this field are meeting with unusual response from farm people. Interest in rural community gatherings is stronger now than for many years. Entertainment, amusement, human companionship are in demand, a natural manifestation of the desire of people to get away from, or to be lifted above, their difficulties and troubles."

I showed John's statement to the chief, C. B. Smith. This was his comment, "In our activities we need to stick close to those which relate directly to augmenting the farm income and to making that income go as far as possible in providing necessities and comfort for the farm family. Let's stress the essentials. Recreation is the garnish of the meal. It should be to rural life what salt and pepper are to food—the proper seasoning. We need it in the extension program, but in moderation. Every extension meeting may well include in its program group singing and some form of recreation in proper combination with its instructional features."

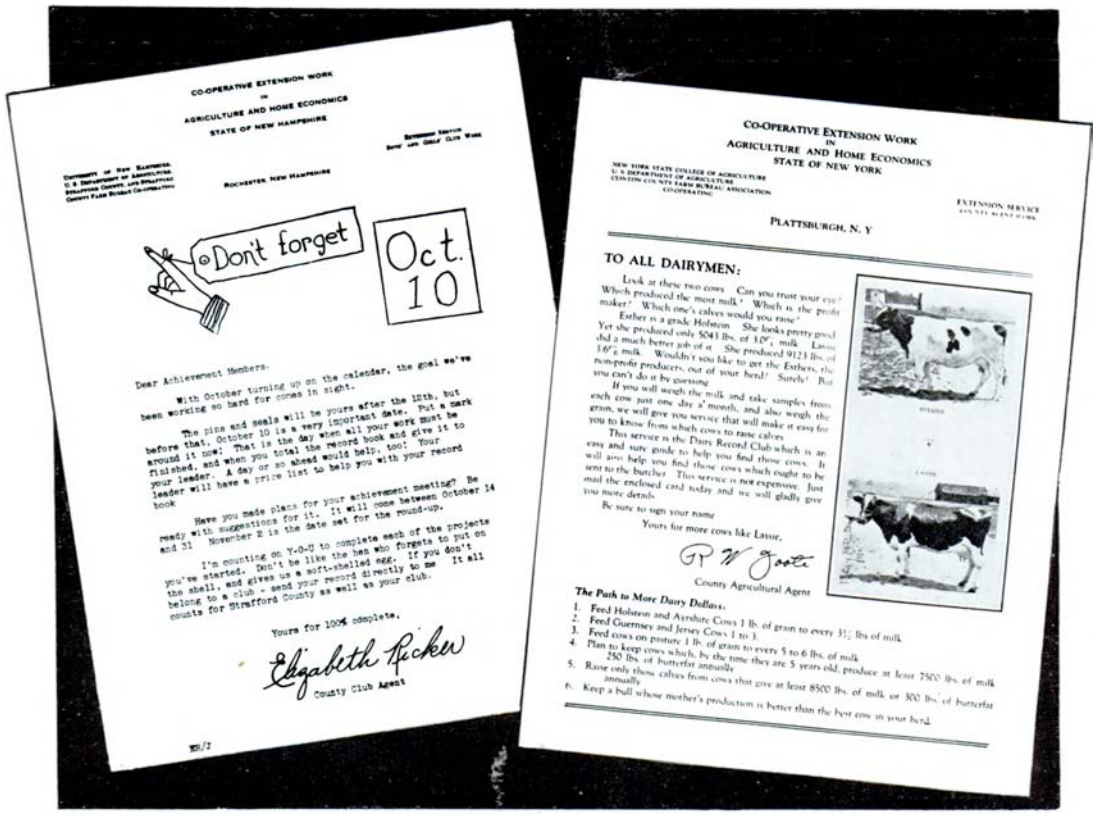
The Work Continues

SUCH THINGS as adverse weather, poor crops, dollars and cents, or lack of them, good times or bad times, alone, do not determine extension interest, support, and results. Else, why did nearly 30 per cent more farm women in Valley County, Mont., take an active and uninterrupted part in extension work in the drought year of 1931 than were so engaged in 1930? Also, why in the face of difficult financial conditions, have the county commissioners approved of the continuation of the work for another 3-year period? The answer, Florence P. Elliott, home demonstration agent, thinks lies in the fact that the women of Valley County believe that the health, comfort, and happiness of their families and themselves are closely related to food, clothing, and the operations involved in the conduct and management of the home. They believe, too, it would seem, that home demonstration work is giving them the information and assistance required to corral their share of health, comfort, and happiness. Else, why keep on with home demonstration work?

What Is The Answer?

BRADLEY COUNTY, TENN., reports an enrollment of 533 boys in 4-H club work for 1932. This is 103 members more than were enrolled in the county in 1931. "Yet," says Assistant County Agent E. H. Swingle, "Bradley County held no fair last year and no prizes were awarded to club boys for the excellent work they did. We thought that the lack of prizes might result in decreased interest this year. On the contrary, we have the best interest and enrollment we have ever had."

Which raises the question, How essential are prizes to the success of club work? And, again, What are the things offered by the 4-H clubs that attract and hold boys and girls as members? R. B.



ILLUSTRATE YOUR CIRCULAR LETTERS

THE effectiveness of the circular letter in influencing the action of farmers and farm women may often be increased through the use of good illustrations. The properly selected illustration not only presents the idea more clearly but makes a more lasting impression than words.

HALF-TONE cuts at the head of a printed letter add much to its attractive appearance. For a mimeographed letter, where the illustration must be cut on a stencil, a simple line drawing is best. Too much detail often results in a ragged, uneven imprint as well as in a confusion of ideas.

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 illustrations for circular letters. Forward your request through your State director of extension.

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

U. S. GOVERNMENT PRINTING OFFICE: 1932

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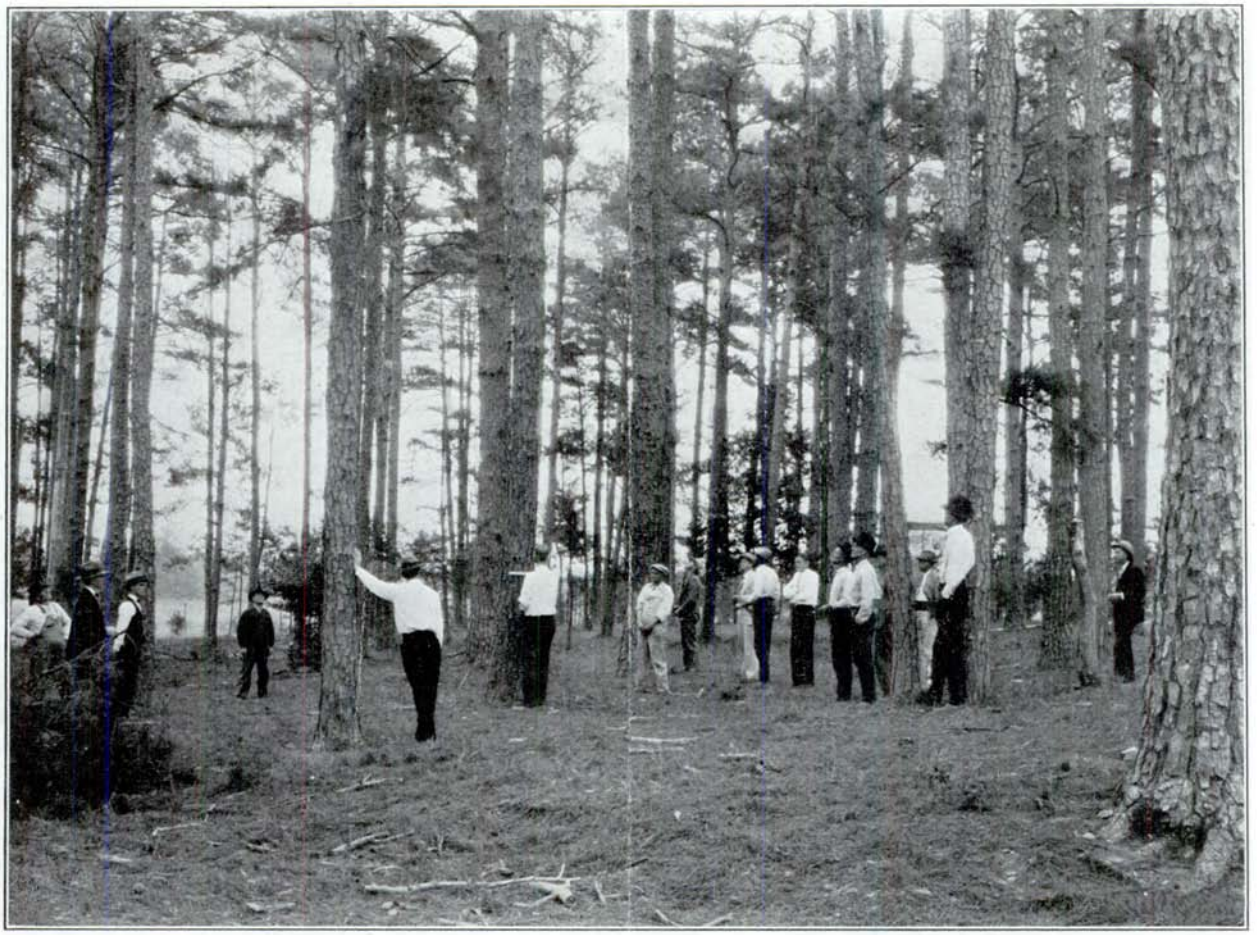

STUDYING LOCAL FARM TIMBER PROBLEMS

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

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

In This Issue

CHAIRMAN STONE of the Federal Farm Board hits the nail squarely on the head in his discussion of trading power for the farmer. Strengthening the trading power of the farmer as he sees it benefits in the end consumers as well as producers. Cooperative marketing associations he shows tend to the development of more effective bargaining power with the result that the producer is enabled to ask a price for his commodity based on the demand for it and the total supply available to meet that demand.

IN THREE Minnesota counties in 1932, 41 young men and women cooperating in a farm family partnership program made average net incomes of $277.92 and average savings or gains in net worth of $116.23. At the close of the year their net assets averaged $836.31 apiece. Says the father of one of these cooperators, "I believe it is the best way to keep our boys and girls interested in the farm business. It certainly develops a sense of responsibility."

There are 200 young men and women enrolled in this program in 20 counties in Minnesota this year. We'll watch the results they obtain with keen interest.

IN ANSWERING the question, how can farming be made more profitable, cords and board feet and acreage of soil saved from erosion are coming in for consideration along with bales, bushels, and tons. That's the thought R. Y. Stuart, Chief of the Forest Service, brings to us. "Extension workers will find the officers of the Forest Service throughout the county always willing," says Major Stuart, "to cooperate in showing farmers how to make the woodlands pay their way."

THOSE OF US who are pondering over the problems of what to teach and how to teach at 4-H club camps this summer may well take a leaf from Missouri's experience. The importance of insects and how to control them was presented as a special feature to 1,200 boys and girls in the instructional programs at 4-H club camps in Missouri last summer. A mighty well-planned teaching effort George D. Jones, extension entomologist, made of it. If, some day, the hoppers and the borers overwhelm Missouri's agriculture, it won't be for lack of knowledge of how to stop them. It will be because there are just too many of them.

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On the Calendar

RURAL LEADERS' conference for State, county, and local adult extension workers, July 4–9, at Camp Ohio, Ohio.

NATIONAL 4-H camp broadcasts from Washington, D. C., on the Farm and Home hour over National Broadcasting Co. network, Friday, June 17; Monday, June 20; and Tuesday, June 21, 12.30 to 1.30 p. m., Eastern standard time.

BELIEVING that cheap feed is cheap fuel for producing power when fed directly to the horse and very expensive if it must be sold and converted into other forms of fuel, County Agent V. J. Mann launched a big-hitch campaign in Clinton County, Ind., three years ago. The praise of the results obtained by farmers who began using the bigger teams was responsible for a rapid adoption of the practice. In two years there were more than 100 users of the big hitch in the county.

ONE COULD drive for miles and never see a garden. People would tell you that gardens would not grow in the county. That's how Gertrude Brent, home demonstration agent, pictures the garden situation in Coleman County, Tex., in 1923, eight and one-half years ago. In 1931, there were 235 irrigated gardens as compared to 9 in 1923. A thousand acres of garden where before there were barely 100 acres. And, that's only a part of the fascinating story that Miss Brent tells of aiding Coleman County to live at home.

AN INCREASE from $50,000 to $250,000 in 10 years in annual income from dairying is the record made in Boyd County, Ky. Here in 1920 only 8 farmers in the county owned 10 or more cows. In 1930 this number had increased to 60.

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

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

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Forest Service Aids For Extension Workers

R. Y. STUART
Chief, Forest Service

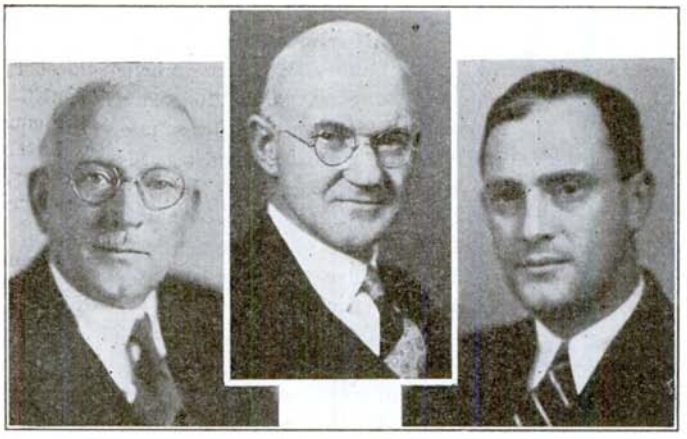
THE farm woodland—its products and influences—is demanding more and more attention in discussion of the big question: How can farming be made more profitable? Cords and board feet and acreage of soil saved from erosion are coming in for consideration along with bales, bushels, and tons.

The agricultural colleges or related institutions of 32 States and 2 Territories have on their faculties extension foresters whose work is to bring the farm woodland into the farm program and to do for its products and their betterment what the poultry specialist or the agronomy expert does for his line. Rhode Island, Delaware, South Carolina, Florida, Kentucky, Missouri, Kansas, Oklahoma, South Dakota, Montana, Colorado, New Mexico, Arizona, Nevada, Washington, Oregon, and Alaska as yet have no extension foresters. All of these, however, have State foresters except Arizona, New Mexico, Nevada, and Alaska. The Extension Service of the United States Department of Agriculture has a forester, W. K. Williams, among its specialists, and the branch of public relations of the United States Forest Service has an extension forester, W. R. Mattoon.

The Clarke-McNary law, enacted June 7, 1924, authorizes the Secretary of Agriculture to cooperate with appropriate officials of each State, and through them with private and other agencies, in the protection of timbered and forest-producing lands from fire, and in the production and distribution of forest-tree seeds and plants for the purpose of establishing windbreaks, shelter belts, and farm woodlands upon denuded or nonforested lands. It also authorizes Federal cooperation with the various States in forestry extension, to assist the owners of farms in establishing, improving, and renewing woodlands, shelter belts, windbreaks, and other valuable forest growth, and in growing and renewing useful timber crops.

Fire Protection

During the fiscal year ended June 30, 1931, a total of over $6,500,000 was expended for fire protection in the 36 States cooperating under this law. Of this total, $3,910,310 was the States' quota, $1,619,942 was paid by the Federal Government, and $1,101,111 was contributed by private agencies. In the same year, $338,889 was spent for the distribution of forest planting stock, of which 37 States and 2 Territories cooperating paid $248,091 and the Federal Government $90,798.



W. R. Mattoon R. Y. Stuart W. K. Williams, jr.

In 1930, farmers of the country were supplied with more than 26,000,000 young forest trees from the nurseries of the States and Territories cooperating under the Clarke-McNary law. This meant that timber production was established or restored on nearly 26,000 acres of farm lands. Material increases in the number of trees distributed from the various State nurseries in the South evidenced an awakening interest there in timber as a farm crop, while recognition of the value to farms of shelter belts and woodlands has resulted in constantly growing demands for planting stock in the Plains States.

Federal cooperation in farm forestry is conducted as a part of the extension program of many of the State agricultural colleges and is administered by the Extension Service of the United States Department of Agriculture with the cooperation of the Forest Service. This forestry extension work embraces such major projects as planting, improvement cutting, timber estimating, marketing, fire prevention, and 4-H club work in forestry. In several States marketing, sawmill improvement, and maple-sirup production are included. The most popular work is forest planting. This work has been extended in some form in all of the 32 States and 2 Territories having extension foresters, and is the principal project in 5 mid-western States where windbreaks and shelter belts are needed on many farms. Forest planting is also the greatest farm forestry need in Hawaii and Porto Rico.

At the 11 regional forest and range experiment stations maintained by the Forest Service investigators are giving much attention to the development of new and better practices in farm forestry. Problems of grazing damage to woodlands in the hardwood belt, of growing and marketing walnut and other valuable species, and of preventing erosion are being studied at the Central States Forest Experiment Station. The southern station has special studies under way on erosion control and on turpentining methods. Management studies, growth and yield studies, and fire-protection investigations for the southern pine belt, the northeastern pine and spruce forests, the Lake States, and other forest regions are in progress. Windbreaks and their effects are being studied in the Great Plains; management of the ranges

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for continuous forage production and maximum watershed protection is receiving attention on the southwestern and intermountain regions.

To aid extension workers throughout the country in carrying on their educational work in forestry, the United States Forest Service is continually preparing new material, based on its findings. It is always glad to make available to the extension people whatever educational material it has. Requests for publications, lantern slides, posters, and exhibits are welcomed.

Publications Available

Some 50 popular publications issued by the Forest Service are now available in varying quantities for free distribution. These deal with the broad problems of forestry and conservation, farm forestry, marketing of farm timber, preservative treatment of wood, erosion control, livestock range management, forest planting, and wood utilization.

Especially valuable for reference is the series of technical bulletins on timber growing and logging practices. In this series it is aimed to present the most up-to-date and complete information developed by research and experience on the methods of growing and harvesting timber that will insure continuous and profitable crops. Eventually all the major forest regions of the United States will be covered in the series. Bulletins have already been published for several of the regions, including the Northeast, Lake States, Rocky Mountain, central hardwood, and southern pine regions.

A bimonthly magazine, The Forest Worker, also is published by the Federal Forest Service, which contains current information on State forestry, forestry education, activities of Federal forestry agencies, research results, and recent forest literature. Much of this information is of value to county agents and other extension workers in their dealings with farm woodland owners.

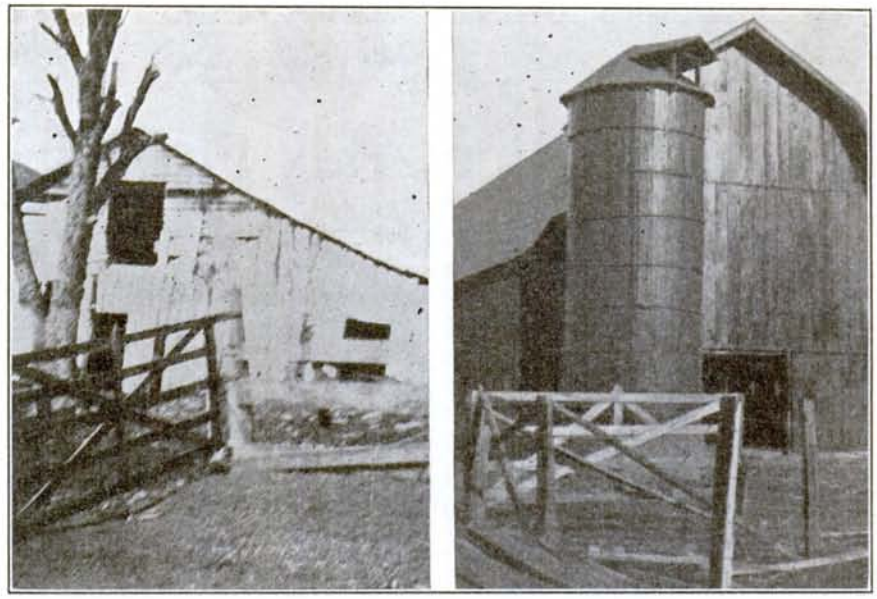
Lantern Slides

Lantern-slide sets with prepared lecture outlines may be borrowed from the Forest Service. The service will also have duplicate sets made at cost for the permanent use of extension workers. The Extension Service has a number of film strips on forestry subjects. Popular motion pictures on forestry subjects which have been filmed by the United States Department of Agriculture are available for loans. These include film stories on forests and waters, forests and wealth, forests and health, and forest fires and game. The first Department of Agriculture talkie made was Forest or Wasteland.

Instructive and attention-getting forestry exhibits may be borrowed for county fairs, meetings, or other uses. Small traveling exhibits and special material suitable for school and 4-H club use have been prepared by the Forest Service.

Protection and development of the Nation's forest is the broad objective of the Federal Forest Service. Solution of the forest problem involves not only the proper management and protection of the great areas of timberland within the national forests and the large industrial holdings; it involves the encouragement of better management and more profitable production on the individual farm woodland. Because over one-fourth of the total forest area in the United States is farm woodland, farm forestry looms large in the program of the Forest Service. Extension workers will find the officers of the Forest Service, scattered throughout the country, always willing to cooperate in the work of showing farmers how to make the woodlands pay their way.

Dairy Development in Boyd County, Ky.



Everett Hamilton, a Boyd County, Ky., dairyman was milking 15 cows in the old barn on the left in 1930. In 1931 he built this modern dairy barn. When the barn was completed it was the scene of a banquet tendered to the business men of the locality by 26 cooperating dairymen

THE ANNUAL income from dairying in Boyd County, Ky., has grown from $50,000 to $250,000 in 10 years and cows now represent a major source of farm revenue the year around according to County Agent Joe Hurt. In 1920 most of the milk consumed in Ashland and Catlettsburg was produced in Ohio; now practically all of it is furnished by farmers in Boyd County.

In 1920 there were only 8 farmers who owned 10 or more cows, whereas in 1930 this number had increased to 60. Practically no farmers produced grade A milk as late as 1925. Now 51 are wholesaling grade B milk, which is Pasteurized and retailed as grade A. There are 13 modern dairy barns in the county, and 38 general-purpose barns have been remodeled into modern dairy sheds. Fifty-one farmers have modern milk houses which meet the requirements of the board of health. There are 12 purebred bulls in the county.

Last year the Boyd County Dairy Herd Improvement Association completed their first year of testing and herd improvement. They planned an ambitious program of obtaining production records of 425 dairy animals, a county study tour, a county dairy banquet, the importation of better dairy blood, and the cooperative effort toward the adoption of a sanitary program in production that will financially lead to the adoption of a standard milk ordinance in the city of Ashland. All of this was accomplished and in addition, more than $1,000 was saved by the dairy men's organized efforts in securing a tuberculin test of their dairy animals.

Trading Power for the Farmer

JAMES C. STONE
Chairman, Federal Farm Board

IT SEEMS to me that one of the most difficult problems facing the American farmer is the inequality of trading power when he sells his commodity.

Due to the progress industry has made, especially in the last 25 or 30 years and especially in the amalgamation and consolidation of smaller units into larger ones, it is apparent that the buying power of those who buy agricultural commodities is much greater and is more concentrated than the selling power of the individual farmer.

Inasmuch as the sale and purchase of all agricultural commodities resolves itself down to a simple barter or trade, it is not difficult to see, under these conditions, that those who buy agricultural commodities are in position to make a more advantageous trade than the farmer in the sale of his product. As a practical illustration, there are approximately 6,000,000 individual farm units in the United States. The corporations buying and processing farm commodities into the finished product to be wholesaled and retailed to the general public are owned, no doubt, by many more stockholders than there are farmers, but the stockholders of these corporations have concentrated their buying by corporate organization into the hands of a relatively few, while farmers, in a large measure, are still operating on an individualistic basis.

Cooperative Marketing Aids

As long as this condition exists it will always be difficult for the farmer to receive a price for his commodity based on the normal operation of the law of supply and demand, which implies equality in the bargaining position of buyers and sellers. The agricultural marketing act was passed by the Congress of the United States for the purpose largely of assisting farmers to concentrate their buying power by organizing into selling corporations under the principle of cooperative marketing. In other words, cooperative marketing is to agriculture the same thing as corporate organization is to industry.

The conception of cooperative marketing associations in the minds of most business men has been that the farmers were organizing for the purpose of setting aside the law of supply and demand. This is not true. In reality, under present conditions and in most commodities it is impossible for the law of supply and demand to operate normally for the farmer, and it always will be as long as he insists on following an individual sales policy instead of adopting a collective sales basis.

Increasing Efficiency

Cooperative marketing associations do not benefit farmers at the expense of consumers. Their aim is simply to secure a fair share of the consumer's dollar for the primary producer. In many cases they can render improved services and at the same time reduce distribution costs which must be covered by the price paid by the ultimate user of the product. The development of more effective bargaining power through cooperative organization tends to force an increase in efficiency on the part of wholesale and retail distributors, with benefits accruing to consumers as well as producers.

In periods of falling prices an effective system of cooperative marketing organizations would prevent corporations buying and processing farm commodities from passing back to producers all price cuts necessary to move their products. Now the ability of such organized business interests to shift the full burden of price reductions back to unorganized farmers, and thereby to maintain or enlarge their profit margins during periods of weak consumer demand, accounts for the fact that their enterprises are known as "depression proof." To illustrate, the earnings available for dividends to common stockholders of concerns handling dairy products were 42 per cent greater in 1931 than in 1928; whereas in that period the gross income of agriculture dropped 41 per cent, resulting in farmers suffering a deficit of upward to $1,000,000 last year. Comparable earnings of automobile and truck manufacturers decreased 75 per cent, and the steel industry was reduced to a deficit basis. Earnings of baking and flour milling concerns were off only 2 per cent and tobacco companies increased their earnings 41 per cent, notwithstanding the fact that farmers were paid record low prices for what tobacco they were able to sell.

Cooperative marketing promises no panacea for all the ills of agriculture. It is only an effort on the part of individual farmers to develop intelligently a system through unity of action which will enable them to ask a price for the commodity based on the demand for it and the total supply available to meet that demand. The mere fact of farmers organizing a collective sales organization for a particular commodity and contolling through this organization a sufficient amount of it in relation to the total amount produced, immediately has a tendency to raise the price toward the level of where it would be, based on supply and demand in a market in which the bargaining power or buyers and sellers was more nearly equal.

Merchandizing Organizations

However, cooperative marketing associations should never be operated as "stabilization organizations," which attempt to maintain or increase price through holding operations. Cooperatives are strictly merchandising organizations and unless they are operated on this basis they will not succeed.

The Farm Board feels that the Agricultural Marketing Act has been and will continue to be a great help to the farmers of this country in organizing sound cooperative sales organizations. Our main objective in this work is to assist farmer cooperatives in setting up sound associations, both as to finances and policies of operation. Progress has been made along this line, and the financial assistance we have been able to render during the last three years has enabled many marketing associations to continue and render a real service to their members. As evidence of this fact, in 1929 there were approximately 12,000 cooperative marketing associations in the country, and there have been fewer than 80 failures, which is a far better record than that made by industry in the same difficult period.

COMMUNITY organizations of farm people in 50 Illinois counties are now carrying out regular monthly meetings as a result of a new trend in farm organizations which is being encouraged by the extension service, reports D. E. Lindstrom, associate in rural sociology.

The 254 community units already functioning embrace farm and home bureau units, farmers' clubs, rural community clubs, and local granges.

Using Horses In Larger Units

THE use of horses in larger units has for three years been a successful extension project in Clinton County, Ind., a typical Corn Belt county. County Agent V. J. Mann, in telling of the work, emphasizes the fact that any extension project, if it is to be readily received and adopted into farm use, must fill some recognized want or need. This project tackled a definite problem, that of farm power, which was recognized by many farmers. Mr. Mann states the problem thus: "Cheap feed is cheap fuel when fed directly to the horse, very expensive if it must be sold and converted into other forms of fuel. There are some farmers accustomed to farming big and turning off a large amount of work per man per day. They still want to do this. Horses in larger units offer this opportunity. My job was to help construct a bridge in between for the farmer who may realize the problem, agree with the solution, and still not act. The job was begun in the spring of 1929 with the launching of the big-team-hitch campaign.

Big-team hitches in action in Clinton County, Ind.

Campaign Conducted

The campaign was carefully planned by the State specialists and the county agent. A preliminary survey revealed the fact that only one-third of the farms in the county then had four or more horses, and these farms were the basis for the campaign.

This campaign was planned to consist of news stories in the local paper and circular letters illustrated with actual pictures of teams working and diagrams of various hitches. The publicity led up to a series of hitch demonstrations held in various parts of the county. At the demonstrations four, five, and six horse teams were worked. Farmers were given an opportunity to hitch and drive the teams. They were also invited to bring materials for eveners and were assisted in making them. Following the demonstrations, the county agent agreed to personally assist any farmer in the county in starting a multiple-hitch outfit. This offer resulted in many requests for assistance.

As farmers began using the bigger teams they became loud in their praise, and this advertisement from users was responsible for a rapid adoption in many communities. At the end of the first season there was a record of about 70 users. A multiple-hitch plowing match was arranged in the fall. The Mulberry Community Club, the Prairie Farmer, the Frankfort Morning Times, the Indiana Farmers' Guide, the Horse Association of America, and the agricultural extension department of the university cooperating. Classes were included for teams of 4, 5, 6, and 8 horses. A demonstration 12-horse team was driven. Several hundred farmers attended the match from Clinton and other near-by counties.

The second year of the campaign gave a definite record of more than 100 users in the county. In the fall of 1930 a second plowing match was held in the Mulberry community. The attendance was about 3,500. This year has seen a large increase in big-team use.

The low price of farm products is resulting in more utilization of horse power all the time, and the mutiple-hitch system is the principal method of working large teams. There are more colts in the county now, and the horse situation is receiving more serious thought than was the case before the big-team idea gained recognition.

AN incorporated 4-H Hereford breeders' club with membership limited to 19, and incorporated for $25,000, each member receiving a share for each head of stock, is being sponsored by J. J. Toole, banker and club advisor in Craig County, Colo. The calf club work will be carried on by members as heretofore and as the calves reach breeding age the members will put them into the corporation and receive stock in exchange. As earnings are made, dividends will be declared and a plan of permitting stockholders to sell their interests when they reach the age of 20 will be formulated.

Farm Family Partnerships in Minnesota

"I BELIEVE it is the best way to keep the boys interested in the farm business. It certainly develops responsibility." Thus was approval recently given Minnesota's farm family partnerships for young people by G. H. Larson, of Redwood County, father of two boys who have been in the partnership work for four years.

Likewise the partnership plan has been an outstanding success for the Larson boys. Andrew, 24 years old, has saved $1,532 from a dairy partnership, while Harold, 21, has saved more than $800 of the income from poultry and swine partnerships. Both boys are experts in handling money, says W. D. Stegner, district 4-H club agent, under whose personal direction this farm family partnership plan has been developed.

Juniors Share Income

The Minnesota farm family partnerships are an attempt of the agricultural extension service to provide a program for older 4-H members or for young people beyond club age, but who are not sufficiently well established economically to be interested in the adult extension program. The farm family partnership is a business agreement between young men or women and their parents by which the junior partner shares the income from certain farm enterprises in exchange for his or her assistance in conducting the farm work. With the help of the county agent or 4-H club leader, an individual contract is worked out to suit each case, signed by the parties to the partnership, and the program carried out with the assistance of the extension service.

In Redwood and Martin Counties, where this plan was first tried out in 1928, 41 junior partners, averaging 21.9 years old, made average net incomes of $425.29 and average savings, or gains in net worth, of $308.13. Thirty-three junior partners in the same counties in 1929 had average net income of $594.51, with average gains in net worth of $390.81.

Figures available for 1930, covering 44 cooperators in 3 counties, show average net incomes of $466.93 and savings of $214.99. In 1931, 41 cooperators in these same counties averaged net incomes of $277.92 and savings of $116.23. At the close of the year these 41 cooperators had average net assets of $836.31.

An important object of the farm-family-partnership work is to enable the boy or girl to accumulate money with which to secure more education or start farming. In 1930, nine boys, partnership members, but at that time in business for themselves, retained affiliation with their county partnership groups and submitted records covering their year's business. Their net incomes for 1930 averaged $1,115.25, with average savings or gains in net worth of $737.85. In 1931, 9 such former partnership cooperators, averaging 25.7 years of age, made net incomes of $347.48, with average savings or net worth gains of $317.99, an average total net assets of $2,641.36, indicating that their farm-family-partnership experience had helped them to go ahead for themselves.

Records kept by the State 4-H club department on this partnership work are rich in examples of boys who have made remarkable achievements. There is the record of Clinton Carlson, Martin County, who has assets of $3,248.61 accumulated from a beef partnership. He has kept excellent records of the entire farm business, as well as a good personal account book. Mr. and Mrs. Edwin Carlson, his parents, are enthusiastic about the partnership plan, now in the fifth year of trial in the Carlson family.

Alden Flygare, his education interrupted by the illness of his father, has maintained his interest in farm and home activities through a turkey partnership which has netted him $1,063 in four years, besides financing a 3-month's term of study in the school of agriculture of the University of Minnesota. Alden's partnership work, like that of many other cooperators, is the sequel to a long and successful 4-H club experience. Alden was one of Minnesota's representatives to the National 4-H Club Camp in 1929.

Melvin Linder, Martin County, has assumed much responsibility in operating the home farm since his father died. He shares with his mother in the dairy and swine enterprises, and has accumulated assets totaling $776. He is keeping farm and personal records, and for eight years previous had been a 4-H club member.

Suggestive of the method of organizing and carrying on this junior partnership work is the program carried on in Rock County in 1931. C. G. Gaylord, county agent, spent 3 days enrolling 20 cooperators, each of whom signed an agreement with his or her parents specifying that he or she was to receive a definite part of the income from one or more farm enterprises for the year. In some families the partnerships included a percentage of the chicken or turkey income, others shared the income from rented land, and there were several livestock partnerships in which the juniors received the income from one or several sows and litters. Several girls were enrolled.

Educational Meetings

Two weeks after securing enrollments, a county meeting brought these young people and their parents together for a talk by a State 4-H club representative on the aims and purposes of partnerships. The importance of farm and personal records was emphasized and a plan for holding additional educational meetings discussed. The Rock County Junior Farmers Club was formed, and a committee appointed on program of work.

The committee's report, which was adopted, provided for additional meetings to be held in August and the following February. At the August meeting R. A. Turner, Federal 4-H field agent for the Central States, discussed what young people's groups had done in other States. At the February meeting a farm management representative from the University of Minnesota discussed results of a cost route in Rock County. There was also a talk on the importance of record plans. At each meeting several program numbers were given by junior partners, and lunch was served.

County Agent Visits Homes

The work at meetings was supplemented by visits of the county agent to the home of each member and by circular letters sent out jointly by the county and district club agents. All members recorded receipts from their partnership arrangements and also personal and project expenses. Where feasible, junior partners were also requested to keep records covering the entire farm business.

Mr. Gaylord's impression of results from this type of work are expressed in his recent statement as follows: "I feel this is one of the most important pieces of extension work attempted in Rock County, and I am going to put additional emphasis on it during the coming year."

Practically all of the 1931 cooperators have enrolled again, and several new members will be added. Further evidence as to the reaction both of parents and of junior partners is furnished by replies to a questionnaire submitted to 49 families, following the fourth year's work. Forty-five juniors and 42 fathers favored the plan. No parent or junior partner stated opposition to the plan.

Though begun as an experiment and restricted to two counties in 1928 and

1929, the partnership plan has won its way into popular favor, and this year will be emphasized in approximately 20 Minnesota counties with a total enrollment expected to exceed 300. Originally designed chiefly for young men, the idea has been found to interest young women also, and it is of special interest that St. Louis County has the goal of 20 girl partnerships for 1932. Several other counties have a goodly number. Details of the farm family partnerships have been published in Minnesota Special Bulletin 136, obtainable by anyone interested.

A Bachelor Cooks Club

The Bachelor Cooks Club, of Basin, Wyo., is the first and only home-economics club of boys in the State of Wyoming. This club, organized and directed by Pauline Bunting, home demonstration agent, is made up of nine boys, a majority of whom have already completed four years in calf-club and four years in bean-club work. Although a desire to do something different, after winning the State championship in crops demonstrations in 1930, was one of the reasons for organizing a foods club, at the same time their interest was attracted to foods for health and to the health training available in foods clubs when one of them competed in the State health contest and failed to win because he was underweight.

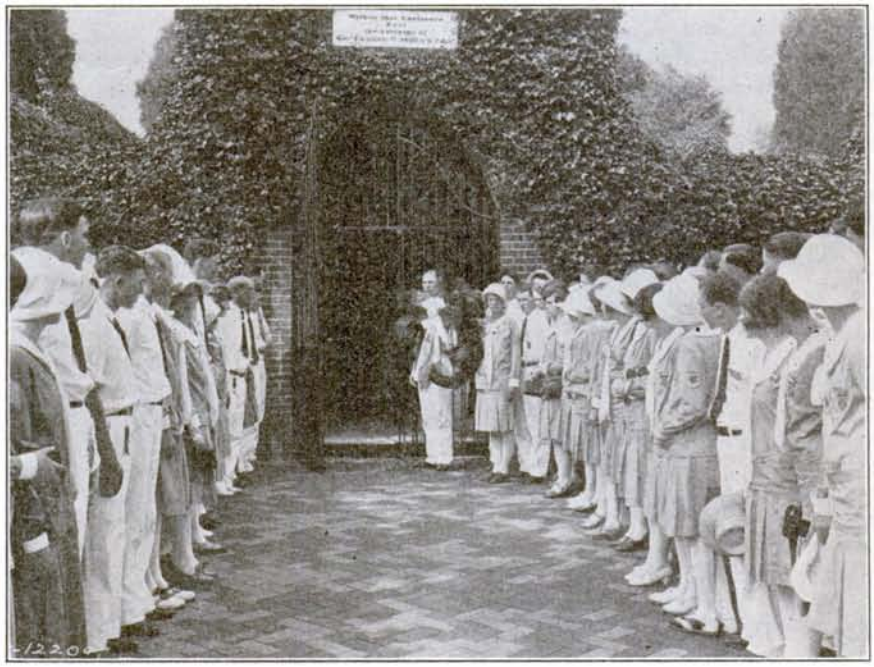
A splendid demonstration was given by two members of the club in the county contest, in competition with 14 girls' foods teams. "Good sanitation means better health" was the theme of their demonstration, which showed the proper methods and the equipment to use in dish washing, some of which they had made. When asked by the judge which part of dish washing was the hardest, one member of the team answered in the most serious manner, "I guess that getting started is the hardest part."

The success of the club work was evidenced in the number of premiums won at the county exhibit. The first five placings in the white-muffin class were won by these boys, with third places in whole-wheat muffins and baking-powder biscuits. Then, third prize on muffins at the State fair was awarded one of this club. Making quick breads was named the favorite lesson by several.

The boys finished 100 per cent, which entitled them to the Wyoming certificate of honor, as well as to individual 4-H achievement pins.

National 4-H Camp to Honor Washington

THE George Washington Bicentennial Celebration is being featured at the Sixth National 4-H Club Camp to be held on the Department of Agriculture grounds in Washington, June 15–21, inclusive. June 21 is bicentennial day with a special pilgrimage to Mount Vernon in the afternoon. A boy and a girl in behalf of 4-H club members will lay a wreath on the tomb of George Washington. In the evening a meeting in the Sylvan Theater, at the base of the Washington Monument, will give the delegates to the national camp a chance to hear what the life of Washington has meant to the country, from the Secretary of Agriculture, and will also give the young people a chance to express their own appreciation around the camp fire.



Club members attending the National 4-H Club Camp placing a wreath on the tomb of George Washington

Another bicentennial event will be the colonial party, to give a glimpse of the social life of Washington's day.

4-H club delegates from about 40 States are expected to take part in the camp this year. Two boys, two girls, and two State leaders will represent the club folks of each State sending delegates. The campers meet each morning to talk over problems facing farm young people to-day, such as choosing a vocation, service to the community, recreation, and other things which they are thinking and talking about in club meetings and at school. For these conferences the camp is divided into five groups, each group selecting its own chairman, secretary, and recorder.

A general assembly will also be held each morning in the auditorium of the New National Museum when men and women prominent in Washington and those who are carrying on Government work will talk to these representatives of the rural young people about the work of the Government and present trends in agriculture.

Afternoon sessions are devoted to educational trips in and about Washington. The Capitol, White House, Arlington Cemetery, Lee Mansion, Treasury Building, Lincoln Memorial, and Washington Monument will be visited by the campers. Members of the scientific staff of the Department of Agriculture will show the 4-H club members experiments being carried on in the Government laboratories and experimental farms near by.

Three of the department's National Farm and Home Hour noon radio periods broadcast over a national network will be devoted to the campers to tell some of their 4-H club experiences and some of the activities at the national camp.

Farm Life Changes In Coleman County, Texas

Gertrude Brent

THE record of eight and one-half years of home demonstration work in Coleman County, Tex., shows many changes. In 1923 Gertrude Brent came to the county to serve as home demonstration agent, and has remained throughout the entire period. Recently Miss Brent took a glance back over the years, which revealed many interesting evidences of betterment of home conditions traceable to home demonstration work.

In 1923, gardens in the county, which is more than 60 miles long and 40 miles wide, amounted to only 109 acres. "One could drive for miles and never see a garden," Miss Brent says. "People would tell you that gardens would not grow in this country, which averages only 30 inches of rainfall annually. We now know that they will grow, because gardens increased until in 1931 there were gardens of ¼ to 6 acres on practically every farm in the county, amounting to 1,000 acres of gardens. Irrigated gardens increased in that time from 9 to 285, and the average varieties per garden increased from 9 in 1922 to 27 in 1931. The health of farm people has improved accordingly; they have learned to eat vegetables and they have better-balanced meals."

More Poultry Raised

In 1923 poultry was scarce on practically all farms. Standard-bred flocks increased from 20 at that time to 675 in 1931. Chickens are accepted as a necessity on the farm now, and 350 club women reported the sale of $66,057 worth of poultry and poultry products in 1931. Turkeys are a great item in the county, and many are grown and shipped to eastern markets. The range is good, and cost of growing turkeys is very small. They are one of the best cash crops. One club woman raised more than 400 last year. Cars of poultry shipped from the county have increased from 7 in 1923 to 58 in 1931.

"Living at home has been the greatest program emphasized and results are most gratifying," says Miss Brent. This year practically every farm home and many town homes have their own pantries ranging generally from 200 to 1,200 containers and in some homes there are 1,800 containers of fruits, vegetables, and meats on the pantry shelves. The people say, "We have no money but plenty of food." Only $705 worth of food was reported canned the first year of Miss Brent's work in the county, while the year 1931 showed $52,313.96 reported by club people alone. Only 18 beeves were canned in 1923 and more than 500 in 1931. Where 8 pressure cookers and sealers were in use in 1923 there are now more than 1,200 in the county. The 1931 report shows 360 cookers, 348 sealers, 542,600 tin cans, and 15,900 jars sold by jobbers in the county, and food conserved is estimated at 750,000 containers. No provision was formerly made for storing canned food, but this year 5,285 feet of shelving was added for storage space and several pantries were built. One pantry demonstrator reported her grocery bill, including all supplies bought to complete her pantry, for 1931 was $37.20.

Milk Supply Increased

Eight and one-half years ago people in the county felt that milk was a nonessential and very few dairy cows were kept. Many farms did not have a cow. Now practically every farm has from one to three good milk cows. Club members reported 910 dairy cows December 1, 1931, and 398 club families reported having an adequate milk supply. The total value of milk and milk products of club members for 1931 was $56,053.21. Cheese making is proving quite profitable on the farm and more than 600 pounds of American cheese was reported made by club people.

During these eight and one-half years 330 farm kitchens were made into more convenient workshops. Natural gas is accessible and many farm homes have it installed. Ninety-seven living rooms were beautified and made more livable. By the use of screens, water systems, or sewage disposal systems sanitation has been improved on about 600 farms in Coleman County. Yard beautification has just been started in the last two years and some improvement has been made. Native shrubs are being used to some extent and native rocks are used for walks, 66 walks being made in 1931 and 1,115 native and nursery shrubs started.

Home demonstration clubs in the county have grown from 4 with a membership of 65 in 1923 to 26 with a membership of 544 in 1931, and 10 other communities are asking for club work. These club people are helping to extend the influence of home demonstration work and 75 per cent of the farm families in the county were reached in 1931. For 1932 each club member will reach at least 4 families, and clubs will sponsor new clubs and eventually it is hoped to have evidence of home demonstration work in every home in the county. Ten clubs held community fairs, 6 had club shows, and 14 had complete club exhibits at the county fair in 1931, while in 1927 only one community fair was held.

The social side of club work has meant much to the rural women and girls. Many new friendships have been made and the women say that they have a better place in which to rear their families. Much has been accomplished, but Miss Brent and her tireless group of home demonstration women feel that they are just laying the foundation and that greater things are to be done in the future.

A Fair Exchange

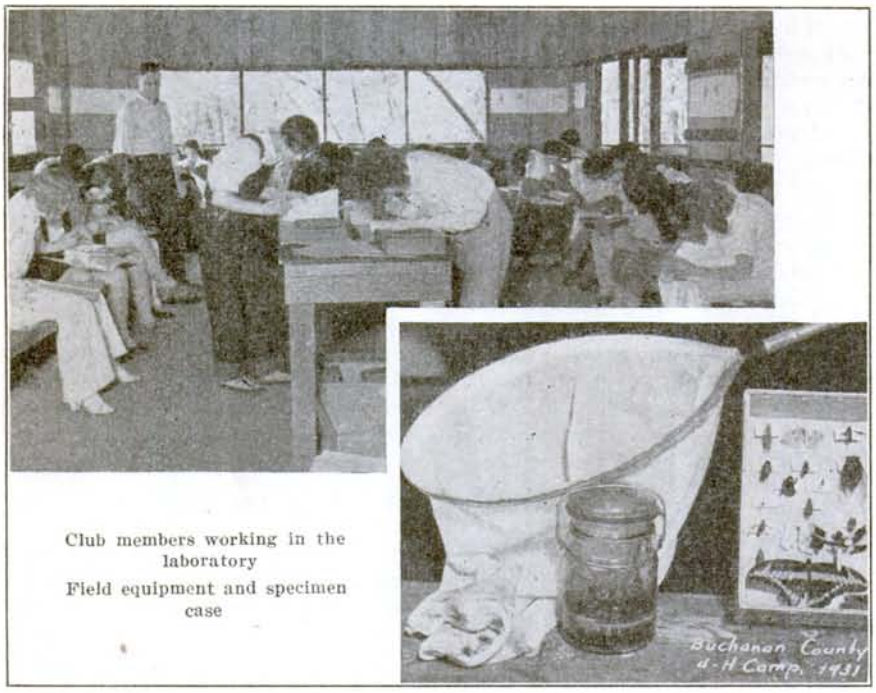
The farmers of Bradley County, Ark., found that they had a supply of Irish potatoes maturing too late to be shipped by the truck growers' association. In order that those who had good potatoes on hand might get something out of them, J. A. Hemphill, county agent, wrote several letters to firms handling potatoes. Two of the wholesale grocers agreed to trade groceries for potatoes to local merchants in the county. This was immediately taken up with the merchants catering to the farm trade, and they readily agreed to trade groceries for potatoes, valuing the potatoes at 50 cents per bushel. About eight carloads of potatoes have been handled in this way, with no cash involved.

The idea grew, and now potatoes, cottonseed, and sorghum sirup have become Bradley County farmers' substitute for Uncle Sam's none too plentiful greenbacks. At the present time sirup is being exchanged for soybean seed and cowpeas for hardware. A list of surplus farm products offered for sale, exchange, or trade is kept by the county agent and run in the local newspaper at no cost to the farmers.

LAMOILLE County, Vt., established something of a record in the potato line last year when every grower of seed potatoes in the county obtained certification.

Missouri 4-H Club Members Learn About Insects

A STUDY in the economic importance of insects and some measures for their control was made available to the 1,200 Missouri 4-H club youngsters who attended club camps in 1931. The plan for this study was worked out largely by George D. Jones, Missouri Extension Service specialist in entomology, assisted by other members of the college entomology department and the State club agents.



Club members working in the laboratory

Field equipment and specimen case

The insect study program was carried out daily on an average of three days in each of the ten 4-H club camps conducted during the summer. These camps, held in various parts of the State, contained club members from 44 counties so that the influence of the program reached representative parts of the State. As Missouri has a large number of common species of insects, this entomological nature study project was not only interesting but worth while from an educational standpoint.

Field Trips

The subject matter was taught through field trips and laboratory studies in which every club member in camp took part. Each member collected 10 specimens from a selected list of 25 of the common insects which could be found in all parts of the State. Cigar boxes were brought by the club members from their homes, and the insect specimens pinned in the boxes after having been studied and the information recorded in record books during the laboratory period. Illustrated material on each of the 25 insects was placed where it could be studied in the laboratory. This material helped greatly in life-history studies.

The organization for field work in each camp consisted in dividing the club members into two large groups, one for 4-H club instruction and one for nature study work. This made up the morning educational program for the camp. This program was arranged in a schedule of three 1-hour periods. While one division was in the discussion group, the other was out on the field trip. After completing the field work this group would come in and do laboratory work, then sit as a discussion group. The group which had their discussion session first then went out and did field work, followed by the laboratory work.

The group which was on the field trip was divided into groups of four or five, each small group carrying a killing jar and insect net. Members of the group worked as a unit in making their collections and carried their collected specimens back to the laboratory in the killing jar.

Each club member kept his record book and collection after it was looked over and graded. Pins, labels, pencils, laboratory manuals, paper, killing jars, and nets were furnished by the State club office. The extension entomologist or a member of the entomology department, home demonstration agents, county agents, and 4-H club leaders assisted with the field trips and laboratory work.

Motion Pictures Used

On one night during the camping period a motion picture illustrating insect development was shown. Such pictures as the development of the Cecropia moth, Monarch butterfly, mosquito, and the honeybee were used. In several camps ribbons and other awards were given to outstanding club members who made the highest combined averages on both the discussion work of the club leaders and on the insect study.

This project in insect study was part of a definite program of nature study arranged for 4-H club summer camps by T. T. Martin, State club agent for the Missouri College of Agriculture. In the 1930 camps the project used was forestry, given under the direction of the district forester of the State.

At Sixty Below

Extension work in Alaska has plenty of thrills, according to a recent report received from Mrs. Lydia Fohn-Hansen, assistant director for home economics extension. She recently left Fairbanks on a field trip, taking a train at 10 o'clock in the morning, still pitch dark. Some hours later said train found itself stuck in a snow bank, where it remained from Monday morning until Friday. Trains on the Alaska Railroad do not carry diners or sleeping cars and the temperature outside was only 60° below zero. Fortunately three abandoned cabins were near by and these provided fuel to keep the passengers warm. At last they reached Curry, where dinner and beds welcomed them. However, due to an "interrupted schedule" she reached her first stop at Anchorage some four days late, but the women's clubs adjusted themselves to her changed plans and everything went forward in good form. Later she left Seward for her next stop at Juneau on the S. S. *Victoria*, but ran into "the worst storm of the season" on the Gulf of Alaska and arrived at Juneau several days late. This is just to indicate that extension work in Alaska is still in its pioneer stages.

The Problem of Reaching More People

C. B. SMITH

Assistant Director, Extension Service

THE first essential of an extension program that reaches more people is that the program meets a real need. If the farmer or his family profit by the extension program—the project emphasized—either in money or ease or time or health or influence, that project accomplishes much, travels far, and reaches many people. We find, through our studies, that one of the largest of all factors in getting improved agricultural and home-economics practices adopted is the spread of influence from one farmer to another, from one home to another, through one farmer or farm woman telling another farmer or farm woman of how he or she met and solved a difficulty or conducted an enterprise that brought them gain or satisfaction. We do not talk so much about our failures, nor do we bubble over about our experiences unless they have meaning to us and to other people. Our programs must meet a need and give satisfaction worth talking about in order to reach more people.

If in a given area the spraying of potatoes for late blight barely pays over a period of years, and the potato-spraying operations conflict seriously with other farm work, the practice of potato spraying can not be expected to spread rapidly. On the other hand, the growing of Gopher oats will spread like wildfire where this variety outyields other locally grown varieties by 20 bushels per acre. Similarly, home canning of meats may spread rapidly in a community where the women get great satisfaction in having a convenient supply of meat available on short notice at all times.

Spread of Practices

The extent of the economic advantage or other similar satisfactions resulting from the adoption of the practice largely controls the rapidity of the indirect spread of the recommended practice from neighbor to neighbor. The statement of a neighbor in good standing in the community, the reported yield of oats or wheat, the size of a neighbor's milk check, success in canning vegetables, or a convenient kitchen are all powerful forces set in motion by effective extension teaching to reach more people.

Extension programs, then, that meet a need, that give satisfaction because they carry real help—help that the farmer himself wants, rather than help we think he ought to get—reach more people.

This all means that our extension program each year should be a serious affair—planned in advance and worked out with the farm men and women concerned, and as evolved should meet real needs and give real satisfaction.

How many people are we expected to reach or ought we to try to reach in extension? That depends on the nature of the case.

Where but 60 per cent of the farmers are swine raisers a program relating exclusively to swine can not possibly influence more than 60 per cent of the 2,000 or more farmers in the county. If but 30 per cent of the farm women bake bread, improved methods of bread making can hardly be expected to be adopted by more than one-third of the women of the county, even if the extension program is successfully carried out. Obviously the extension program over a period of years must relate to farm and home problems of vital interest to rural people if extension is to have large influence.

If with any particular project we are emphasizing we reach helpfully 90 per cent of those concerned, we may be reasonably satisfied. Kansas, in her 5-year wheat-extension program, apparently reached 91 per cent of all the farmers in each wheat-growing county in some form or other.

Numerous Projects

It seems to be a fact in extension that the more projects an agent promotes over a period of years the more people he or she reaches. With a wheat project you reach certain people; add a bean project and you reach certain additional people; add clothing and still others are reached.

Apparently continued emphasis upon a small number of lines of work results in small total accomplishment, because of the limited number of people reached. This does not necessarily mean that an agent must carry a large number of projects in any one year but that emphasis should be shifted from time to time to insure that during a term of years the extension program is such as vitally to affect practically all of the 2,000 or more farms and homes of the county.

In this article we assume we have not "reached" anyone until that someone does something we recommend or instigate. Wisconsin, in its alfalfa extension work, has shown that more people are influenced to grow alfalfa when it is made easy for farmers to get lime, inoculating materials, and alfalfa seed. They followed up preachment at farmers' institutes with the immediate appointment, before the meeting adjourned, of committees which took the farmers' orders for lime and seed. These materials were bought cooperatively at a price within the reach of the farmer. The farmer, through this cooperation at the meeting, where the psychology was right, reached a decision and saved money on his order. Someone else did the work of ordering and the farmer went home from the meeting with all essential matters settled and his mind at rest.

Ease of Getting Materials

Other States have followed similar practices with other crops with like results. They reached more people. We state as a fact, then, if you want to reach numbers, make it easy for the farmer to get materials and to reach a decision. Decisions are easier when everyone else is making them. Appoint your committee to get materials before the inspirational meeting or the tour closes.

Again, if you want to reach more people, make your recommendations reasonably simple. This may be illustrated by a fable:

"Long ago a man recommended for a certain ailment a certain salt. Of those who suffered and heard him, 90 per cent used the salt and were cured. Then he suggested that they dissolve the salt in water, whereupon 75 per cent used the salt. He stated proportions, 4½ ounces of salt in 9⅓ quarts of water, and 60 per cent used it. He warned against any but china receptacles, and 45 per cent used it. He recommended that the water first be boiled, and 30 per cent used it. When he said that the solution should be strained through muslin, 15 per cent used it. He finally indicated distilled water for the solution and then nobody used it at all. Each modification had been sound and wise and he was much disappointed. Then he gave his solution a name and made it up himself and everybody used it."

So much for a fable. It probably states a truth. If we reach more people,

our recommendations must be in simple terms, not complex. This does not mean, however, that each project may not be made up of several factors but that each of these factors shall be simple.

Thus Kansas had in its 5-year wheat-improvement program 14 or more separate factors—14 separate appeals to the farmers to change some practice that would affect his wheat crop. During the 5-year period 97 per cent of all the farmers in the areas surveyed heard these appeals and 91 per cent of all the farmers made some change in their practice as a result of these appeals.

While it is so obvious as to be almost a truism, extension workers sometimes overlook the fact that in order to influence large numbers of people to adopt improved practices, large numbers of people must be brought into contact with extension work and extension workers.

A Terracing Record

Six years of soil conservation work in Runnels County, Tex., has resulted in terracing and contouring most of the land under cultivation, or 234,793 acres, which County Agent C. W. Lehmberg claims, is a record for Texas and even for the United States. Runnels County covers an area of 950 square miles, of which 65 per cent, or 395,200 acres, is under cultivation, and has about 2,500 farmers.

During these six years of soil conservation the acre production has been increased from 25 to 50 per cent due to terracing, and the value of the land in building up the soil and restoring fertility has been increased from 33 to 52 per cent per acre.

The work was organized in 1924 on the community basis. Terracing schools were held in the various communities, giving training to men and 4-H club boys in the use of farm level and in the construction of terraces. There are now in the county 12 such community units organized on the labor-saving basis. Each soil-conservation demonstration to be complete must be carried on over a period of four years; terraces 24 feet wide at the base and 2½ feet high to prevent soil erosion must be constructed; the terrace lines must be run so that they will store the largest possible amount of water; a workable system of crop rotation must be practiced; and accurate records on crop production must be kept for a year.

LINCOLN COUNTY (N. C.) 4-H club boys have set 2,100 black-walnut seedling trees, and the county agent has had to order 200 more for other boys who have become interested.

Cotton County Comes Back

SEVERAL club boys with 1 acre of cotton each and a few adult demonstrations launched County Agent B. M. Drake's cotton program in Chattooga County, Ga., in 1924. Since that year the production of cotton has gradually increased until it has now reached the normal production of pre-boll-weevil times and this is being done on fewer acres of land. The 1929 census report shows about 13,000 bales produced on about 18,000 acres. This is as much or more cotton than was produced in the county in pre-boll-weevil times on 25,000 to 28,000 acres. In 1928 the yield was almost as good as in 1929. In 1930 the yield was approximately 10,000 bales in spite of the extreme drought in that corner of the State. It would seem that this county has come back in cotton production, with a high per acre production average and saving approximately 10,000 acres of land for other crops.

When County Agent Drake came to the county, there had been very little continuous county agent work. After looking around it seemed to him the greatest need lay in improving the cotton production. The boll weevil had cut heavily into the cotton crop in the preceding three or four years and the bad effect of depleted soils, small quantities of poor-grade commercial fertilizer, and inferior varieties was evident.

In 1926 only two 5-acre cotton contestants made reports and the same number in 1927. However, in 1927 one of these happened to be a prize winner, and the publicity which this brought created considerable interest for the following year, so in 1928 more than 40 boys grew out creditable acres of cotton and twenty-eight 5-acre contestants made reports. All of these demonstrations showed the value of using a good quantity and a good grade of fertilizer, together with improved seeds. The demonstrations averaged a bale of cotton or more per acre.

In 1929 a big movement was launched for a bale-to-the-acre campaign. The slogan adopted was "A thousand bales on a thousand acres." Two hundred and five 5-acre contestants were signed up and carried their projects through the year. However, a few of these did not turn in their reports at the end of the season, but it is safe enough to say that these contestants made a thousand bales on a thousand acres—a big undertaking and a big record for Mr. Drake which is still talked of in Georgia.

Another undertaking in Chattooga County which has made progress is that of soil building. The growth of crimson clover in that county was introduced by the county agent in the fall of 1924. The growing of other winter legumes and summer legumes such as soybeans and cowpeas has greatly increased. The farmers are now growing seed patches of crimson clover as well as seeding for soil building, and the business of saving the seed is arousing much interest. This enterprise gives promise of making Chattooga County soils fertile again as the county agent continues the work.

Boys' club work has been one of the major enterprises during the eight years of continuous extension work. One year as many as a hundred purebred pigs were brought in for club members. Each year club work has been the means of adding a number of good purebred pigs to the county. It seems that this necessarily should have some effect on the hog industry of a county.

There have been many other enterprises and activities in the county, some of which are strawberries, watermelons, dairying, poultry, and cooperative shipping. Although cotton has been emphasized as a money crop, balanced farming is one of Mr. Drake's hobbies. Cotton production has not been stimulated at the expense of other money crops, but the production of more cotton on fewer acres has left more land for feed and berry crops, which serve excellently as cash crops in Chattooga County.

National 4-H Club Radio Program

Saturday, July 2

Profit from potatoes. 4-H club boy from Pennsylvania.

How we reduced clothing expenses. 4-H club girl from Illinois.

What our older 4-H club members are doing. State 4-H leader from Illinois.

The local 4-H leader a cornerstone. Ray Turner, Extension Service, United States Department of Agriculture.

National 4-H music achievement test. Music-identification test. Learning to Know America's Music.

A music-identification test will feature this program. The United States Marine Band will play several compositions selected from those previously used during the year's study. Listeners are encouraged to identify these compositions as they are played. The correct list will be announced at the close of the broadcast.

THIS is one of 54 Missouri home gardens on which accurate records were kept last year, with the following results:

Average value of vegetables grown	$107.03
Average cash outlay	8.49
Average labor return per hour	1.32
Average hours spent in gardens hours	75
Average size of gardens acre	⅛

The garden which produced the greatest amount of vegetables was one-half acre in size and returned $316.99 worth of food with a cash outlay for expenses of $14.50.

A Concerted Drive on Weeds

FOR the third year Redwood County, Minn., is throwing all the force of a good organization plus plenty of determination into a concerted drive on weeds. In the two years of the antiweed campaign, an organization has been built up, which, according to County Agent Nate Bovee, not only is making great strides in weed control but is interesting many farmers in the extension program. He says: "Certainly a wonderful organization of interested farmers has been built up. It was built from the bottom up, founded in times of dire need and strengthened during times of stress. The improvement is so definite and so apparent that one may safely conclude that three more years will bring the weeds under control."

This plan of work which has given the county the reputation of being the cleanest in the State is now being used in 20 other counties in Minnesota. These counties last year reported 19,648 farmers cooperating, and 258,380 pounds of chemical used in spraying weed patches.

The organization is simple but brings a large number of farmers into the program. It is significant that the 1,200 men in the organization work more efficiently and more harmoniously each year that the campaign is carried on. A strong central committee composed of the extension committee, county commissioners, farm bureau board, and extension service direct the campaign. The control unit in each township is headed by the local weed officer. Under him, 36 volunteers, one for each section of land, supervise the actual work. These section men have visited every farmer in the county explaining the weed control work, talking over methods of weed control, and inspecting the work done.

Roadside Weeds Killed

Roadside weeds are taken care of by county and State road officials. Two complete rounds of county roads were made with the power sprayer, providing 2,000 demonstrations of this method of weed control last year. In all, 220 miles of State roads and 190 miles of county roads were patrolled and sprayed in 1931. The mayors direct weed-control measures in towns and villages, and have done excellent work. Absentee landlords are advised of the campaign by letter, and many have supplied chlorate for spraying, furnished alfalfa seed, or made concessions for extra cultivation. The railroads have destroyed the weeds on their right of way.

The first year many meetings were held. The plan was explained and the work organized at 26 township meetings. Many newspaper articles and circular letters to section men kept the matter before the people. During the period of bloom of the Canada thistle a special "war on weeds week" intensified the efforts in exterminating this weed. As a result of the first year's work, 4,200 acres of weeds were plowed, 1,395 were cut, and about 405 acres were treated with sodium chlorate, 50,000 pounds of this chemical being used in the county.

Weed Conference Held

Last year the program was better understood, and sectional meetings did not seem necessary. A county-wide meeting was held in the spring to launch the work and to iron out current problems. The importance of the problem was emphasized by the calling of a weed conference in the fall, attended by representatives of 14 counties in southwestern Minnesota. One result of this meeting was the assurance that the State recognized the efforts and promised the support of all cooperating agencies.

The second year saw about 4,000 acres plowed, 1,500 cut, and 700 sprayed, using 2 carloads of sodium chlorate. Two new township spraying outfits were bought.

One result of the campaigns is seen in the absence of weed seed in threshed grain. George A. Paton, of the Farmers' Elevator Co., of Redwood Falls, writes, "So far, haven't seen a thistle seed this year. Grain is all very clean—the cleanest I have ever seen in this territory, and I have bought grain for 18 years."

The campaign is being continued this year along the same lines. It is planned to add more township spray outfits to help arouse more interest in the program over the State, and to continue the system of roadside seeding and standard road building.

MORE than 90 women in the farming districts of Otero County, Colo., have enrolled in the home demonstration work under the project "The kitchen as a workshop." Seventy members reported kitchen improvements for the past year, such as the installation of water systems. The work is being carried on under the supervision of Jessie Reinholtz, county home demonstration agent, and Mary L. Sutherland, extension economist in home management.

County Agent Outlook Training Schools

THE OUTLOOK material prepared for New York farmers reached farther into the communities this year than in years past because of a change in organization, according to Earl A. Flansburgh, assistant county agent leader of New York. Instead of having the extension specialists attempt to attend community meetings to present this material, training schools were conducted in seven districts of the State to prepare county agents to carry the message into communities. These schools dealt with subject matter and methods of presentation.

The teaching staff for each school consisted of two extension specialists from the department of agricultural economics and farm management of the State College of Agriculture, and two leaders from the county agent leader's office.

Prior to the presentation of the subject matter, the presiding county agent leader pointed out the rules of the game. He stated that in listening to the material the county agent should not only bear in mind that he should attend with a view to receiving the information, but to getting the material minutely enough in mind so that he could present it at a practice period on the last afternoon of the 2-day school. Assignments were not made, however, until the morning of the second day, so that each county agent was equally well prepared to give the material. On the second morning a county agent or assistant county agent was selected to discuss for 15 minutes some particular phase of subject matter. His presentation was criticized by his fellows. The rules of the game also provided that any county agent heckling or in any other way interfering with the presentation of the material, except by asking a question that might be brought up at a community meeting, was automatically selected to replace the speaker and proceed with the discussion for 15 minutes.

Each county agent also prepared a detailed outline which showed just how he was going to use the outlook material in his county.

The material which the county agents received at these schools has been presented to grange meetings and community meetings of the local county farm bureau units. It has been the basis of community and county project committee meeting programs. It has also been presented to county emergency milk meetings that have been held over the State. The following is a typical schedule for such a school.

County Agent Outlook Training School

Poughkeepsie, N. Y.—February 9–10, 1932

Counties represented—Ulster, Columbia, Dutchess, Greene, Rockland, Westchester, Suffolk, and Nassau

Tuesday forenoon, February 9

Earl A. Flansburgh, assistant county agent leader, presiding

9.30:	15 minutes—Remarks	Earl A. Flansburgh.
9.45:	45 minutes—General Agricultural Situation	M. C. Bond.
10.30:	10 minutes—Discussion.	
10.40:	30 minutes—The Fruit Outlook	P. V. Kepner.
11.10:	10 minutes—Discussion.	
11.20:	40 minutes—The Livestock and Dairy Situation	M. C. Bond.
12.00:	15 minutes—Discussion.	

Tuesday afternoon, February 9

Lincoln D. Kelsey, assistant county agent leader, presiding

1.30:	30 minutes—The Equipment, Fertilizer, and Credit Situation	P. V. Kepner.
2.00:	10 minutes—Discussion.	
2.10:	30 minutes—The Outlook for Vegetable and Canning Crops	M. C. Bond.
2.40:	10 minutes—Discussion.	
2.50:	30 minutes—The Forage Crops and Small Grain Situation	P. V. Kepner.
3.20:	10 minutes—Discussion.	
3.30:	30 minutes—The Poultry Outlook	M. C. Bond.
4.00:	10 minutes—Discussion.	

Tuesday evening, February 9

Round Table on County Extension Problems, A. L. Shepherd, Dutchess County agent, presiding.

Wednesday forenoon, February 10

9.30:	45 minutes—Methods and Use of Outlook Information in County Programs	L. D. Kelsey.
10.15:	15 minutes—Publicity Suggestions	Earl A. Flansburgh.
10.30:	30 minutes—Review of Recommended Charts	M. C. Bond.
11.00:	60 minutes—Individual conference with agents on plan of work for outlook, farm management, and marketing by county agent leaders and specialists. Selection of county agents to present material at practice periods in afternoon.	
12.00:	Lunch.	

Wednesday afternoon, February 10

1.00:	60 minutes—Individual conference with county agents.	
2.00:	30 minutes—General discussion.	
2.30:	Practice periods for county agents.	
	15 minutes—The Dairy Outlook	County Agent Shepherd.
2.45:	15 minutes—The Poultry Outlook	County Agent Allen.
3.00:	15 minutes—The Fruit Outlook	Assistant County Agent Clark.
3.15:	15 minutes—The Cash Crop Outlook	County Agent Been.
3.30:	15 minutes—Fertilizer, Spray Material, and Labor	County Agent Davis.
3.45:	Adjournment.	

The 1932 Outlook for Dairying in Oswego County, New York

County Agent Henry L. Page, of Oswego County, N. Y., has been especially successful in his outlook meetings for dairy farmers. In this article he gives in condensed form just what he tells these dairymen when they meet to discuss the dairy outlook for the coming year. County Agent Page received his training in outlook work at one of the regional training schools in economic information held each year for county agents by the New York Extension Service staff. Eight 2-day schools were held this year.

IN DISCUSSING the present dairy situation and the outlook for 1932 it might be well to consider the general price level, which went back to pre-war or 100 in December when dairy products were at 77 per cent. New York State farm prices were at 78 per cent and the United States farm prices were at 69 per cent of pre-war prices.

Dairymen are extremely unfortunate at the present time because they are on the downhill side of the cow cycle which aggravates their condition with a declining price level. In the cow cycle it ordinarily takes about 14 to 16 years to go from one peak to the next one. We have been used to judging the future by the present, consequently, when milk is high we raise a lot of heifer calves and when it is cheap we slaughter most of them. In 1928 and 1929 milk testing 3.5 was bringing better than $2.50 per hundredweight net. Judging from the number of heifer calves started during the period from 1926 until 1930, when we increased the number of heifer calves raised from 168,000 to 245,000 yearly, many dairymen evidently thought prosperity was here to stay. The heifer calves started then are milking to-day—those raised in 1926 are 5 or 6 year olds—just in their prime. We had on January 1, 1932, 3 per cent more milking cows than a year ago and 6 per cent more than on January 1, 1930.

The abnormal number of heifers that were started above the need for replacements came into production, and their production coupled with a decrease in the consumption of milk in our large consuming centers has helped bring the price of milk and cows down rapidly.

You will undoubtedly be interested in knowing what the heifer situation was on January 1, 1932. We have reports of only 213,000 yearlings on farms, or a decrease of 10 per cent in one year. This means that farmers have 1 heifer to every 6.6 cows and it seems quite probable that this will not be enough to maintain the needed number of cows in New York State in years to come. From these figures it would seem that dairymen reason that with cheap milk it's a poor time to start a heifer. It is by reasoning such as this that we have our peaks and valleys in the cow cycle.

Figures furnished by the State Department of Agriculture and Markets show that the peak of cow prices was reached in September, 1929, when crop reporters reported that cows were selling for $135 a head while on January 1, 1932, these men reported that cows were selling for $60 per head, less than half the price of a little over two years ago.

Cream consumption increased about 1 per cent in 1931 over 1930, but this only amounted to the same total amount as in 1929.

It might be well for us to remember that only 54 per cent of the milk produced was sold as fluid milk and that 21 per cent was sold as cream. The balance went into surplus products such as

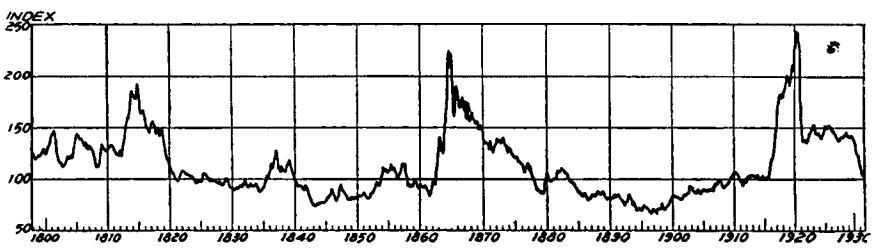


FIGURE 1.—Wholesale prices in the United States for 135 years, 1797–1931. 1910–1914=100 (From "Farm Economics," February, 1932)

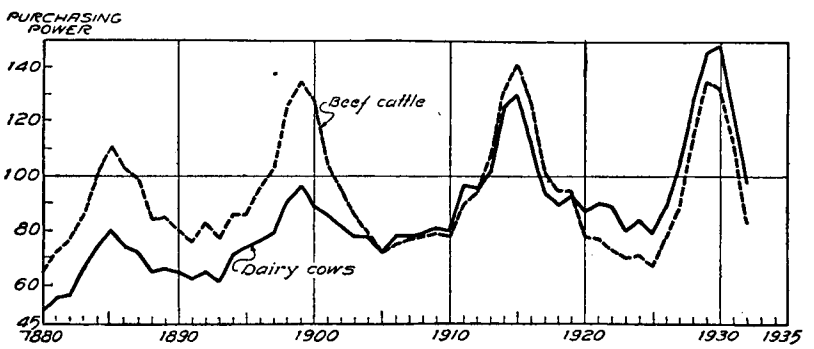


FIGURE 2.—Purchasing power of dairy and beef cows in United States, or prices of cattle as compared with prices of other things. (From the New York State 1932 Agricultural Outlook)

Effect of Falling Price Level

The effect of a falling general price level not only affects the price of cows but it drags practically all other commodities with it. For 45 years prior to 1930 there was an average yearly increase of 4.5 per cent in the consumption of fluid milk in New York City. This, coupled with the average 6 per cent yearly increase in the consumption of cream, helped overcome the steadily increasing number of dairy cows. These normal increases did not occur in 1931. The receipts at New York City were practically the same as in 1930 and only 2 per cent more than in 1929.

cheese, condensed milk, and other by-products, returning a much lower price than fluid and cream outlets.

Summing up the situation, we are on the downhill side of the cow cycle; consumption is at a standstill, with production increasing, which if it keeps on will drag your pooled price still lower. What can you as an individual do about it?

Suggestions to Meet Situations

The first suggestion that I would make is to take an inventory of yourself. Ask

(Continued on page 94)

Garden Clubs in Ross County, Ohio

THE garden club movement, although relatively new in Ross County, Ohio, has come to occupy a very definite place in the local extension program, according to County Agent Fred R. Keeler. The first club was organized in Chillicothe about two years ago, and at the present time there are 10 clubs in the county with a membership of more than 300 women.

The Chillicothe Garden Club, in addition to helping the members with their flower gardens and lawns, has taken an active part in the landscaping and planting of the grounds around the new high school. Two other clubs in the county are cooperating in similar projects. Other groups are helping the 4-H flower clubs by furnishing better-quality plants and seeds than the youngsters would get otherwise.

County Federation Organized

Last fall a county-wide federation of garden clubs was organized for the purpose of correlating the programs and activities of the various clubs, as well as promoting activities that have county-wide interest. Each club in the county, with the exception of one organized very recently, is a member of the federation and is represented on the county council through its president and 1 delegate for each 25 members.

In addition to activities relating to individual clubs, the county federation is carrying out a general educational program through meetings, newspaper publicity, a county-wide flower show, and garden demonstrations to arouse more interest in home beautification.

Interest in home beautification is increasing yearly throughout Ohio, reports Victor H. Ries, extension specialist in floriculture. This is developing along two major lines, the organization of garden clubs and the development of special garden features, as rock gardens, lily pools, and perennial borders.

The Ohio Association of Garden Clubs was organized less than two years ago with the cooperation of the Ohio Extension Service. It is not a women's organization but a mixed group with commercial nurserymen and landscape men affiliating and reaching about 6,000 gardeners.

The other type of program proving most popular and successful is the method demonstration. County-wide demonstrations, sponsored by the county garden clubs in cooperation with the extension agents, were held in a dozen or more counties last year. Fifty-seven demonstrations had an attendance of 3,590.

Nurserymen Cooperate

It has been found that a tie-up with a local nursery proved most successful. The outstanding demonstration was held at Dayton, Ohio. A rock garden was made on the grounds of a local nursery. Although started in the morning, the major part was made while the group looked on in the afternoon. They had an opportunity to witness every operation from beginning to end. A crew of 10 men worked while the extension specialist described the operations. As near as a count could be made, 1,000 people witnessed this work, coming from 7 counties, some from 30 or 40 miles away.

Many people came back to watch the growth during the season and many others unable to attend the demonstration came later to see the finished garden.

Several of the outstanding nurseries of the State have offered to cooperate in a similar way this season.

In places where no local nursery exists the specialist, with the help of the farmer and agent, makes a small rock garden, a tub pool, or its equivalent in some other garden feature.

The 1932 Outlook for Dairying in Oswego County, New York

(*Continued from page 93*)

yourself if you are fitted to be a dairyman—do you like the routine, the cattle that are under your care, do you like to plan ahead and try to breed your herd up to the goals set? Last, but not least, do you have faith in your industry and in the men who are its leaders? These are fundamental to your success in the dairy industry.

The second suggestion that I would make is to inventory your herd, then cull and cull drastically. Remember one 7,000-pound cow is better under present conditions than three 4,000-pound cows.

If you have good cows, feed them. Feed is cheaper than it has been in many years, and 1 pound of milk will purchase 1 pound of grain, which under ordinary feeding practices, with good cows, will return 4 to 5 pounds of milk.

Incidentally, now is a pretty good time to purchase a good purebred bull calf. You can buy him cheap, feed him on cheap milk, and the heifers he gets may produce you some high-priced milk and may possibly grow into money on the uphill of the cow cycle.

One other suggestion on feeding—home grown legumes, alfalfa, or clover will help keep your feed bill down. Good yields of silage, with some corn in it, is more essential than ever before. If milk is going to be cheap and you are to stay in the dairy business you will have to produce cheap milk.

These are things that you as an individual can do from the production standpoint.

From the marketing standpoint those of you who are in cooperatives can help them bargain effectively by trying to regulate your production to the fluid requirements of the market, and producing your surplus when it can be handled at the lowest cost—that is, during the summer months.

All dairymen, whether in a cooperative or not, should get behind some organization and ask for a tank-car freight rate on milk.

Your chances of getting this would be better if about half of our milk plants were eliminated so that the rest would handle a volume that would make it an economical operation.

Many of you have been discouraged this winter. I don't blame you, but many of you have been through these periods before. Look at that old dairy cycle chart and start thinking about getting ready for the next up.

THE income from Tennessee farm woodlands for wood products sold was approximately $17,000,000 in 1929, says G. B. Shivery, extension forester.

According to the United States census report, the harvest was as follows: 478,630 thousand board feet saw logs and veneer logs; 1,960,679 cords of firewood; 73,366 cords extract, acid, and pulp wood; 3,002,578 fence posts; 1,051,871 railroad ties; and 165,655 poles and piling.

It is rather difficult to figure the value of these products, because many of them were used by the woodland owner, Mr. Shivery states, but, figured at a conservative market price at that time, the total value of these products to Tennessee farm woodland owners was about $17,000,000.

The Month's Best News Story

We are going to give news stories as written by county extension agents a vacation this month. Just for variety, we'll try another brand of local news story. Also, we're not forgetting that the extension specialist as well as the county extension agent is part of our clientele. They are less numerous, it's true, but they, as well as the county extension agents, are most certainly essential in keeping the extension machine in effective action. At that, though, you'll find that this month we are striking just as close as ever to the counties as our field of operation.

Kansas specialists and their extension editor, L. L Longsdorf, have developed a variation in handling localized news stories. This is the plan they work on as described by Longsdorf. He says:

"We began some time ago to handle part of our news service by what I call the reverse-action method; that is, we have asked our specialists in all lines of work to get good success stories while they are out in the field and to give us the facts. Then we take these facts and put them into form with local headlines for our weekly papers."

So much for the plan. Now for the stories. We give three of them. Each one is a local success story. The first is about a farmer, the second is about a farm woman, and the third is about a group of 4-H boys and girls. What was attempted, the results obtained, and how the job was done are told. Each story is an expression of extension subject matter in terms of successful individual accomplishment. It's good extension teaching material and an example of mighty good cooperation as well, between the county extension agents and specialists of Kansas and their extension editor.

TROY, KANS., February 10.—If chickens are to make their owners a profit, they can not be lazy. They must work longer. And if they are going to work longer, the days must be lengthened. There is where artificial lights will be helpful.

That was the plan on which Mrs. Ethel M. Brazelton worked. She is one of the outstanding poultry raisers of Kansas and works in close cooperation with the Doniphan County Farm Bureau in getting the latest information on poultry and egg production. Besides that, she is a charter member of the Kansas Record of Performance Association and was honored as the State poultry champion in 1930.

Here is what she did. She furnished her flock with lights—gave them more time to work during the short days of winter—and increased the egg production by 700 per cent. That increase was noted from the record comparisons of 1929 and 1931.

Mrs. Brazelton began her experiment and record keeping on the effect of lights on her birds in October, 1929. That month she sold 57½ dozen eggs from a flock of 300 pullets and 100 hens. The following year she started the lights on October 12 and sold 138 dozen eggs during that month.

Then it was in 1931 that the real test began. Lights were turned on the flock of hens in July of that year, turning them on at 3 a. m. The pullets were managed likewise, but not until September 1. When the records were checked again at the last of October, there were 437 dozen eggs to the credit of the flock.

By using lights it is possible to get a much higher fall and winter egg production, explains Mrs. Brazelton. She says that her hens are held in production later in the summer by using the lights in July and August, and they come back into laying sooner after their molt if they are given a longer day in December and January.

And another thing that Mrs. Brazelton has noted—the lights give eggs for hatching at a much earlier date than before lights were put into use. No harmful effects on the hatchability have been noticed.

Mrs. Brazelton uses artificial lights in the brooder house to keep the chicks from crowding. Five-watt bulbs are used in each brooder house. These also give the undersized chicks a chance to eat at night, making the brood more uniform.

BELOIT, KANS., February 4.—Believe in and practice hog raising on market requirements! That was the very thing that 4-H club boys and girls enrolled in the Mitchell County Farm Bureau pig-raising project did this year. Their pigs were finished and marketed at a price much above the price received later when the majority of the spring pig crop for Mitchell County was sold.

The higher price was the difference between $6.25 and $3.50 per hundredweight.

The plan outlined by this group of young livestock raisers with the aid of their county agent and the local farm bureau included a study of the normal price trends. The fact that the normal high point of the fall comes near September 1 was explained by a demonstration worked out by each club member. The fact that a certain type hog and a desirable finish must be obtained to meet the market requirements was stressed.

Then there was included in the plan the worming of the pigs, sanitation, and the use of a balanced ration of homegrown feeds for economical gains.

As a result, good gains were made. The pigs weighed 200 pounds or better by the time they were 6 months old. Of all the club members, Tommy Mehl had the pig that made the highest gain. It weighed 290 pounds at 5 months and 21 days.

Here is another thing that helped these boys and girls get top prices for their hogs. The county agent kept in touch with the market situation throughout the summer. By following these market indications, the top would be reached before the 1st of September. The agent informed his pig club members of this fact. He wrote to them and told them to sell their pigs as soon as possible. That was August 15.

From August 17 to October 8, the boys and girls marketed 58 pigs. There were some 48 members in all. And what they made for their work by following a well thought-out plan of pig raising is told in receipts obtained. Four pigs were sold August 17 at $6.50 per hundredweight, 27 were sold August 19 at $6.25; 19 were sold September 3 for $5.50; 6 were sold October 3 for $5.25; and 2 were sold October 8 for $5 per hundredweight.

Tommy Mehl's experience in having the fastest gaining pigs and also the heaviest emphasized another point to these Mitchell County club members; that is, that the market usually pays top for the hogs when they weigh around 200 pounds. Tommy sold on the market September 3 with an average price of $5.50. But he took a 15-cent dock for a pig that was too heavy.

HORTON, KANS., February 18.—Dry weather and grasshoppers could not stop progress. The alfalfa grew and thrived just the same. It was because the plans had been laid in advance.

That is the 3-sentence story that is told by Henry Jacobsen, one of Brown County's leading farmers. And because he had such good returns during an adverse year he reported to the county agent of Brown County. And by the

way, Mr. Jacobsen, a member of the local farm bureau organization, followed many of the suggestions offered by the agent in planning his alfalfa-growing program, and fighting the hoppers.

Mr. Jacobsen believes in early preparation of his land for alfalfa. He double disks his oat stubble immediately after harvest. He follows this with shallow plowing.

"Preparing land after oats takes more packing and causes me to seed a little later than if I had summer-fallowed my land, but with proper methods I am able to get a good seed bed in time to seed by the last of August," explains this alfalfa grower. This past year Mr. Jacobsen seeded his field in August, using Kansas Common alfalfa. And he inoculated his seed with fresh, live cultures, too.

Last fall the grasshoppers threatened his young seeding, since the field he was sowing lay between another alfalfa field and a red clover field. He prepared to fight the hoppers. Here is how he did it.

When the last cutting of alfalfa was made on the old field, a strip of uncut alfalfa was left along the new field. After the hay was put up, poisoned bran mash was scattered on this remaining strip early one morning, and the hoppers were killed "by the millions." As the young alfalfa came up, poisoned bran mash was scattered around the field every second or third morning. This was done three different times—and no loss to the alfalfa. The stand is good clear to the edge of the sowing.

The most troublesome thing about poisoning hoppers is that it has to be done about 4 a. m.; that is, before the hoppers start feeding.

Mr. Jacobsen plans to let his alfalfa stand but four or five years and then grow corn on the land.

Two New Film-Strip Series

Two film-strip series have been completed by the Office of Cooperative Extension Work for the use of extension workers and others interested in visual presentation of information. They are:

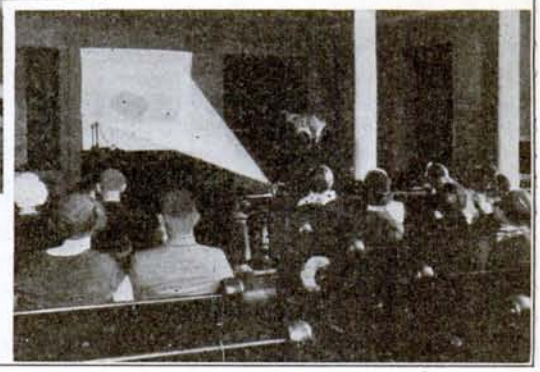
Series 170, Some Methods of Estimating Milk Quality by Bacterial Tests. (49 frames.)

Series 253, Plows and Plowing. (39 frames.)

These series were prepared in cooperation with the Bureau of Dairy Industry and the Bureau of Agricultural Engineering. They may be purchased from the Consolidated Film Industries (Inc.), Fort Lee, N. J., the price being 35 cents for series 253 and 44 cents for series 170. However, authorization to purchase the strips should be previously obtained from the Office of Cooperative Extension Work, United States Department of Agriculture, Washington, D. C. The series are also available for loan in the form of glass slides. Mimeographed notes describing illustrations will be supplied with the series for lecture use.

Ohio Uses Illustrated Radio Talks

Broadcasting the first illustrated radio meeting from the Ohio State University's radio station, WEAO, Columbus, Ohio



Meeting similar to this received the broadcast, which was illustrated with a film strip synchronized with a strip in the studio

SYNCHRONIZING film strips shown at county meetings with radio talks given by specialists and faculty members at the university station in Columbus is being done successfully in Ohio. The first program was worked out by V. R. Sill, asistsant editor and radio specialist, and P. B. Zumbro, extension specialist in poultry, in a group of poultry meetings held in five Ohio counties: Fairfield, Licking, Union, Warren, and Knox. The county agents arranged for the local meetings, introduced the program, and led the discussion, and to them goes much credit for the success of the meetings. In broadcasting the illustrated talk, a film projector was set up in the studio and the pictures thrown on the screen in front of the speaker. The projector was operated by an attendant, who at the signal of a gong struck by the speaker turned to the next picture on the strip. Before the speaker discussed the next picture on the film strip he referred to the slide number. Each slide was conspicuously numbered, and at each sound of the gong five agents in five different counties in the State simultaneously turned to the next picture on the film strips.

Local discussions on the subjects emphasized in the radio talks and film strips were led by county agricultural agents immediately after the illustrated part of the program. During this discussion period, questions were called in to designated telephones at the university. Then the questions were answered by radio in a question and answer forum.

At the end of the meetings, summaries of the radio discussions were passed out.

The possibilities in the illustrated radio meeting as an extension medium are shown by the fact that 98 per cent of those attending the meetings indicated they considered them successful. Many others asked for additional meetings on various subjects.

Some of the subjects suggested as being especially adapted to this type of meeting were poultry, gardening, improvement of home grounds, economic outlook, meal planning, health, livestock, fruit, and other projects.

In every county perfect synchronization of the film strips with radio discussions from the studio was obtained without difficulty.

The agricultural extension service at the Ohio State University has prepared a detailed report of the entire project with suggestions on how such meetings may be conducted with the greatest effectiveness. A copy may be obtained for the asking.

· ACROSS · THE · EDITOR'S · DESK ·

A Call To Action

IT'S A STRIKING word picture of present-day conditions that the Committee on Continuity of Business and Employment of the United States Chamber of Commerce gives in its report on planning proposals "To an onlooker from some other world," reads this report, "Our situation must seem as stupid and anomalous as it seems painful to us. We are in want because we have too much. People go hungry while our farmers can not dispose of their surpluses of food; unemployed are anxious to work, while there is machinery idle with which they could make the things they need. Capital and labor, facilities for production and transportation, raw materials and food, all these essential things we have in seeming superabundance. We lack only the applied intelligence to bring them fruitfully into employment."

I read with keen interest, too, the comment on this statement by Charles Beard in his new book, America Faces the Future. He says, "Can anything be done by human intelligence and will? Is the cycle of expansion, explosion, contraction, and calamity a product of inexorable nature or the outcome of human arrangements and methods, susceptible of modification and control by intelligence and will? Surely, here is a call to action that can not be met by a confession of defeat."

How fully is the cooperative extension service responding to this call? Is it one that any of us can long deny or ignore? I think not.

Considerable Interest Was Created

IN 1926, County Agent B. M. Drake of Chattooga County, Ga., conducted a 5-acre cotton production contest. He had two farmers enter the contest. In 1927, the contest was continued. Again there were two contestants. I'll just let Agent Drake tell the rest of the story himself. He says, "One of these 1927 contestants turned out to be an outstanding prize winner and the publicity which this brought created considerable interest for the following year. So in 1928, more than 40 boys grew out creditable acres and 28 adult farmers enrolled in the 5-acre production contest made reports. Then in 1929, we went in for a-bale-to-the-acre campaign. We had more than 200 contestants. They grew a thousand bales on a thousand acres."

After all, though, you'll say, a contest is a contest. What practical results came out of this creation of "considerable interest?" Says Agent Drake, "It would seem that Chattooga County has come back in cotton production. We produced in 1931 as many bales of cotton as we did in the years before the boll weevil came and on about 10,000 less acres of land. Improved soil fertility, more and better fertilizers, and seed of higher yielding varieties have given us this production and have released 10,000 acres on which other cash producing crops are being grown."

How much credit should we give to the contest for the result obtained? How much to the straight information given? What's your guess?

A Real Definition

FIRST and last, we manage in extension work to waste a lot of perfectly good words in defining this and that and in trying to explain that and this. So when I come on a real definition, simple, direct, and comprehensive, I rejoice. Recently, I found such a definition for 4-H club work. I culled it from the February issue of the Connecticut Four-Leaf Clover. I assume it's the brain child of Gus Brundage, Connecticut State Club Leader. If so, my hat's off to him. Here's the definition:

"There is nothing magic about 4-H club work. It has been developed from the premise that farm and home tasks have educative values which, if properly directed, are certain to develop not only more capable young people, but also a more satisfying rural life and happier community relationships."

Business Cooperates

A SUCCESSFUL extension program depends on the cooperation of the business man and farmer. It is only through cooperation that we can progress, not only among farmers themselves, but between farmers, business men, bankers, and merchants. In Dallas County, Ala., every civic club and chamber of commerce is behind the work. That's what John Blake is able to say after his 21 years of experience in the county as county agricultural agent. In this time, he has seen a generation of 4-H club boys trained by him grow into some of the best farmers that the county has. And, in his work with the club boys as well as in his work with the adult farmers he has had the hearty support of the business men of the county. That Dallas County to-day ranks third in the State in dairy production, second in beef cattle, and third in pecans, that the county last year grew 38,000 bales of cotton on 100,000 acres, and that 80 per cent of its white farmers belong to the county farm bureau, which last year did a business of $500,000, are results which the bankers, merchants, and business men of the county appreciate and are proud to have helped in bringing to pass. No wonder John Blake believes in winning and holding the cooperation of the business men of his county in doing extension work.

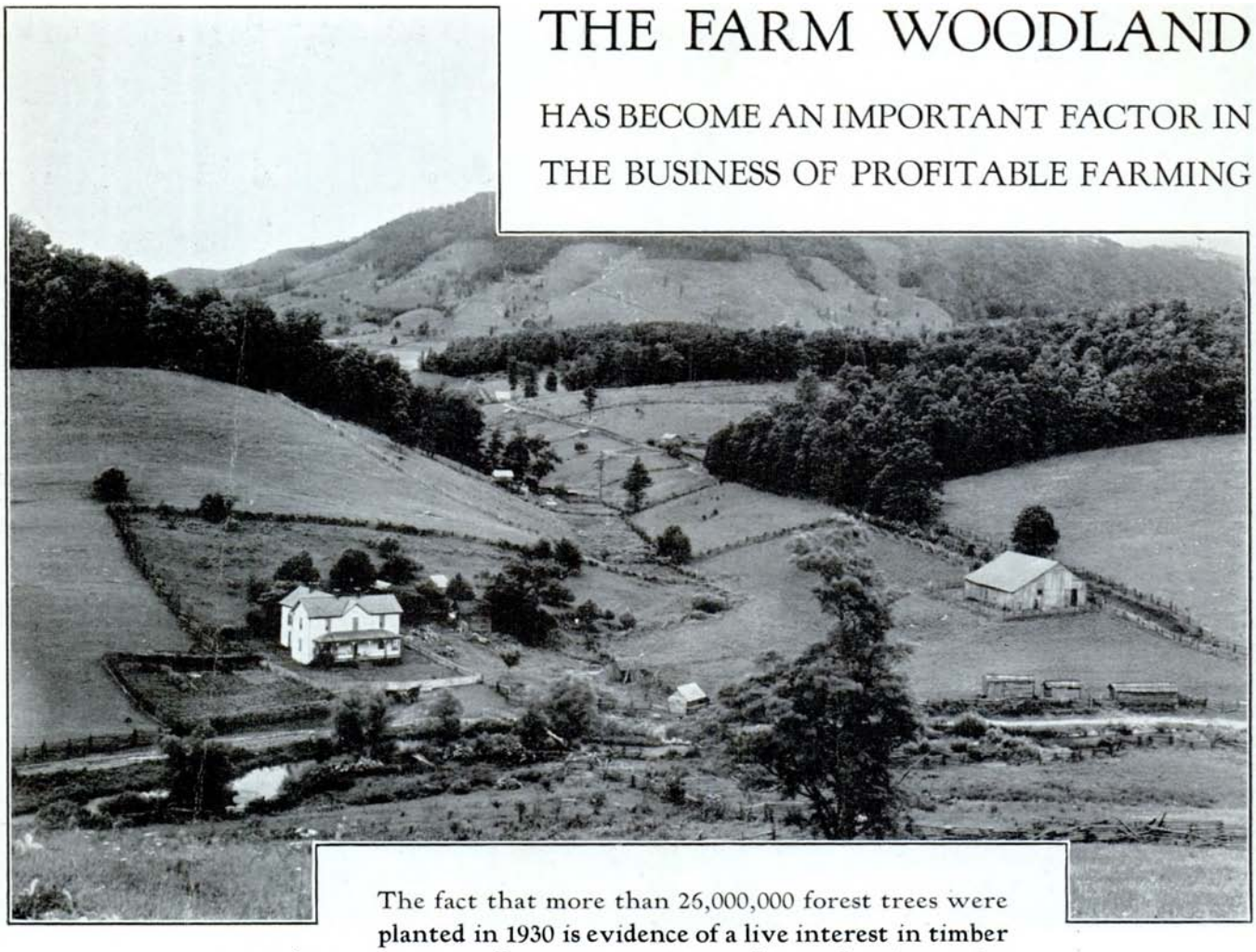
No Cause For Upset

READING the report on extension work in Pennsylvania for 1931 I find Director M. S. McDowell assessing the situation as he looks into the matter of further adjustments in the extension program for this year. He say, "A good extension program is no different in times like the present than in times of prosperity. Fundamental principles are equally important at all times. We can not see that in times of depression there should be a scurrying around to revise an agricultural extension program 'to meet the present situation'. This does not mean that some shifting of emphasis may not be desirable or that revisions should not be made in some particulars, but established methods need not be torn to pieces."

Isn't this sound thinking? I rather think so. R. B.

THE FARM WOODLAND

HAS BECOME AN IMPORTANT FACTOR IN THE BUSINESS OF PROFITABLE FARMING



The fact that more than 26,000,000 forest trees were planted in 1930 is evidence of a live interest in timber as a farm crop as well as a recognition of its value in erosion control and as a windbreak.

To develop better practices in farm forestry the Forest Service maintains 11 regional experiment stations where the forestry problems of each section are studied.

DO YOU WANT PROFESSIONAL ADVICE AS TO TIMBER PROTECTION, CUTTING, ESTIMATING, and MARKETING?

ARE THE FARMS OF YOUR COUNTY IN NEED OF SHELTER BELTS AND WINDBREAKS?

HAVE YOU A WORKING KNOWLEDGE OF IMPROVED FORESTRY METHODS OF PREVENTING AND CONTROLLING EROSION?

Send your problems through your State extension forester or your State extension director to the Forest Service. Publications, motion pictures, film strips, lantern slides, posters, and exhibits may be obtained also for your use.

FOREST SERVICE
UNITED STATES DEPARTMENT OF AGRICULTURE
WASHINGTON, D. C.

U. S. GOVERNMENT PRINTING OFFICE: 1932

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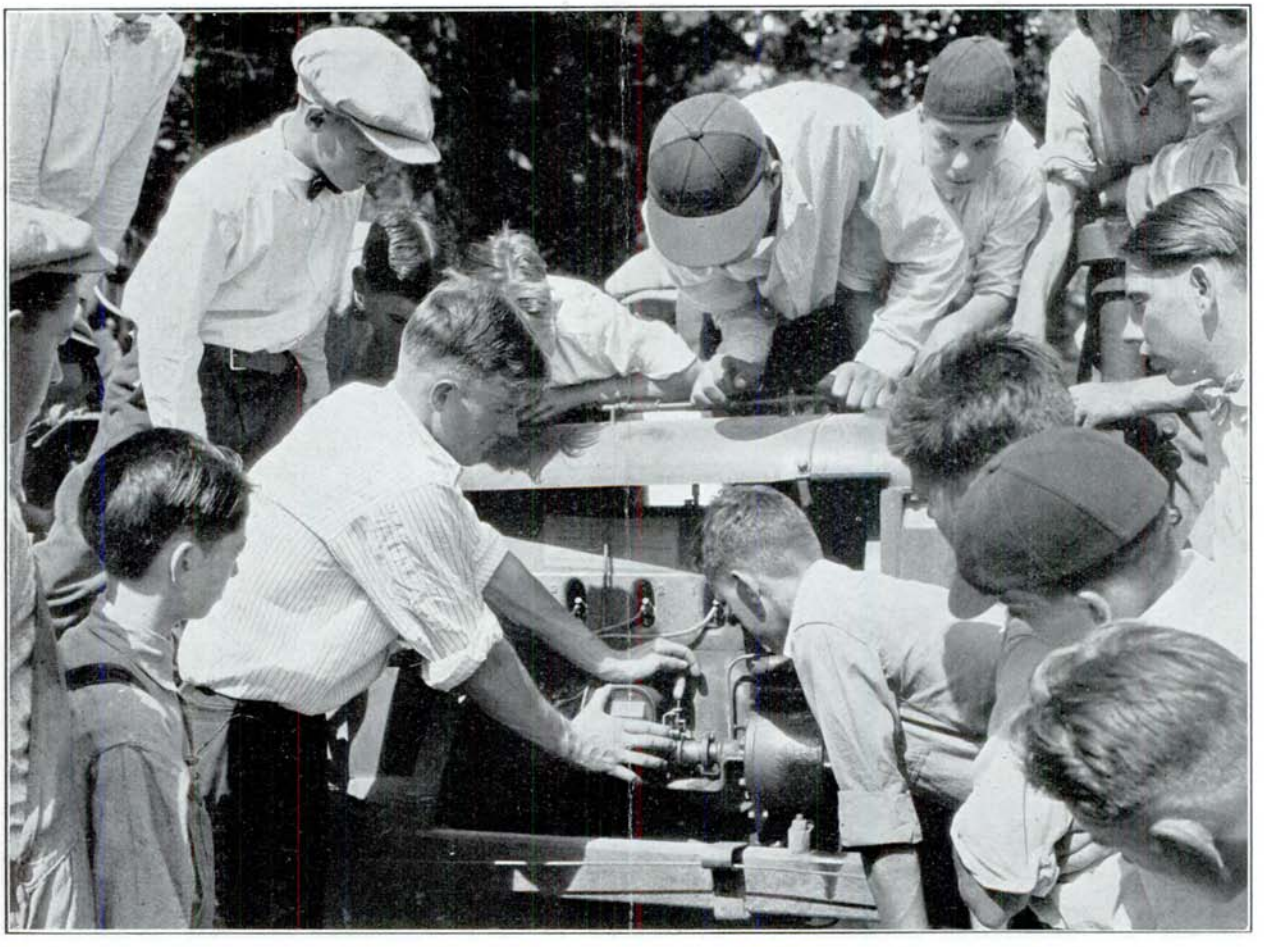
VOL. 3, NO. 7 JULY, 1932



4-H CLUB BOYS LEARN ABOUT FARM POWER

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

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

In This Issue

NORTH CAROLINA is now nearer to the goal of a self-sustaining agriculture than it has been before in 50 years. Director I. O. Schaub sees agriculture in his State turning the corner as he describes the "live-at-home" program, which has played such an important part in bringing about a decrease of 541,000 acres in cash crops and an increase of 865,000 acres in food and feed crops. North Carolina he believes has taken a long step forward in balancing crop and livestock production to utilize labor and equipment to better advantage and in adapting agricultural production to market demand.

OHIO stubbornly contested and stopped with minimum damage its most recent invasion of the Army worm. T. H. Parks, extension entomologist, gives us a graphic account of how the battle was waged. Supplies of direction sheets telling what to do were taken immediately by county agents to elevators, banks, and leading stores in the affected area. News stories were run, radio talks were made, poisoning demonstrations were given, and the telephones in the county extension offices were kept in constant use. When local poison supplies ran low, additional supplies were brought in from a distance. There was no lag anywhere. In 10 days the invasion had ended and the forces of information had won.

4-H CLUB WORK more than any other one phase of extension has the respect and support of business men. That's the thought with which Dean W. C. Coffey of Minnesota opens his very enthusiastic statement on 4-H club work in his State. Some of the finest achievements of extension work in Minnesota, he tells us, come through developing an interest in club work in farm homes which up to that time had been indifferent to the county extension agent and his program.

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THE NEAT SUM of $87,110 was what women and girls belonging to Florida home-demonstration clubs received for home products sold by them last year. And, they went a step farther in emphasizing this apt lesson for the present time. They brought their story before their urban and suburban sisters in an impressive exhibit of vegetable soups, jellies, marmalades, flowers, and novel home products at the annual meeting of the Florida State Federation of Women's Clubs.

On the Calendar

THE AGRICULTURE OUTLOOK and Economic Conference for the Western States will be held at Salt Lake City, Utah, August 11 and 12, and for the Central States at Chicago, Ill., September 14–16.

Arkansas Farm and Home Week, Fayetteville, August 2–5.

Arkansas Extension Conference, Fayetteville, August 6–9.

Camp Vail, Eastern States Exposition, Springfield, Mass., September 18–24.

EDUCATIONAL EXHIBITS of the United States Department of Agriculture have been arranged for six State and interstate fairs during July and August by the Office of Exhibits.

Northern Arizona State Fair, Prescott, Ariz., July 1–4.

Northwest Fair, Minot, N. Dak., July 4–9.

North Dakota State Fair for Fargo, Fargo, N. Dak., July 11–16.

Kankakee Interstate Fair, Kankakee, Ill., August 12–19.

Illinois State Fair, Springfield, Ill., August 20–27.

Upper Peninsula State Fair, Escanaba, Mich., August 22–27.

ONE OF THE most popular productions of the Department Office of Exhibits is a mechanical hen. It attracted so much attention on its first exhibition in Massachusetts that the State Fairs Association had a reproduction of the hen made and loaned it during 1931 to the county fairs holding membership in the association. This experience suggests a practical way of making outstanding feature exhibits of the department available to county as well as to State and interstate fairs.

SAYS Esther Pond, Wyoming home-management specialist, "Not enough girls and women know how to manage the three tools of the home maker—time, energy, and money. Through our junior home-management clubs which take in women from 18 to 24 years of age, we seek to give the training they desire in efficient management."

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

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

Extension Service Review

VOL. 3 WASHINGTON, D. C., JULY, 1932 NO. 7

How I Feel About 4-H Club Work

W. C. COFFEY

Dean, Department of Agriculture, University of Minnesota

I HAVE been impressed over and over again by the appeal our 4-H club work makes to the business men of Minnesota. Each year, during State fair week, the Civic and Commerce Association of Minneapolis gives the 4-H club members and workers attending the fair a banquet. Only a few business men are permitted to attend, as the 4-H crowd taxes the capacity of our largest banqueting places, but the favored few are there and some have admitted to me that they had to "pull wires" to secure "the bid." At one of these banquets I sat beside a prominent business man. His eyes were shining with interest and delight as he looked at the happy, responsive, purposeful throng and he said, "I have two sons and I could wish nothing better for them than that they find their life partners amongst the group of girls here tonight."

As the above would suggest, the 4-H club work, more than any other one phase of extension, has helped to win the respect and support of Minnesota business men for county agent work. They support the 4-H club by providing special prizes, funds for buying stock, and by giving personal leadership through sponsoring boys and girls in given projects. They thus come in contact with the county agent and come favorably to know a great deal about the other features of his program. I suppose our business men are little different from those in other States but perhaps somewhat so. The Twin Cities, Minneapolis and St. Paul, regard agriculture as their chief hinterland of support and they are, therefore, anxious to identify themselves with movements that give promise of building up our agricultural interests. And nothing else inspires them quite so much as the annual gathering of 4-H club forces at the State fair and the junior livestock show in South St. Paul. The latter, by the way, is solely a 4-H club affair and in many respects one of the most unique livestock shows in America.

Getting Parents Interested

I have traveled with county agents on visits to homes to inspect calves, lambs, and pigs belonging to 4-H boys and girls, and I have observed that when the county agent can get parents and children into conference in the presence of some animal which a son or daughter is feeding for a competitive show there is no difficulty in approaching any subject which the agent desires to discuss. Of course, there are farm homes without children; there are others having children, but unfortunately there is lack of appreciation of what the 4-H club program can do for them. Yet, some of the finest achievements in extension work in our State have come by developing somehow a spark of interest in club work within homes of indifferent attitude toward the county agent and his program. Here, again, I suppose I am saying nothing new, but I can not refrain from adding weight to what I infer is already existing testimony

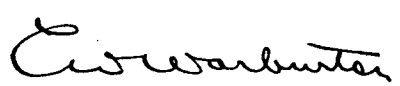
In our State I have witnessed the power of 4-H club work to rekindle interest in education. We have under the supervision of the university four schools of agriculture for rural young people who have completed the grades but who have not gone on to high school. Often our able country boys and girls decide to quit school upon completing the grades. But they continue in 4-H club work or become interested in it after leaving school. The educational nature of the work and the contacts it furnishes often cause these young people and their parents to reconsider the matter of schooling, and as a result we have a number in our schools of agriculture who would not be enrolled with us were it not for club work. We have 4-H club organizations within our schools. These young people come to us 4-H club minded, they remain so while with us, and thus minded they return to their home communities to become an inspiration and help to the extension program. And they do return, for these schools are organized and conducted for the purpose of training young men and women for rural

(Continued on page 98)

900,000 Boys and Girls in 4-H Clubs This Year

NEARLY 900,000 boys and girls have been enrolled in the 4-H clubs for 1932, according to the estimates we received from the State directors of extension work in May. Every member of the Extension Service may take pride in these figures. In spite of increasingly heavy handicaps, the total has steadily climbed. This has meant hard work and sacrifice from extension agents. It has meant unselfish service from those loyal volunteer leaders who have given so generously of themselves in behalf of youth. But this year I feel there is a deeper significance in the gain. Nothing reveals so plainly the faith of the father and mother as that which they purpose for their children. Back of the 900,000 boys and girls whom we know in the 4-H clubs are the fathers and mothers whose faith in the future of the American farm is reflected in this effort to give their sons and daughters more opportunity to understand the possibilities of farming and of rural life.

Surely, this imposes on us an increasing responsibility to maintain the high standards we have set for club work and to bring the opportunities that the 4-H clubs afford to even greater numbers of rural boys and girls.



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Martha Van Rensselaer

MARTHA VAN RENSSELAER, co-director of the New York State College of Home Economics and State leader of home economics extension work, Cornell University, died at St. Luke's Hospital in New York City on May 26. She had been for over 30 years one of the foremost leaders in extension work with rural women in the United States.

When the opportunity came to Miss Van Rensselaer in 1900 to do work at Cornell University she had the vision to see how university extension would help rural women. Her previous work as a rural teacher and Chautauqua worker and, later as school commissioner for Cattaraugus County, N. Y., had familiarized her with the needs of farm women and their keen appreciation of information that would help them with their work. As a means of meeting the need for adult education in relation to farming, a reading course for farmers had been organized by the College of Agriculture. Alert to the needs of the whole farm enterprise, Prof. Liberty Hyde Bailey proposed an enlargement of the course so as to include the special interests of farm women and asked Miss Van Rensselaer to organize such a course. This she did. A reading course for farm women was started and the first bulletin entitled "Saving Steps" was sent to 2,000 women. By 1904 the reading course had an enrollment of 18,000 names, and by 1918, 76,000 names.

During the first year of the reading courses, the plan was conceived and put into effect of organizing groups of women throughout the State who would use the courses as a basis for their discussions of their own household problems. The distinctive feature of these clubs was that they were concerned with the things that must be done in and for the home. The clubs showed a surprising vigor and vitality. Later on they gave way to the activities of the home bureaus of the present day, which owe much of their strength and virility to Miss Van Rensselaer's helpful influence.

Never hampered by fear of new and unexplored fields, Martha Van Rensselaer thus began to make extension history. A basement room in Morrill Hall was placed at her disposal. The equipment consisted of a chair or two and a small kitchen table with a single drawer. From these simple beginnings grew that

The late Martha Van Rensselaer

enterprise which, in the spring of 1928, was designated by the legislature the New York State College of Home Economics at Cornell University.

From the beginning of her work at Cornell in 1900 Miss Van Rensselaer's life was one of constant and constructive service to farm women and the rural home and to the cause of extension work.

In 1915–16 she served as president of the American Home Economics Association.

In 1917, when the United States entered the World War, she was appointed as head of the work with women on food conservation in New York State. She had to give that up, for she was called shortly by Mr. Hoover to be head of the Division of Home Conservation of the United States Food Administration, where she served until after the close of the war.

In 1920 she was chairman of the home economics section of the Association of Land-Grant Colleges and Universities.

In 1923, at the request of Mr. Hoover, Miss Van Rensselaer went to Belgium to study the needs of women who might be served through the Commission of Relief in Belgium.

In 1929 Miss Van Rensselaer was again called to Washington to serve as assistant director of the White House Conference for Child Health and Protection, called by President Hoover. Perhaps no work Miss Van Rensselaer did was of greater importance than that which she did in connection with this conference.

Miss Van Rensselaer accepted the chairmanship of a committee on family life of the Housing Conference appointed by President Hoover, and held this assignment at the time of her death.

Miss Van Rensselaer's life was devoted to the betterment of the American home and the interests of the American family. Under her inspired leadership the State of New York gave recognition to the importance of the home and family life through the organization of its State College of Home Economics and the appropriation of a million dollars for a home economics building, which will be the most extensive of its kind in the world. These substantial fruits of her life of earnest and brilliant effort are, after all, only the material expression of the love and respect which thousands of her fellow citizens, men and women alike, hold for Martha Van Rensselaer, gifted and lovable woman and honored extension pioneer.

How I Feel About 4-H Club Work

(*Continued from page 97*)

life and not for professions related to agriculture.

Prof. T. A. Erickson, in charge of club work here in Minnesota, wants me to say two or three dozen more good things about our work. I could, and thus demonstrate far better than I have a comprehensive understanding of the 4-H program and its achievements. It is a great program in all of our States, and it constitutes a great hope for the future agriculture and rural life of the United States.

Radio Appreciated in Alaska

The Alaska Agricultural College and School of Mines at College (Fairbanks), Alaska, has just inaugurated radio broadcasts by remote control over KFQD at Anchorage. Director Bunnell gave the initial talk on February 7 and later received the following telegram indicative of the appreciation the radio receives in some of the isolated northern wilds:

SEVOONGA, ALASKA (VIA TELLER),
February 15, 1932.

Doctor BUNNELL,
College.

Getting such interesting College news, together with your kind wishes, over KFQD makes eight months', isolation amid drifting pack ice no longer unpleasant. Through kindness of Mr. Troutman message relayed per dog team to me. May we hear you often is our wish. Everything O. K. Best wishes yourself and all.

OTTO W. GEIST.

Extension Work Pays Farm Dividends

A. F. LEVER
Federal Farm Board

I AM writing this statement with the identical pen with which President Wilson signed his surname in making the agricultural extension act a law. The President used two pens in signing this bill, giving one to me and the other to Senator Hoke Smith, of Georgia, who piloted the bill through the Senate. Perhaps no other pair of Congressmen ever collaborated on a law of equal importance. Senator Smith was a huge man physically as well as intellectually, weighing 250 pounds, and the most energetic big man I ever saw. In stature I was his opposite. I am 5 feet 7½ inches in height and sometimes weigh 125 pounds when I have both shoes on. But in our purpose to create what has crystallized in the far-flung farm bureau and supporting extension system—in the work of county agents, home demonstration leaders, and 4-H clubs—we pulled together like a matched team.

Hon. A. F. Lever, of South Carolina

The late Hon. Hoke Smith, of Georgia

Agricultural legislation of this country divides itself into four phases, namely, education, research, finance, and distribution, and these are covered, respectively, by the Morrill and the Smith-Lever Acts, the Hatch Act, the rural credits act, and the agricultural marketing act.

We celebrated the eighteenth anniversary of the signing of the Smith-Lever bill by President Wilson on May 8, 1914. This act committed the Federal Government, in cooperation with the States, permanently, to the policy of support of agricultural extension work.

Morrill Act

The first Morrill Act providing for the establishment of land-grant colleges and for teaching therein agriculture and the mechanic arts inaugurated nothing new in method of teaching; it only found a new field in which the old pedagogic principles of teaching might graze.

The Smith-Lever Act struck a new note in teaching and uncovered something different in the realm of education. President Wilson said of its method: "It constitutes the kind of work which it seems to me is the only kind which generates real education." Director L. N. Duncan, of Alabama, recently said: "It is more than a law; it is a conception; it is an inspiration; it is a spirit."

In its terms, and by implication, from statements of those responsible for its enactment, it is more pregnant in prophecy and suggestions for the future perhaps than any single law of the land.

What has been the harvest in its 18 years of operation, what the dividends?

Rural Leadership

The great dream of agriculture throughout all time has been to develop a safe, stable, independent, forward-looking, rural leadership, which, unhampered by lack of financial support or partisan or sectional influences, should devote itself to every phase of country life, social, economic, or financial, with definite, unified programs for the future—a leadership capable of organizing agriculture as an effective fighting force in behalf of its ideals.

Such leadership we have in the army of devoted county agricultural and home demonstration agents of the country, under whose wise guidance and steadying influences agriculture to-day is better organized, better directed, more united in thought, and more fixed in fundamental aims and aspirations than at any time in its history.

In my report of December 8, 1913, accompanying the Lever bill, repeated references are made to the financial aspects and needs of agriculture. Senator Smith, of Georgia, coauthor, referred many times in the same vein. Contemporary literature shows clearly we had in mind a system of credits adapted to the particular needs of agriculture — the present system of rural credits.

Training Boys and Girls

Again I say: "This bill furnishes the machinery by which the farm boy and girl can be reached with real agricultural and home economic training through the country schools. The whole trend of our system of education is calculated to minimize agriculture as a profession, to create a feeling of dissatisfaction with farm life, and an ambition to get away from it." Here is the seed corn of the Smith-Hughes Vocational Act.

Again from this same report: "The itinerant teacher or demonstrator will be expected to give as much thought to the economic side of agriculture—the marketing, standardizing, and grading of farm products—as he gives to the matter of larger acreage yields." Note especially the word "marketing," which is emphasized over and over in the Senate debate. This act was the forerunner of the agricultural marketing act of 1929 designed to lend financial aid to cooperatively organized groups of farmers.

The reports of the debates on the Smith-Lever bills give the first indication that the importance of the distribution of farm products had found definite lodgment in the congressional mind.

To me, a kind of foster father for them, it is gratifying beyond expression to find that county agricultural and home demonstration agents, Smith-Hughes leaders, in fact, all federally aided farm agencies, have thrown a maximum of strength behind the policies projected under the authority of this last, the capsheaf of fundamental agricultural legislation—the agricultural marketing act.

In such a union of forces, devoted and militant, for a better civilization through a better agriculture, we challenge the dismal picture of Markham's The Man with the Hoe.

These are some of the dividends which we report to our stockholders, the 120,000,000 people of the United States.

I would fail in my sense of fairness if I did not put the large measure of these dividends into the lap of the originator and propagandist of the fundamental thought underlying the extension method of agricultural teaching as made permanent in the Smith-Lever Act, the late Dr. Seaman A. Knapp. Hail to his memory!

Progress in Horse-Parasite Control in Illinois

FIVE veterinarians of Vermilion County, Ill., already have treated a total of 2,108 horses and mules for internal parasites, such as bots and worms, in the state-wide campaign which the College of Agriculture, University of Illinois, and cooperating agencies are conducting to restore horse power, according to a report by Farm Adviser Otis Kercher.

A tabulated report received by the department shows that 20,851 horse owners in 66 counties cooperated with 63 farm advisers in the State in an organized movement to treat horses for the control of bots, stomach worms, and large intestinal roundworms during the past winter. The professional services of 204 practicing veterinarians were used in administering treatment to 128,550 animals in the movement to control these parasites.

Over half of all farm boys and girls of club age in New Hampshire are reached by D-H work.

Tree Day in a Nebraska County

TREE day, with 350 people taking part, was one of the high spots in the Adams County, Nebr., extension program and carried the county well over its goal of 25,000 trees for each of the next 10 years. More than 14,000 trees were taken home in addition to the 23,000 trees planted earlier in the spring.

How to carry out a program of tree planting with very limited means, but with soil conditions the best in 10 years, was the problem and challenge which faced County Agent Elliott R. Davis in the spring.

Through the forestry department of the Nebraska Extension Service government trees could be obtained for windbreak and woodlot planting at a cost of a cent per tree. Many varieties were available, both of the broadleaf trees and evergreens. The farmers had their choice of from 1 to 400 of the following varieties: American elm, Chinese elm, Russian mulberry, Russian olive, cottonwood, green ash, Catalpa, box elder, Caragana, honey locust, Scotch pine, Austrian pine, jack pine, western yellow pine, and red cedar.

This solved the problem of the farm windbreak, but the government seedlings were hardly large enough for planting on rural school grounds. To meet the need for larger trees the Adams County Farm Bureau obtained them in large quantities from local nurseries at low cost and in turn gave the school districts the advantage of this saving.

The need for shrubbery and flowers was still to be met, and here again they were faced with the problem of funds. In connection with the extension project lesson, The Garden that Feeds the Family, a survey of garden seeds, plants, and shrubs was carried on in the project groups. This survey showed that many families had a large number of extra plants and shrubs which had little commercial value, and a county-wide exchange was arranged.

Exchange of Plants

The 17 project clubs voted to hold an exchange day instead of the usual annual achievement day, and to make this day a big success invited the county papers and 15 other community groups to cooperate. April 5 was set aside for the exchange of shrubbery and the sale of trees.

A great deal of publicity was given through both the daily and weekly papers which added to the enthusiasm and interest in the project.

Through the courtesy of the city council and the Hastings Chamber of Commerce the municipal auditorium was secured free of charge.

By 9 o'clock people began to bring their contributions to the exchange. As the plants were brought into the booths a committee registered them, after which they were classified and put on tables for exchange. Each person was entitled to take home as many plants as he brought, if he so desired. All surplus plants were given to families planting new home grounds.

Instructions for wrapping and labeling the plants had been previously given through the press, emphasizing the importance of bringing each plant in the condition one would himself like to receive it. One side of the auditorium was devoted to booths where the plants were grouped and displayed, while the other side was devoted to the handling of government and other trees.

Beginning at 11 o'clock, an informal period of instruction was held. Discussions were led and questions were answered by local florists, plant lovers, and specialists. There were talks on roses, peonies, and other flowers.

At noon a lunch stand was operated by the better homes committee, who took this means of raising a little money to be used later for prizes for the junior garden clubs.

The usual order of program was reversed because many people had come quite a distance and had to leave early in the afternoon. First a drawing of names was held (it's human nature to enjoy this), and three prizes were awarded—100, 50, and 25 government trees by the State forestry department and the Adams County Farm Bureau. Then, seriously, and in honor of our pioneer tree planters, a first prize of 25 seedlings was awarded to Mrs. Ellen Kernan, of Hastings, who planted trees in Adams County 59 years ago. Mrs. W. F. Crozier, of Juniata, who had planted trees 57 years ago, was second, and J. N. Bourne, of Pauline, who planted trees 47 years ago, was third.

Trees were also awarded to the person coming the greatest distance to the women's project club with highest percentage in attendance and to the school district with the largest number of patrons registered.

The rest of the afternoon was devoted to talks by the extension forester and the extension horticulturist.

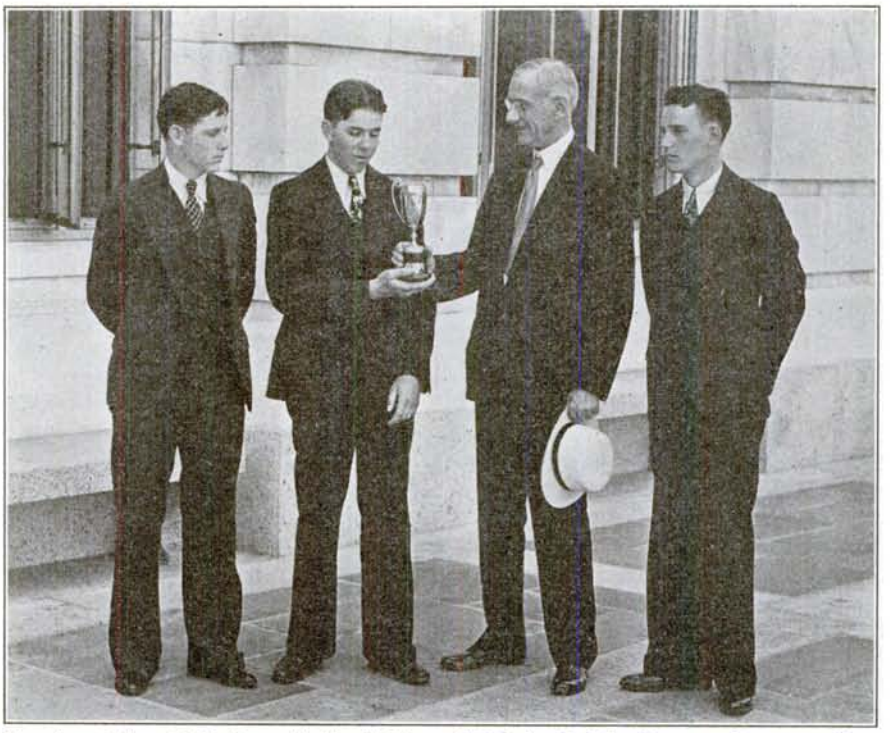
Oklahoma 4-H Dairy Judging Team Goes to England

THE National champion dairy judging team from Oklahoma represented the 4-H clubs of the United States in the international dairy judging contest sponsored by the London Daily Mail in Southampton, England, July 6, 1932. The team was composed of Milford Brown, captain; Forrest Fansher, and Orville Siegenthaler, with Albert Conley as alternate. All have been in club work six or seven years.

This is the twelfth international contest in which a national champion dairy judging team from the United States has competed. Out of the eleven previous contests the 4-H team has won the cup seven times and lost only four times.

The young club members who have represented the United States in previous years have given very good accounts of themselves since they took part in the international contest. The first team, which was from Texas, went to England in 1921. After returning, Jack Turner and Stephen Alva Debnam graduated from the Texas Agricultural and Mechanical College. Jack Turner is now manager of the White Hereford Farm near Fort Worth, Tex., and Stephen Debnam served first as county agent and then went to the Cotton Cooperative Association in Arkansas. Gilbert Weiting, the other member of the team, completed his training for the Presbyterian ministry and is proving to be a leader in his community.

Maryland has won the honor of sending her high-scoring team to England in 1922, 1923, 1926, and 1931. These 12 boys are all proving worthy of representing 4-H club work and for the most part are active in club work in their counties. George Worrilow of the 1922 team graduated from the University of Maryland and is now 4-H county club agent in Delaware; Stanley Sutton of the 1926 team is assistant county agent in Kent County, Md. Ralph Walker of the 1926 team and Charles Clark of the 1931 team are now farming. Joseph Glacken, 1922, and R. N. Wills, 1923, are both teaching; Arthur Dunnigan and William Chilcoat are attending the University of Maryland.



Secretary Arthur M. Hyde greets the Oklahoma 4-H Dairy Judging Team on its way to England. Left to right, Forrest R. Fansher, Milford D. Brown, Secretary Hyde, and Orville Siegenthaler

Iowa produced the winning team in 1925 and in 1927. The 1927 team boasted the only girl who has ever won this honor. Gertrude Kaiser, then 16 years old, was a member of a team which won the cup and Gertrude was the high-scoring individual. Since returning she has studied home economics for two years at Iowa State College and plans to continue her studies there next year. She is at present teaching school and is the leader of a girls' 4-H club and also takes an active part on club programs, banquets, and meetings. Of the other members of this team, Kenneth Walter is a senior in the dairy course at Iowa State College, and Lloyd Kaiser is in partnership with his father on a dairy farm. Harland Leonard of the 1925 team is a successful farmer; Lester Olson is doing cow testing association work in Muscatine County, Iowa, and Raymond Monahan is employed by Armour Creameries in Kentucky. None of these boys ever miss an opportunity to help with club work in their counties.

The Illinois team, which won the cup in 1924, was composed of Harold Gaulrapp, who is now engaged in organization work with the Indiana State Grange and works at home on the farm; Elwyn Falkers now doing laboratory work for the Beatrice Creamery Company at Bloomington; and Donald R. Williams now employed by a commercial firm at Rockford.

In 1928 the champion team came from Nebraska. Joe King of this team is now supervisor of dairying at Nebraska State Institutions; Russell Hughes is a successful farmer in Nebraska; and Jesse Bilyeu graduated this year from the University of Nebraska.

For three years it was impossible to send the National champion team to the international contest in England. During these years Minnesota won the honor in 1919, Missouri in 1920, and North Dakota in 1921.

Oklahoma has furnished the champion team in more recent years, in 1929, 1930, and 1932. These boys are in school now, but will later prove their worthiness to represent 4-H club boys and girls of the United States.

The first two teams, 1921 and 1922, to be sent to England won the honor at the Southeastern Fair, Atlanta, Ga., which organization also financed the trip. Since then the national contest has been held each year at the National Dairy Show.

Junior Home Management Clubs in Wyoming

A junior home management club in Converse County, Wyo., meeting to study the managerial side of home making

WYOMING girls between the ages of 18 and 24 who have had several years work in 4-H projects in foods, clothing, and room furnishing, or who have had sufficient experience through high-school training or at home, are becoming deeply interested in a detailed study of the managerial side of home making.

These girls feel that they have finished the 4-H projects offered, and yet they are not ready to enter the homemakers' club with their mothers. For this reason, the Wyoming Extension Service has offered them a junior extension club in home management.

Esther Pond, home management specialist, together with some of the home demonstration agents, worked out such material for the project as was felt would be most helpful and interesting to the girls. Miss Pond says: "Not enough girls know how to manage their three tools—time, energy, and money—when they go into homes of their own. That's why we are anxious to help them at the age when we think they need it most. We want our girls to take responsibility and to be future leaders for our 4-H clubs."

The object of this project is to train the girls to make use of the head in the management of their hands, heart, and health. There are tasks to perform, which they may think they know how to do, but which when they study and use the methods suggested they find new and more efficient ways of doing each. They are taught that good management calls for careful thinking in advance, the planning of work to be done, the kind of equipment to be used, step-saving arrangement of equipment, and efficient methods of work.

Gayle Neubauer, home demonstration agent in Converse County, was the first agent in the State to see the need for such a club in her county and to organize a group of 10 former 4-H club girls.

This club plans to meet every three weeks for study. Evening meetings are necessary, as some of the girls are employed as teachers, stenographers, and sales girls, and some are in school.

Club Requirements for Members

(1) Attend not less than three-fourths of all meetings held.

(2) Study the correct method of caring for the bedroom and making beds, cleaning, care and equipping of a closet and dresser drawers, caring for the living room, keeping a personal or home account book, the job of being a hostess, managing the preparation of a meal, dish washing, the family laundry, and ironing.

(3) Assume the responsibility of doing each of the tasks studied for one week as a share of the routine housework and by so doing make it a habit and establish the practice in their homes.

(4) Act as a leader at one or more meetings.

(5) Assist whenever necessary in group or county-wide meetings.

(6) Make a final report of all work done, including a story of club experiences for the year.

Every girl is taking an active part in the new club, and several already report many improved practices adopted in their methods of doing home work.

Each girl has her personal account book up to date and many are finding that they could improve the management of their money, particularly for the amount spent on candy and lunches between meals.

This junior club will help in making arrangements and carrying out plans for the annual 4-H club camp this summer and the county-wide achievement day in the fall.

A second junior home management club under the leadership of their home demonstration agent, Irma Bradford, which is composed entirely of young married women within the age limit, has recently been organized in Lincoln County. These young ladies find many problems in common in their managing and want to get started on the right foot early in their married lives. Several other groups in this county have indicated their desire for a junior club in home management.

"WHITE House Conference, 1930," is the title of a new pupblication that is the key volume to all the reports of the White House Conference on Child Health and Protection. It contains the leading speeches delivered at the conference and abstracts of the committee's reports with their recommendations. This book is available in an attractive board edition at 50 cents or bound in cloth at $2 from the White House Conference on Child Health and Protection, Interior Building, Washington, D. C.

SEVEN hundred Pennsylvania poultry men grew 339,046 birds in the 1931 "Grow healthy pullet" project. Columbia County was first with 140 poultry men completing the project and Wayne County was second with 119. The mortality losses varied from 18.49 per cent, where none of the 5 recommended clean practices was followed, to 6.87 per cent, where all recommendations were observed.

IN THE past five years Mrs. A. C. Goodman, Madison County, Tenn., has missed only two days on the Jackson Curb Market, and during that period has averaged more than $10 per day, states Miss Bertha Corbitt, home demonstration agent.

Teamwork in Two Arizona Counties

THE narrow wind-swept valleys of Navajo and Apache Counties, in Arizona, afforded but a meager home and a precarious existence to the dauntless pioneers who invaded the unpromising loneliness in the "early seventies." It was 800 miles over deserts, canyons, and rivers to Salt Lake City, 200 miles to Prescott, and the trips to Phoenix and Tucson were made on a horse. The nearest railroad in 1879 was at Albuquerque, so the isolation was complete. Besides, they were in the center of Indian and outlaw country, and it took no end of skillful maneuvering to maintain some degree of peace and security.

In spite of the hardships incident to pioneer life, respectable homes were established. A few cattle were collected and maintained on the "thousand hills," and gardens, orchards, and fields of limited area were placed under irrigation. The larger ranges were controlled by a few cattlemen and sheepmen, and revenues from this source were not shared to any large degree by the settlers. Established markets were too far away to reach with large quantities of farm produce, so much of the living of most of the "farmers" was obtained by freighting, chiefly from the railroad to Fort Apache.

But times change. Towns along the railroad grew up. Some of the large range holdings changed hands and others were subdivided. Automobiles came in, the farm bureau was organized, and finally in 1916 agricultural extension work was established.

"At this time," writes County Agent Charles R. Fillerup, "approximately 40 per cent of the farm people of Navajo County made their cash incomes from freighting to Fort Apache and the Indian agency at White River. Immediately on noting this condition I began working toward sustenance production, saying that present conditions could not continue and we must prepare for coming changes. In 1919 came the Apache Railroad. * * * Fort Apache was closed as a military post in the fall of 1922. * * * In 1922 and 1923 trucks usually not owned by teamsters, came into freighting activities. Four years ago, 1927, the last team—John McCleve's—quit freighting."

The farm bureaus and the new agent formulated written plans for the development of the agriculture of the district—Navajo and Apache Counties. These plans were centered about supplying home-raised food and developing an agriculture that would support livestock, chiefly dairy cows, hogs, and chickens.

Many a State specialist, returning from a stiff schedule of method demonstrations over both counties, has heaved a great sigh of relief when the job was done, and wondered how any county agent could keep up such a terrific pace, regardless of weather, roads, and distance, month after month and year after year.

It is difficult to portray the enthusiasm of those early years. Great crowds flocked out to those meetings. Many times almost every man, woman, and child in the whole community "came early and stayed late." Spring and summer campaigns to stimulate the growing of gardens and corn, to produce butter and cheese, were followed in the fall by local farm bureau fairs. Here the produce of the community was assembled, judged, and awarded ribbons. Picnics, speeches, and dances frequently followed, leaving a keen appetite for more.

In 1923 the work in the two counties was divided, Mr. Fillerup remaining in Navajo County and David W. Rogers being assigned to Apache County. In all of the hurry and rush the main goals were kept in mind. Home production of possible food supplies soon reached the demand and surpluses were had to sell in the "railroad towns." When the agent first came he wrote: "There is scarcely a score of good dairy cows in both counties." Responding to the stimulus of the gospel of better bred cattle, 38 registered cows and 25 bulls were obtained in 1916. Between 1917 and 1931 a total of 793 high-grade dairy cows and 60 registered dairy females were brought in and 78 registered dairy bulls were introduced or placed to advantage in the two counties.

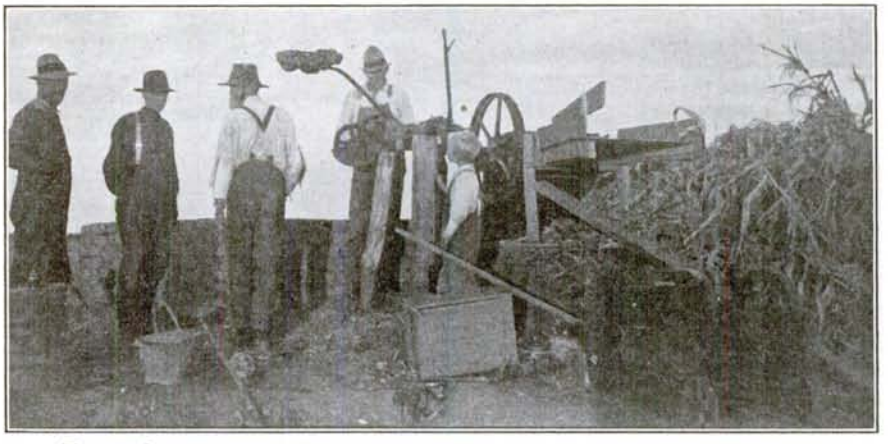
Number of Cows Increased

The last census shows the cows and heifers 2 years old and over kept mainly for milk production to have increased from 525 in 1920 to 1,091 in 1930 in Navajo County. A smaller increase is noted for Apache County, but the cows listed as kept mainly for milk production in 1920 in both counties would scarcely be classed as anything better than range cows. In 1931 Mr. Fillerup reports 1,850 head of good dairy cattle in Navajo County alone.

To produce profits, dairy cows require abundant feed. Fine pastures on the range at certain seasons help some, especially in caring for the young and dry stock, but cows in milk require better treatment. In Navajo County the farm bureau and the agent began a program to find a variety of corn or sorghum suitable to every location in the county and for both silage and grain. Sixteen years of variety tests and field selections have brought handsome returns.

In 1916 almost the only corn grown outside of the gaily colored Indian corn was native white flint and white dent. These yielded 30 to 60 bushels per acre. New varieties introduced into Navajo County are reported now to make yields exceeding 100 bushels of shelled corn per acre, while both corn and sweet sorghums have weighed yields of over 30 tons of green fodder per acre. Now for all corn areas in Navajo County there has been found a profitable variety for each purpose.

The work is well started in Apache County. Here the agent and farm bureau are specializing on crops for high



Homemade cutter attached to mowing machine gears to develop speed for cutting

elevations. They have tried out Mammoth Russian sunflowers at elevations of 8,500 feet with promising results.

Profitable dairying in cold climates requires succulent feed in winter. Northern Arizona is no exception. In 1915 there was not a silo or an ensilage cutter in all northern Arizona. The county programs called for silos, and silos they went after. The first one was built in 1916. Sometimes the agent could get only a pit dug and the corn put in without being run through a cutter, the stalks being cut in the spring with an axe. At one place the farmers were so hard put that a cooperator who dug a pit silo had to make his own ensilage cutter. It was crude but effective. One silo and one ensilage cutter were enough for a beginning. Tours and discussions, kept up year after year, did the rest. At the end of 1931 Navajo County had 234 silos—pit, trench, and above ground. This is nearly one for every dairy farmer in the county.

In Apache County the silo idea has been harder to sell. A dozen farmers took a tour into Navajo County in 1929. They saw the silos, saw the corn, saw the cows milked, and talked with the farmers. Five silos were filled in Apache County that fall, 18 the next, and 25 last year.

What is the significance of these accomplishments?

From having almost no cash income from irrigated farm sales in 1916, most farms now supply a great part of their own food and have developed an income from sales of truck, poultry, or dairy cows. Records show that since 1928 more than $11,000 worth of cream has been shipped from one station serving Apache County, which is just beginning to obtain milk production in quantity. The most conservative estimates place the monthly income in Navajo County at $4,500 per month from the sale of milk at the farms for town consumers, to say nothing of the revenues from cream and butter sales. In fact, quantity production in this county has reached a point where a butter, cheese, and ice-cream factory is being established to care for the surplus.

The promise of the future still holds. The poverty and distress which threatened to come from the loss of revenues from freighting to Fort Apache have been replaced with revenue-producing dairy herds, flocks of well-bred chickens, and gardens and fields large enough to support the home plant.

Scholarship Winners Complete Year's Work

Mary L. Todd

Andy Colebank

MARY L. TODD and Andy Colebank, who had been studying nine months in the Department of Agriculture on the Payne scholarship fund, are this month completing their work here.

Mary Todd will go back to Georgia, her native State, as home demonstration agent in Carroll County. She graduated from the University of Georgia last year and received the Payne scholarship for excellence in scholarship, her nine years of 4-H club work, and the leadership qualities she had shown. She came to Washington last September and first worked for several months in the Bureau of Home Economics, where she assisted in the preparation of material for the President's Conference on home building and home ownership and became familiar with the work of the bureau. She has also made a study of the organization of the department and the material available from the Government which might prove helpful to a home demonstration agent.

Andy Colebank graduated last year from the University of Tennessee and was awarded the Payne scholarship as the 4-H club boy graduating from one of the land-grant colleges who ranked the highest in scholarship, leadership, and the quality of his 4-H club work. His specialty is dairying and he has spent much of his time in the Bureau of Dairy Industry. He assisted with the department exhibit at the Dairy Industries Exposition in Atlantic City and has become familiar with the research being carried on in the bureau. He feels that one of the most valuable things he has gained from his work in the department is the knowledge of the great variety of experiments being carried on and the immense amount of material which is available to county agents and to farmers for the asking.

The Payne scholarship winners for next year are Margaret Latimer, of South Dakota, and George M. Harris, of Kentucky. These young people. who graduated from South Dakota State College of Agriculture and Mechanic Arts and the University of Kentucky this spring, will come to Washington next September to begin their work.

TWENTY members of the Virgie 4-H Club in Pike County, Ky., are putting their 4-H food club work into immediate use by preparing meals for poor children, according to Marie E. Fortenbery, county home demonstration agent. Food donated by friends was prepared and served to 150 undernourished children. Tomatoes, oatmeal, prunes, milk, soup, and cocoa were among the foods distributed.

North Carolina Turns the Corner

I. O. SCHAUB

Director, North Carolina Extension Service

CUSTOMS and habits resist change. This is especially true in farm life, yet perhaps no line of business is more quickly or definitely affected by new economic conditions. No one can question that there have been unusual economic adjustments since the World War. The effect of these on every farmer has been unusually severe and sheer necessity has compelled all farmers to adjust operations to new situations.

For more than a generation North Carolina farmers have grown mostly cash crops. They have produced cotton, tobacco, peanuts, or other cash crops for the market and depended on income from these to pay all operating costs, purchase family food and livestock feed, and provide for any other needs or luxuries. When farm commodity prices tobogganed a few years ago our cash-crop farmers immediately ran into financial difficulties, and in thousands of instances their families were in real want for the necessities of life.

To correct this situation, a radical change in the agricultural program of the State was necessary. To this end the agricultural college, together with all other recognized agencies, applied their efforts.

It was agreed that the production of food and feed, at least for home needs, and a reduction in acreage planted to cash crops, was fundamental and conducive to a sound agriculture. Headed by the governor with the slogan, "Live at home," an active and continuous program has been put on in every section and county of the State.

Information Assembled

The college first assembled information showing the amounts of various commodities necessary to properly feed the people and also giving the surplus or deficit of these commodities produced in every county, and for the State as a whole. The most reliable information showed that North Carolina spent approximately $150,000,000 annually for imported food and feed.

Cash-crop farming does not utilize labor and equipment throughout the year. Therefore it was emphasized that sufficient food and feed for at least the actual farm needs could be grown with the available labor on the farm and the cost of production thus be held at a minimum. The press of the State, the public schools, civic clubs, merchants, and other agencies joined in putting such facts before the people.

One especially effective means of reaching each home was a food and feed budget for a family of five. This budget was printed on a single sheet of paper, one side of which showed the requirements for an adequate diet, while the other side carried blank spaces to aid each family to work out its particular requirements and thus show the surplus or deficit existing on that farm with each item.

A copy of this budget was supplied through school principals to every high-school student in the State. Several counties reported more than 90 per cent of the students working out a budget for their individual homes.

The success of the program is indicated by a pronounced shift in acreage from cash crops to food and feed crops. In three years there was a decrease in cash crops amounting to 541,000 acres and an increase in food and feed crops of 865,000 acres. The value of the increase in food and feed at present low prices amounted to $42,289,000. Even with this remarkable change, the State has not yet reached its goal of a self-sustaining agriculture, though it is nearer to such a goal than it has been in 50 years.

Live-at-Home Program

The attaining of the "live-at-home" program, however, is only part of the goal. North Carolina still needs to balance crops and livestock so as to utilize labor and equipment to better advantage and likewise to adapt production to market demands. To this end during the past year extension workers held a series of regional meetings in various sections of the State. To these meetings were invited leading farmers, home makers, business men, vocational teachers, county and home agents, and boys and girls from the 4-H clubs, representing each county in the State.

Each of these regional meetings covered a 2-day period. At the first session on the opening day the economic situation, as it affects agriculture, and the supply and demand outlook for the main commodities grown for market in North Carolina were presented to those attending. To many, one of the surprises at these meetings was the evident interest of our farm women in economic and outlook charts and facts.

Committees Formed

After receiving information on the economic situation, the delegates divided into groups or committees along the lines of crops, livestock, farm management and reorganization, clothing, nutrition, family living, and the like. On each such committee were farmers, farm women, business men, and college specialists, representing each subject-matter group. During the afternoon and evening these committees worked out a recommended program applicable to the particular region in which the conference was being held. On the second day the committee reports were presented to the group as a whole and, as finally adopted, were printed for general distribution.

It is as yet too early to measure the success of these conferences, but the comments of those in attendance to the effect that they were the most profitable agricultural meetings they had ever attended indicate progress.

North Carolina agriculture is not yet out of the woods, but many farmers have publicly stated that they have turned the corner and can go forward even though commodity prices remain at a low level.

REPORTS from 37 counties in Arkansas show a total of 15,839 trees planted as memorials to George Washington during the months of February and March by farm families who are cooperating with county agents and home demonstration agents. As a definite part of a landscape plan 5,738 of these trees and 12,758 shrubs, also memorial plantings, were placed on home grounds. Extension agents report that 7,792 shade trees and 8,047 fruit trees were set out. Many of these trees were planted by individuals, and still others by home demonstration clubs, 4-H clubs, and other farm organizations.

Connie J. Bonslagel, State home demonstration agent, who was chairman of the committee, has made arrangements for presenting to the counties which send in the best reports rooted ivy plants from Mount Vernon.

Farm Machinery Repair Campaign

A binder which had not been repaired before it was taken into a field of overripe rye made this poor shock

CO-OPERATIVE EXTENSION WORK
IN AGRICULTURE AND HOME ECONOMICS

To Decatur County Farmers:-

Were you ever in this situation during HARVEST?
a broken down MOWER or BINDER
and HARVEST HANDS LOAFING

Then hit the road
for REPAIRS
or to BORROW
or to BUY a NEW ONE

This is what it cost to repair these mowers last year.

Age		cost of repairs		Owner.
37	yrs.	$ 3.35		Wm.Cahill
30	"	1.40	"	O.Underwood
30	"	5.40	"	Bd Hoff
33	"	7.89	"	Parker Bros.
*28	"	3.25	"	C.G.Patterson
*27	"	.12	"	Walter Kite
*25	"	2.75	"	O.A.McCoy
30	"	13.80	"	R.R.Oldham
15	"	1.17	"	O.Ketchum
Average cost		4.27		

The mowers marked with the * were cast aways. You can easily check over your mower and put it back in line by following the instructions on the inclosed sheet. Another letter will follow soon on how to prevent pulling knife heads, etc.

County Agent

One of the letters which was sent to farmers

A binder that had been repaired made this shock

IT IS one thing to tell a farmer he should keep his farm machinery in repair, ready for the season's work, but even more important and practical is it to tell him how to do it.

In applying this helpful advice and instruction to his cooperative extension activities last year, I. L. Thurston, county agricultural agent, at Greensburg, Ind., conducted a complete county-wide campaign on the repair of farm machinery.

Farm machinery repair schools were held in every community in Decatur County. At least one old mower and a binder were repaired in each school. George O. Hill, agricultural extension engineer, of Purdue University, gave the instructional work. This was followed with a county repair week in which the local implement dealers assisted in the advertising and cooperated in other ways.

This year the work is being followed up in the county with instructional letters to all farmers in the county. The first letter gave the names of the farmers attending the school in each community as references. Five hundred and four farmers attended the schools.

These circulars mentioned the results of last year's work and gave explicit instructions, with diagrams and illustrations, as to how mowers and binders can be successfully repaired; steps employed in timing the mower, aligning the sickle bar, reconditioning the knife, wearing plates, guards, and the like.

Some of these instruction letters are in the form of questions and answers, such as:

Does the mower knife catch on the guard lips? If so, put on new wearing plates and clips.

Does the knife drag grass into the guard? If so, put on new ledger plates, new wearing plates, and new clips.

The repair campaign brought to light some interesting facts on the durability of mowing machines, if properly cared for, and certainly contradicts the oft-heard statement that "the average life of farm machinery is about 10 years."

One farmer brought in a 37-year-old mower which he had discarded and had it repaired at a cost of $3.35; three other mowers aged 30 years each were repaired at costs ranging from $1.40 to $7.89; another farmer who had discarded a 27-year-old mower had it put in good cutting condition for 12 cents.

Aside from the savings that may have been effected by these repair schools, the importance of care, timely repair, and housing has been most forcefully brought home to the farmer, and the cooperation of local dealers has no doubt done much to stimulate a better understanding between these merchants and their farmer customers.

Florida Women Add to Income

FOR home products they sold last year, home demonstration club women and girls in 23 Florida counties received $87,110, according to reports recently compiled and shown in an exhibit before the Florida Federation of Women's Clubs.

The exhibit was composed mainly of representative samples of home products the women have been selling and posters revealing the amount sold last year. Several neatly labeled cans of "Florida Sunshine" vegetable soup, 1,044 cans of which were sold by Gadsden County women for $251, were shown. Another woman from the same county showed two pints of canned chicken. She had sold 75 pints at 75 cents each. One Alachua County woman had sold $500 worth of baked foods, while a woman in Dade County had received that amount from the sale of jellies and marmalades, and another in Orange County had received nearly that much for crystallized fruits.

A pine-needle basket of pecans was shown by a Lake County woman who had sold 1,000 of them. One Dade County woman received about $400 for decorated gourds, while another got $330 for products made from coconut fiber. Alachua women reported $140 from the sale of wreaths, a beautiful one of which decorated an exhibit-room window.

In Orange County one woman had received more than $1,000 from the sale of flowers and plants, while a Dade County woman reported $77 received for Easter lilies. Many other products, including hooked rugs, vegetables, canned rabbit, and the like were shown.

Lowering Food Costs

SARA E. COYNE

State Home Demonstration Leader, Rhode Island Extension Service

THE varying topography of Rhode Island, beginning with the sandy shores of the Atlantic, going on to just as sandy country, to more fertile farm lands, then villages and cities, make it necessary to have an extension program that will meet the needs of many different types of homes.

It was decided to study the conditions and discuss them with the women from all over the State. The women's camp held in June, 1931, gave this opportunity. Committees were appointed, and one hour on each of four days was given to discussions of all projects. The foods and nutrition committee, comprising 15 women from every part of the State, brought in a report that feeding the family on a reduced income was the problem in every section.

"How are we to spend the available cash to the best advantages of the entire family? I have $35 per month to spend for food, clothes, and household expenses. What can I spend for food for a family of five? It isn't possible for us to have a garden because the soil is too poor." From another section we hear, "We can grow plenty of vegetables and fruits, but we need cash for meat, groceries, and the like." These were some of the questions that came before the committee.

During the conference it was found that more money was spent for meat than for other foods; from one-fourth to one-half the money spent for food was spent for meat. Here was a very tangible problem for the committee to have low-cost menus to reduce the meat bill, or to quote Aunt Sammy, "Keep the family yearnings within the family earnings."

The foods project was planned to take care of this problem. The outline was as follows: The project outline was to show that by careful planning of both time and money spent the cost of food purchased could be reduced. Planning ahead was the first problem so that marketing could be done advantageously.

Low-Cost Menus

Low-cost menus were worked out using the Washington market basket, material from other States, magazines, and news articles, these having been adapted to the conditions of this State.

Market orders for a family of five were made out for $5 per week from these menus, prices having been secured from local and chain stores.

Four meetings were given to complete the project, which included the following:

1. Cheap cuts of meat and the low-cost seasonal vegetables.
2. Meat substitutes emphasizing the dairy products.
3. Fish, since it is so valuable in the diet, very inexpensive, and always available in Rhode Island.
4. A community meal to carry out the idea of low-cost menus farther afield. These meals have cost from 7 cents to 15 cents per person.

Subject matter, menus, recipes, and leaders' supplements were made out for each meeting.

The garden project as a part of the foods project to reduce living costs and give a well-balanced diet was carried right along with the foods project. Starting in February, the garden specialists, both vegetable and fruit, worked out plans and cultural directions for a vegetable and fruit garden for a family of five. Canning and storing budgets were given out and preparations made for canning bees and schools during the summer months. A garden contest is a feature of this project.

Records and Reports

Report forms are made for individuals and groups in each project. Household account books with pages for records for two months were made available to the women signing up for them. Garden record books were furnished those entering the garden contest.

The leaders of each group send in a leader's report of the work done, attendance at each meeting, and the like, to the county office.

The method used to carry on this project is the usual local leader school, each group sending two leaders for the entire project. These schools are held the first week of the month, the leaders planning for their own meeting some time during the month.

Subjects Discussed

Subject matter, recipes, and leaders' supplements are discussed by the agent or State leader at the leader school, and an entire meal is prepared by the women. The household account book which was developed to meet the needs of the women to know where they could cut expenses, proved very helpful and interesting.

Even the more fortunate Rhode Island farmer in a fertile area who could in the past make a fairly good living for his family with a home vegetable and fruit garden to help supply a balanced diet, had difficulty in making ends meet. Milk, the principal farm product, has dropped in price in the last year and a half from 9 cents per quart delivered in Providence, to 4½ cents. Since it costs 6 cents to produce a quart of milk the income of the dairy farmer has simply disappeared. Something had to be done and low-cost menus seemed to be the answer. The household account books were talked over at leader schools, and those who were interested enough to sign up and return them when filled in were to receive them. A letter and a second book were sent out at the end of the two months. The returned books have much valuable information. The agent visits each group at least once during a project to note the progress of the leaders.

Results

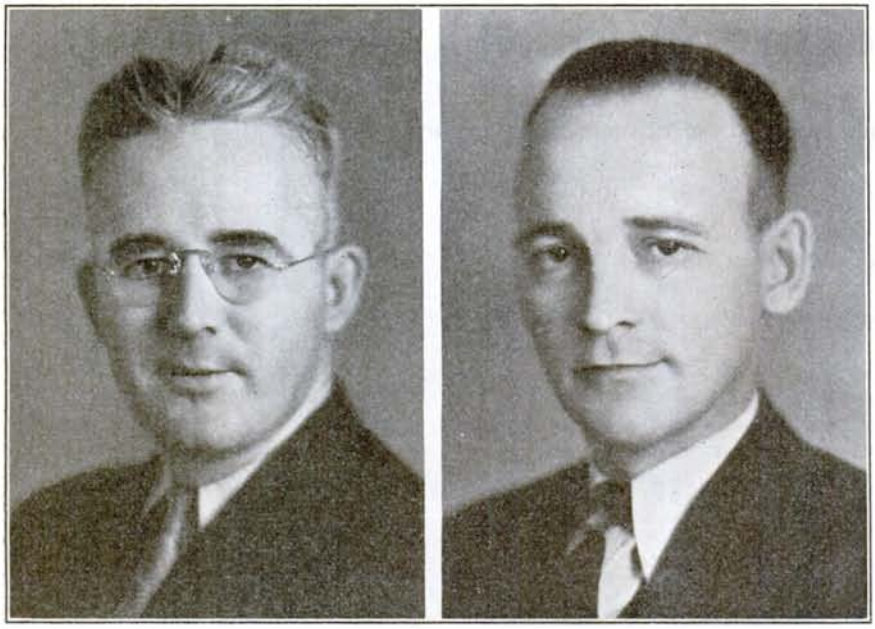
Since the project will not be completed until June, the results as yet are not far reaching nor awe inspiring. However, there are 125 women in two counties keeping household records and sending in reports; 138 have signed up to have a garden; and 27 of these have entered the garden contest. About 1,100 women have been reached through the project. Food scores have been improved from 5 to 40 points.

Improvements Made

The most interesting results have been from the women using the low-cost menus and market orders. They have gone on and improved upon our suggestions, and any number have reported living on $5. The reports from three farm women who grow and can vegetables and fruits have been 23 cents per person per day. The interest they have taken in keeping records and reporting on this phase of the work has been most inspiring. Several mill districts have requested the low-cost foods demonstration for their help out of work. A series of four evening meetings reached 500 women.

The attendance at the leader schools has been almost 100 per cent. We were anxious to know how the leaders made out at their meetings for reports can sound very rosy. The leaders were visited both at group meetings and at home. They were asked what difficulties they had encountered and what changes they would make. The first thing some leaders said was that they

(Continued on page 108)



L. M. Vaughan T. S. Thorfinnson

L. M. Vaughan and T. S. Thorfinnson have cooperative positions with the division of extension in agricultural economics of the Office of Cooperative Extension Work.

Doctor Vaughan, who has been assistant extension professor in farm management of the New York State College of Agriculture, is with this office on a cooperative agreement. He will assist in farm management and outlook extension work and especially will aid in developing the economic policy boards or county councils, which have the job of developing a long-time agricultural policy and program of the county.

Mr. Thorfinnson, extension economist in farm management of the South Dakota State College, will be with this office until November 1. He will study particularly methods of doing farm accounts and outlook work with a view to aiding extension agents in the States.

Lowering Food Costs

(*Continued from page 107*)

"had too much to do—too many different things to put across"; second, "The subject matter was not simple enough"; and third, "The leaders were unable to hold the interest of the group."

This third point is the most important one, as the success of the project depends on the ability of the leaders to carry out the meeting as planned in the leaders' supplement, dividing up the work among the group members, and keeping them busy and interested.

The leaders were asked if they felt that the local leader method was worth while or if they would prefer having the agent carry every meeting. They said, "It would be fine to have the agent at all our meetings, but I wouldn't miss the leader schools for anything. It has meant so much to me to get away from home to meet and work with women from other parts of the county aside from the help it has been to me in feeding my family and making ends meet."

APPROXIMATELY 5,500 packages of garden seed and a quantity of seed in bulk have been donated to farm families in the drought area and to members of home makers' clubs in various sections of the State by the North Dakota Agricultural Experiment Station. The seed was grown in the experiment station gardens and is being distributed by county extension agents.

The seed is being supplied to every member of home makers' clubs in Burke, McKenzie, and Golden Valley Counties and to two members of each club in Cavalier, Cass, Morton, Slope, Hettinger, Benson, and Adams Counties. In sections where the drought was most severe scores of farm families are being supplied with small amounts of seed direct from the office of the county agent.

All of the seed is of varieties developed at the experiment station, including Sunshine and Golden Gem sweet corn, Buttercup squash, and Progress and Bison tomatoes.

Potato Crop Saved

WHEN late blight, a brand new disease to the Lower Rio Grande Valley of Texas, hit Cameron County potato fields in the spring of 1931, quick action on the part of H. L. Alsmeyer, county agent, staved off utter loss of the crop by limiting the damage to 30 per cent, and resulted in a less than 5 per cent loss this past spring. The value of the crop saved in 1931 was $650,000, and the estimated value of the potatoes in 1932 was $660,000.

Specimens of the first diseased plants reported were taken to W. J. Bach, plant pathologist of the Texas Agricultural Experiment Station system at Weslaco, where the disease was identified and control measures of Bordeaux mixture spraying outlined. Mr. Alsmeyer published the findings and recommendations in all nine papers of the county and over two radio stations. He visited demonstration leaders in all potato communities to counsel quick action. There was not a power potato sprayer in the county, since dusting was the common method used in pest control, but within three weeks there were seven power sprayers at work. Those who could not get the use of these sprayers resorted to dusting with a copper-lime dust which was more expensive than the Bordeaux and less effective. Losses were largely confined to these fields and to those where nothing at all was done. In the latter cases the loss was 100 per cent. The cost of spraying was from $1.25 to $1.50 per acre.

The disease appeared again in the spring of 1932, but growers were ready with 22 power sprayers which protected about 25 per cent of the crop and the remainder was dusted with copper lime. Losses on the 10,400 acres were almost negligible.

Tomatoes were also attacked by late blight in 1931 and 50 per cent of the crop was lost from this cause. About 75 per cent of the crop was sprayed or dusted, but the greater difficulty of doing the job resulted in the higher losses. Had it not been for the control measures, however, the loss probably would have been almost complete. The value of the tomato crop saved was $993,000. Practically no damage from late blight was reported by tomato growers in 1932.

MORE than 70 Arkansas communities in about 45 counties are carrying on a community-wide landscape planning and planting according to the 5-year plan sponsored by home demonstration agents.

Ohio Outmaneuvers the Army Worm

TWICE in fourteen years! That is the record of army-worm outbreaks in Ohio according to T. H. Parks, extension entomologist, Ohio State University, who directed a successful campaign against these worms last summer.

These outbreaks in 1919 and in 1931 were not in the same place and covered only local spots, comprising parts of one or several counties. Last summer there were several such spots in widely separated parts of the State, but all within a relatively narrow band from southwest to northeast. The largest spot covered a considerable part of five counties in central Ohio with the city of Columbus on the northern edge.

The first report of army worms came from a community 15 miles east of Columbus, where the worms were discovered in fields of rye on June 20. They were eating the leaves from the rye stalks and a few were commencing to migrate to rows of corn across the fence. From this date until July 3 the battle was on between the army worm as the invaders and the farmers of central Ohio as the defenders.

Organization

While the extension entomologist was appraising the gravity of the army-worm situation on June 20, telephone calls were received to the effect that the same discovery had been made in near-by counties. The worms were present by the millions in rye and wheat fields then about two weeks before harvest. It was apparent from the start that this was a job for immediate organized effort. On June 21 direction sheets were prepared describing the preparation and use of poisoned bran mash to control the army worms. These directions were sent in quantity to the county extension agents within and around the known area of the outbreak. These reached the county agents on June 22 and in some counties were available for delivery when the first anxious visitors reached the county extension offices. On the same day the directions were taken in quantity to elevators, banks, and leading stores in the rural towns. That evening a Columbus newspaper carried a story of the outbreak and the method of control recommended by the extension service.

On June 23 the first radio broadcasts were made and the information was given three times each day thereafter from the Ohio State University radio station and each noon from two other Columbus radio stations. A fresh supply of direction sheets was prepared and delivered to the farmers with each order of Paris green purchased. The extension entomologist and the county agents were giving directions over the whole area during this time. One county agent was called home from State club camp and another postponed his vacation trip. During the two weeks of army-worm outbreak the extension entomologist and county extension agents found it advisable to stay by the telephone during most of the day and to drive to the center of poisoning operations in the late afternoon and evening. Each day it became more and more apparent that the information was reaching the people through one of the various means used.

What Happened in the Field

After supper hours whole farm families assembled at the edge of their corn field scattering poisoned bran mash, or appraising the work of the day. Some had constructed dusty furrows between the infested small grain and the corn to be protected. Into these furrows the poisoned bran was scattered daily. One grower, whose corn adjoined a field of rye, was tardy in getting his poisoned bait scattered. The result was that six acres of his corn was destroyed by the worms in three days. Not to be outdone, this grower then scattered the mash through his entire oats field and got immediate reprisal with complete control of the worms. Wheat and rye fields were not treated with the bran mash because these grains were too nearly mature to be seriously injured.

On June 23 the extension entomologist visited the community, where the outbreak was first reported and where he had demonstrated the use of the poisoned bran mash on the previous evening. Several neighboring farmers had applied the mash as directed, and within three hours after applying some of the worms were found dead.

During the next week army-worm poisoning was the business of the day on many farms in the five counties. Sunday, not being observed by the worms, saw the battle continuing on both sides. Ammunition soon was low and Columbus wholesale supply houses found themselves out of poison. Overnight express service from Cleveland remedied this. One elevator in Grove City, during the first four days of the battle, distributed approximately 700 pounds of Paris green to 150 farmers in that community. By using the poisoned bran mash intelligently, and in some cases in combination with dusty furrows, most growers were able to save their corn from injury.

By July 4 inquiries ceased coming to the county offices. The farmers had saved their corn and oats, but the worms had in some cases destroyed the little clover and alfalfa growing in the uncut wheat fields. This constituted the most serious damage done by the army worms over the affected area. By July 6 there were few, if any, worms to be found in the wheat or rye fields. The absence of leaves on the wheat and rye stalks and the larval excrement on the ground were all that remained to mark the scene of battle. Beneath the soil in the wheat fields one could dig up pupae of the army worms which had not migrated from these fields or wandered into the barrier zones laid down by the irate farmers. The main outbreak covered an area the shape of an ellipse extending about 40 miles long and 18 miles wide.

Trade Cows for Soybeans

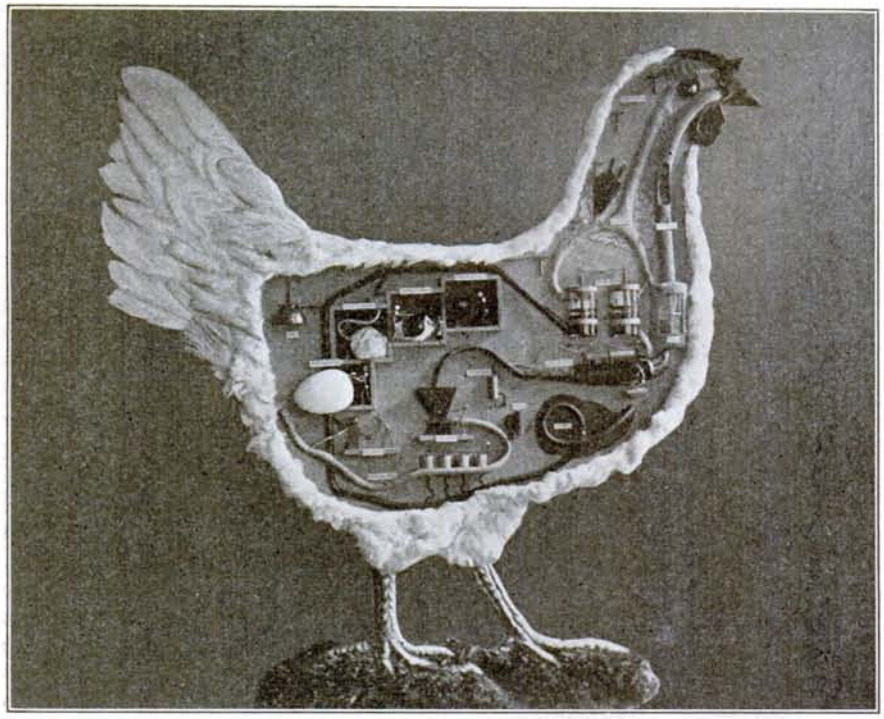
Beaufort County, N. C., farmers have 13 high-grade dairy cows and Davidson County farmers have an adequate supply of soybean seed for planting this year because of a satisfactory exchange arranged by the county agents with these two groups of farmers who are about 225 miles apart. When County Agent P. M. Hendricks, of Davidson County, learned that a group of his cooperating farmers needed some soybean seed and had some surplus cows, he took up the matter with County Agent E. P. Welch, of Beaufort County.

A. C. Kimrey, dairy extension specialist, was called and asked to inspect the cows and select those which would be suitable for the Beaufort farmers. A price of $56 each was agreed upon for the 13 animals selected and the handling charges amounted to $3 additional, making the total cost $59 each. The Beaufort farmers set their price for soybean seed at $1.60 for Laredos and 60 cents for Mammoth Yellows. On this basis was the exchange made.

MORE than $2,000,000 worth of miscellaneous farm commodities alone was handled by Mississippi farmers cooperatively through cooperative marketing organizations in 1931, with the assistance of county and State extension agents, according to T. M. Patterson, marketing specialist.

Fair Association Builds Exhibit

ONE of the special display features which the Office of Exhibits of the Department of Agriculture exhibited at State and Interstate fairs in 1930 and 1931 was a mechanical hen. It was designed in 1930 to show at the Fourth World's Poultry Congress in London as a part of the United States Government's exhibit. This hen stands 6 feet high with a voice of proportionate volume. It is made of wood, wallboard, feathers, and steel, and uses its voice with great effectiveness to tell how eggs are produced. It explains digestive processes by pointing out representations of the various organs in the body, some of which operate mechanically. The voice is produced by means of special phonograph records and amplifiers. Since then this exhibit has been very popular and a demand for it from county fairs has developed.



Owing to the limitation of appropriations for exhibits and the wording of the law, the Office of Exhibits is unable to lend exhibits to other than State and Interstate fairs. Consequently there seemed to be no way of making this feature available to the county fairs.

During 1931, however, the Massachusetts Agricultural Fairs Association conceived the idea of having the mechanical hen reproduced and making it available to a circuit of fairs in its membership and last year had one built.

The Massachusetts State College, the Massachusetts Department of Agriculture, and the Massachusetts Agricultural Fairs Association furnished the funds for building the exhibit and it was rented to fairs for $25. The exhibit was transported by truck from one fair to another and was in practically constant use after the middle of January. During a showing at North Station in Boston, November 16 to December 28, it was estimated that 150,000 people saw the mechanical hen.

Exhibit Advertised

In order that the exhibit might be of the greatest benefit to the fairs a very carefully thought-out advertising and publicity campaign was arranged, made up substantially as follows: News releases were sent broadcast to every daily and weekly newspaper in Massachusetts; radio broadcasts in which the record carrying the story which the talking hen tells was used as well as music and other entertainment features. The itinerary giving the dates and location of the fairs where the hen could be seen was also a part of the program. Later the Fox Movietone News took a picture of it and she was shown in all Fox theaters in the United States. Every fair advertised the fact that it was going to have the hen and carried stories to that effect in their local papers, together with other publicity matter.

Massachusetts feels that this is the beginning of a most helpful movement, and that by this method only can outstanding exhibits be made available to small fairs. It is believed that through exhibition at all of these combined fairs it will be possible to reach a large number of farmers and other citizens.

This experience in making special feature exhibits available to county fairs suggests that if near-by States of similar agricultural interest, were so organized, it would be possible, by exchanging the exhibits, for the smaller fairs in every section of the United States to have access to high-grade exhibits. This would be particularly advantageous when some discovery was made which should reach people quickly or when some timely or valuable exhibit was developed. By duplication in each region the subject matter of such an exhibit could be brought to the attention of the whole country in a relatively short time.

AT THE Kansas State Agricultural College a group of former 4-H club girls, now in college, have rented a house and are living together cooperatively as a club. This organization has promoted the prestige of club work at the institution and at the same time has furnished a splendid means for girls with a small amount of money to reduce their expenses while in college.

FORTY-THREE new 4-H clothing clubs with 380 members were added to the steadily increasing ranks of North Dakota 4-H clothing clubs in 1931, Edna Sommerfeld, specialist in charge of junior clothing work, has announced.

Among the signal accomplishments of the girls last year were the making of 17,521 new garments and household articles, the renewing of 7,514 garments, and the mending of 17,924 pairs of hose. One hundred and seventeen clubs in 30 counties had exhibits or booths at local and county fairs. Aside from their regular projects many of the girls sewed for the Red Cross and remodeled garments from their own wardrobes for needy girls in their communities.

GOLD-medal honors in the Illinois 500-Pound Butterfat Cow Club were won in 1931 by a total of 131 dairymen in 35 counties, announces Prof. C. S. Rhode, State dairy extension specialist.

Each of them got a production of 500 or more pounds of butterfat out of one or more cows they had nominated for the club. In all, 218 cows met the requirements.

The Month's Best News Story

How do you make up a local news story from economic facts? That's a question that has come our way more than frequently in recent months. E. L. Stanley, county agricultural agent for Sacramento County, Calif., gives us an answer in the April 27 issue of the Sacramento Bee and incidentally supplies this month's best news story. This story is about the condition of the poultry business in his county. To begin with, he points out that this business in 1931 amounted to over $1,000,000 and that it was operated at a profit despite the fact that egg prices were the lowest in a generation. He shows, too, how he was aided in preparing the statement by the cost account records kept by 54 poultry growers in the county. Each of these growers, it appears, also equipped his plant with the type of poultry houses recommended for economical production by the poultry department of the University of California.

Further, County Agent Stanley points out that the bulk of egg sales by Sacramento County growers was made outside the county, bringing a very considerable amount of new money into local trade channels. It's a story calculated to interest not only the poultry growers but anyone living in the county and interested in its business development.

RIO LINDA DOES MILLION DOLLAR EGG BUSINESS

Poultry District Operates at Profit Despite Low Prices for Products

During the past year the Rio Linda poultry district of Sacramento County, one of the largest poultry sections of California, did a total estimated business of $1,000,000 and operated at a profit despite the fact that egg prices were lowest in a generation.

These facts are brought out in a report just released by Farm Adviser E. L. Stanley based on cost-accounting records kept in the district and checked by farm-accounting specialists of the University of California Agricultural Extension Service.

$1.09 per Hen Netted

The Stanley report shows that the average total income per hen was $3.19, feed costs per hen were $1.56, and the average farm income per hen was $1.09.

Average farm income is all income for the flock less all costs, including restocking and depreciation, but not including interest on investment nor an allowance for the operator's time.

The percentage of egg income to total income was 78 per cent, the average price per dozen of all eggs of all grades for the year was 19.7 cents and the average egg production per hen was 164. It is pointed out that this latter figure is considerably above the State average.

Fifty-four Keep Records

The cost-accounting records were kept by 54 poultrymen, who installed the university type of poultry houses and who used the university type of record under the direction of E. R. Temperli, poultry adviser for the Rio Linda Poultry Farms (Inc.).

In connection with the issuance of the report, L. B. Schei, manager of the Rio Linda Poultry Farms (Inc.), says that the total bird population of the district was approximately 285,000 hens at a recent survey.

He points out that the larger part of the egg sales were made at points outside of Sacramento, thus bringing a large amount of new money into the local trade channels. He says the poultrymen of the district during the past year have built 183 sections (16 by 16) of new laying houses, 130 sections of new brooder housing, and a few new dwellings.

466,000 Chicks Brooded

The brooding records for the district for the year amounted to 486,000 chicks, as compared with 380,000 chicks for the previous year.

Do Former 4-H Club Members Go to College?

A study has just been made to determine the number of former boys' and girls' 4-H club members now enrolled in courses in agriculture and home economics at the agricultural colleges in the Central States by R. A. Turner, field agent for the Central States, United States Department of Agriculture.

The results of the study indicate that the 4-H club movement is fostering a desire on the part of 4-H club members to obtain additional scholastic training and is directing an increasing number toward the State colleges of agriculture.

Data submitted by 10 of the Central States show a total of 1,724 former club members enrolled in these two courses alone. Indiana leads the States reporting with 41.3 per cent of the students in agriculture and home economics listed as former 4-H club members. Kentucky ranks second with 36 per cent, and Illinois is third with 30.2 per cent. Next in order of rank are Kansas, Nebraska, South Dakota, Minnesota, Wisconsin, and Michigan. Iowa reported that 22 per cent of the freshmen enrolled in these courses were former 4-H club members.

When data similar to these were first obtained in 1927–28, nine States reported 751 former club members at the State colleges. This number has steadily increased with each succeeding year. In every State but one, which submitted complete data for both 1930–31 and 1931–32, the percentage of former club members was greater than that of the preceding year.

It is probably true that the awarding of scholarships to 4-H club members has been a factor in encouraging attendance at the State colleges of agriculture.

AN "ACCREDITED" sign available to all tourist establishments meeting the requirements of the State board of health was adopted at the meeting of 200 New Hampshire roadside operators.

FOURTEEN 4-H club members of Clay County, N. C., grew an average of 58 bushels of corn an acre this season as compared with the county average of 15 bushels an acre.

GOOD pictures showing extension methods are obtained by County Agent William H. Evans, of Caroline County, Md., with the use of a self-timer device which enables him to step into the picture himself. This device is attached to the cable release and can be set for any interval from one-half second to one minute. The picture above showing the county agent demonstrating forestry methods was obtained in this way.

Highways Feature New Talking Movie

An International Study of American Roads, a 6-reel motion picture in sound, with an appropriate musical score arranged by Captain Taylor Branson, conductor of the Marine Band, and played by that famous organization under his direction, has recently been completed by the Office of Motion Pictures for the Bureau of Public Roads.

The extent of our highway system, service of the highways to the people, highway construction methods, and types of traffic served comprise the major portion of the subject matter, although the use of locally available road-building materials, effect of pneumatic and solid tires, weight and speed of vehicles, and the proper selection of road surfaces to meet the needs of the traffic using them are also presented.

An introductory speech by Thomas H. MacDonald, chief, Bureau of Public Roads, expresses the hope that seeing this picture will bring a better understanding among the road builders themselves as well as establish a greater interest in the mind of every individual who in any manner uses or is affected by the highways of the United States.

This is standard 35-millimeter "sound-on-film" suitable for use on any 35-millimeter sound-on-film projector.

Borrowers pay transportation charges from and to Washington, D. C. Application for loan should be made to the Office of Motion Pictures, Department of Agriculture, Washington, D. C.

Office of Motion Pictures in New Quarters

Visitors to the Department of Agriculture in Washington will now find the Office of Motion Pictures installed in the building at Sixth and B Streets SW., formerly occupied by the Bureau of Fisheries. To make room for the west section of the extensible building being constructed to house the department, it was necessary to find temporary quarters for this office, pending the construction of a new laboratory and the section that is to house the offices. The move of the Bureau of Fisheries into the new Department of Commerce building vacated quarters well suited for the activities of the Office of Motion Pictures. The installation of the complicated laboratory and studio paraphernalia has been under way for some time, and the office is now busy catching up with interrupted work. Extension workers will find a visit to this office well worth while.

Rural Electric Lines in New Hampshire

Enough rural electric line to reach from Concord, N. H., to Chicago, Ill., has been constructed in New Hampshire in the past four years as a result of the farm bureau 5-year plan to bring electricity to 5,000 farms in the State in the four years. Virtually 54 per cent of the farm homes are now electrified, or a total of 8,000.

The 5-year plan provides a minimum monthly guaranty for 60 months, sufficient to protect the company against loss, while the subscriber is building up his current consumption, through the installation of household and farm equipment, to the point where the extension line is self-supporting.

Plans for Rural Homes

Copies of 23 sketch plans for farmhouses submitted to the President's Conference on Home Building and Home Ownership by the Committee on Home and Village Housing are available to farmers and rural dwellers, as long as the supply lasts, by application to the Bureau of Agricultural Engineering, United States Department of Agriculture, Washington, D. C.

The sketches show houses ranging from 2-room 1-story structures without basements to more pretentious homes of 2 stories with 8 to 10 rooms. They were selected from those furnished for public distribution by State colleges, the United States Department of Agriculture, farm magazines, and trade associations.

National 4-H Club Radio Program

Saturday, August 6

Farm economics help older club members. 4-H club boy from Ohio.

Our club learns how to plan and serve meals. 4-H club girl from Iowa.

Is 4-H club work practical? State 4-H club leader from Iowa.

What's doing in the 4-H clubs. I. W. Hill, Extension Service, United States Department of Agriculture.

Early American Music

Yankee Doodle (Original Version)
Yankee Doodle (Modern Version)
America_____ Carey.
Star-Spangled Banner_ Key-Smith.
Hail, Columbia_____ Fyles.
Home, Sweet Home_____ Payne.
Washington's March.
The Girl I Left Behind Me.
Brandywine Quickstep.

THE produce grown by 238 club members in Catawba County, N. C., this year amounted in value to $8,885.59, of which $3,843.44 was profit, says the county farm agent.

·ACROSS·THE·EDITOR'S·DESK·

An Extension Epic

IF YOU WANT a real extension story, read about the last 15 years in Navajo and Apache Counties, Ariz. It's a real epic. I'll let County Agent Charles R. Fillerup tell the tale. He says, "In 1916, when extension work in these two counties started, 40 per cent of the farm people in Navajo County made their cash incomes from freighting to Fort Apache and the Indian Agency at White River. It was recognized that this condition would not continue. Immediately, we began to work toward sustenance production. The farm bureaus of the district and the agent laid plans for the development of the district's agriculture. These plans centered about supplying home-raised food and developing an agriculture that would support livestock, chiefly dairy cows, hogs, and chickens. That was over 15 years ago. To-day, the poverty and distress which threatened to come from the loss of revenues from freighting to Fort Apache have been replaced with revenue from producing dairy herds, flocks of well-bred chickens, and gardens and fields large enough to support the home plant."

It's been an uphill fight with long odds against them that County Agent Fillerup and his people have made. I think, though, that he has answered in convincing fashion the question, "Why employ a county extension agent?"

The Tabloid Farm

IN A RECENT EDITORIAL in the Columbus (Ohio) Journal, I find an excellent description of what looks to be a new extension problem. At least, it's new from the standpoint of the number of its kind that the extension worker is likely to have to deal with. I introduce the tabloid farm. Says the Journal:

"In line with the thrift garden development and a decentralization movement caused by unemployed city folk moving back to the country where eating is observed with charming regularity, it seems logical that ultimately there will emerge a third development, namely the tabloid farm.

"The tabloid farm will be from one-half acre to several acres in extent. On it may be raised vegetables, fruit and poultry, and perchance a pig. With the exception of a few dry groceries, the table will be provided for.

"The little farm idea, as heretofore promoted, has not resulted in the success expected, because most folks were loath to get outside the city, when work and high wages were plentiful. But it is possible that there is now an awakening to the benefits and that ultimately a great many will see the delights of dwelling every man under his own vine and under his own fig tree."

To what extent will the tabloid farmer and the tabloid farm require extension assistance? How many have we already on our hands? What is being done to aid them or to discourage them? What will be the effect of their production on the farmer whose sole business is farming?

They Planted Trees

THE CROWNING FEATURE in a day devoted to a county-wide exchange of shrubbery and sale of trees in Adams County, Nebr., was the making of awards to pioneer tree planters of the county. They were Mrs. Ellen Kernan, who planted trees in Adams County 59 years ago, Mrs. W. F. Crosier, who planted them 57 years ago, and J. N. Bourne who had a 47-year record to his credit. It was an event on which county agent Elliot Davis and the 17 project clubs in gardening of the county worked hard. Those in attendance took home 14,000 trees to plant and the number of shrubs exchanged was legion. Tree planting, it would seem, was made the fashion in Adams County.

What Becomes of Them?

WHAT BECOMES of the winners of 4-H club contests? That's a question about which a world of guessing is done. The facts are at hand on America's representatives for the past 12 years in the International Dairy Judging Contest held each year in England. These former 4-H champions are to be found in many lines of activity. The greater bulk of them are engaged in some part of to-day's great program for agriculture. Among them are to be found farmers and farm managers, officials in cooperative marketing associations, farm organization workers, county agricultural agents, teachers of agriculture, and dairy herd testers. One, too, is a successful rural minister. Those not in some profession or business are in college. Not one but is making good.

In the description of what the members of the Iowa group are doing, I read this comment, "None of them ever miss an opportunity to help with club work in their counties." The same attitude, I find, is true of the representatives on these teams from other States that have been in these international contests. They give us a reassuring answer to the question we started with, "What becomes of the winners of 4-H club contests?"

After Eighteen Years

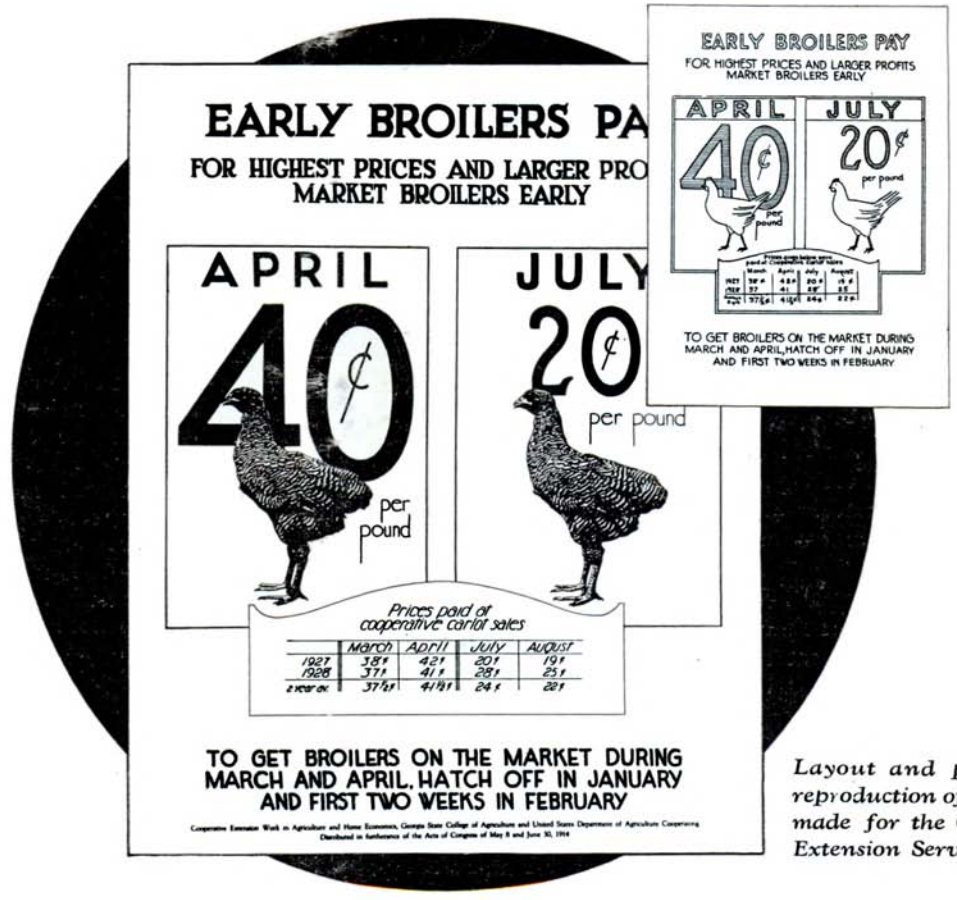
ON MAY 8, 1914, Woodrow Wilson as President of the United States signed the Smith-Lever Act. Speaking in retrospect, A. F. Lever, coauthor of the act, said recently, "The Smith-Lever Act struck a new note in teaching and uncovered something different in the realms of education. The great dream of agriculture has been to develop a leadership capable of organizing agriculture as an effective fighting force in behalf of its ideals.

"Such leadership we have in the army of devoted county agricultural and home demonstration agents of the country, under whose wise guidance and steadying influence, agriculture to-day is better organized, better directed, more united in thought and more fixed in fundamental aims and aspirations than at any time in its history."

This is surely high tribute, coming as it does from one who expected great things from extension work, and who, it seems, after 18 years, has not been disappointed. In present difficulties and discouragement, I think we may well take heart at these generous words from Mr. Lever.

R. B.

EDUCATIONAL POSTERS TELL THE STORY AT A GLANCE



Layout and printed reproduction of poster made for the Georgia Extension Service

AN effective educational poster contains one dominating idea, presented simply enough to be understood and clearly enough to be convincing. Text and illustration reinforce each other.

Such posters strengthen the extension appeal through suggestion as well as by direct statement. Placed in schoolrooms, banks, and shop windows, posters keep constantly before the eyes of the community the main objectives of the extension program.

THE OFFICE OF COOPERATIVE EXTENSION WORK, THROUGH ITS DIVISION OF VISUAL INSTRUCTION AND EDITORIAL WORK, IS PREPARED TO MAKE UP LAYOUTS OF POSTERS, SINGLY OR IN SERIES, FOR THE USE OF EXTENSION WORKERS FROM MATERIAL SENT IN BY THEM

For further information write to the

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

U. S. GOVERNMENT PRINTING OFFICE: 1932

Extension Service Review

VOL. 3, NO. 8 SEPTEMBER, 1932

THIS ARKANSAS FARM FAMILY WAS READY FOR WINTER

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

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

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In This Issue

DISCUSSING the contribution of 4-H clubs to the dairy industry of his State, President C. W. Pugsley of South Dakota State College, gives us a formula for setting up a new extension program in a county. Here it is. The first step is to consult with and call a meeting of all organizations that are interested or likely to be interested in the proposed project. The field is studied both from the standpoint of its value to the individual, to the community, and to the welfare of the county. If it seems desirable from all angles to undertake such a project, the cooperation of all organizations concerned is actively solicited. In this way it becomes everyone's program and everyone wants to see it made a success.

THE ADVANTAGES of using a forced-draft burner to clear land were demonstrated by Charles B. Massie, jr., of Puyallup, Wash., in a land-clearing contest in which he removed 63 stumps from an acre of land at a total cost of $60.63. Farmers chose their own method of clearing land in this contest conducted by County Agent A. M. Richardson and R. N. Miller, extension economist.

EFFICIENT land utilization is a matter of keen interest to-day. New York's program in this field and the contribution of the New York's Extension Service is making to it are of universal extension interest. It's a problem in which the cooperative extension service throughout the country has a vital concern. Dean Ladd gives us a clear picture of what New York hopes to do and has accomplished in dealing with the problem.

THE FARM BOARD during the first three years of its existence made loans aggregating $357,103,399.49 to farmers' cooperative associations, of which $186,700,460.62 had been paid back on July 1. "No major failure of a cooperative association," comments Chairman Stone, "has occurred in this period."

CONVERSE COUNTY, WYO., has the habit of holding annually a local farm congress. At the congress this year County Agent A. E. Hyde made a feature of a series of lamb demonstrations with local growers participating. Contests were conducted in judging live lambs for weight and quality, in butchering and dressing, and in judging the finished carcass. A lamb dinner served to 200 people on the second day of the congress further popularized the idea of lamb consumption.

On the Calendar

EDUCATIONAL EXHIBITS of the United States Department of Agriculture have been arranged for State and interstate fairs during August and September by the Office of Exhibits.

Wisconsin State Fair, Milwaukee, Wis., August 28–September 2.

Nebraska State Fair, Lincoln, Nebr., September 2–9.

California State Fair, Sacramento, Calif., September 3–10.

Michigan State Fair, Detroit, Mich., September 4–10.

Midland Empire Fair, Billings, Mont., September 5–9.

Rutland Fair, Rutland, Vt., September 5–10.

Trenton Interstate Fair, Trenton, N. J., September 5–10.

Rochester Fair, Rochester, N. Y., September 5–10.

Appalachian Tri-State Fair, Johnson City, Tenn., September 12–17.

Kansas Free State Fair, Topeka, Kans., September 12–17.

Kansas State Fair, Hutchinson, Kans., September 17–23.

Eastern States Exposition, Springfield, Mass., September 18–24.

Western Washington Fair, Puyallup, Wash., September 19–25.

Mid-South Fair, Memphis, Tenn., September 25–October 1.

EXTENSION EVENTS

Camp Vail, Eastern States Exposition, Springfield, Mass., September 18–24.

Annual Conference, Lafayette, Ind., October 4–7.

Annual Conference, Manhattan, Kans., October 17–19.

Annual Conference, Brookings, S. Dak., October 18–21.

Camp Plummer at Pacific International Livestock Exposition, Portland, Oreg., October 22–29.

Annual Conference, St. Paul, Minn., October 24–28.

Annual Conference, Lexington, Ky., October 25–28.

American Country Life Association Meeting, Morgantown, W. Va., October 26–29.

Arkansas Agents' Conference, Fayetteville, Ark., first week in October.

THE EXTENSION SERVICE REVIEW is issued bimonthly by the EXTENSION SERVICE of the United States Department of Agriculture, Washington, D. C. The matter contained in the REVIEW is published by direction of the Secretary of Agriculture as administrative information required for the proper transaction of the public business. The REVIEW seeks to supply to workers and cooperators of the Department of Agriculture engaged in extension activities, information of especial help to them in the performance of their duties, and it is issued to them free by law. Others may obtain copies of the REVIEW from the Superintendent of Documents, Government Printing Office, Washington, D. C., by subscription at the rate of 25 cents a year, domestic, and 45 cents, foreign. Postage stamps will not be accepted in payment.

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

Extension Service Review

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Courage Should Be the Keynote

C. W. WARBURTON, Director of Extension Work, United States Department of Agriculture

AS A PART of the Government economy program, the department's printing funds have been reduced and during the present fiscal year the Extension Service Review will be published once every two months instead of monthly. This change is a part of the serious effort that the department is making to reduce expenditures and at the same time maintain efficient service.

This policy is in accord with that of the cooperative extension service throughout the United States. To the maintenance of this policy and to the intrinsic worth of extension effort may be attributed the fact that county extension agents for the most part continued to be employed even in those counties where the financing of the county government has been a difficult matter.

There were 5,959 extension workers employed on June 30, 1932, as compared with 6,161 on June 30, 1931, a loss of 202 workers, or less than 3⅓ per cent. The following figures tell the story in more detail:

	1931	1932
County agricultural agents and assistants	2,783	2,708
Home demonstration agents and assistants	1,400	1,338
County club agents and assistants	251	221
City home demonstration agents	10	10
Specialists	1,222	1,178
Directors, assistant directors, State leaders, and assistant State leaders	495	504
Total extension workers	6,161	5,959

It is also encouraging to note that 34 counties without agents in 1931 appropriated funds in the first six months of 1932 for the employment of agents. Of these 34 counties, 15 are employing such county extension agents for the first time. The other 19 are resuming extension work after intervals of from one to nine years in which they have not had an agent or agents. Of the newly appointed workers, 12 are home demonstration agents and 25 are agricultural agents. Three of those counties employed both agricultural and home demonstration agents.

The soundness of extension work is evidenced by the appreciation which it has received from the people of our agricultural communities. For 25 years and more extension workers have made practical and substantial contributions to the economic development of the communities in which they have worked and to the improvement of living conditions in these communities. The cooperative extension service has become deep-rooted in the rural life of State and Nation. Days of difficulty and distress have served only to accentuate what the service is capable of doing in aiding in the rehabilitation and adjustments of our national life. The results that extension workers have produced and are producing are what to-day help them in public service and make them indispensable to the effort to return to happier and more prosperous days.

Recent months have seen accelerated changes in the consumption of our agricultural products both at home and abroad. That the farmers know of these tendencies is unquestionably important both to them and to the industries handling their products. If farmers are to adapt their farming plans to meet changed demands, they must in many cases become familiar with new rotations, new methods, and new enterprises. One of the greatest services that extension agents have rendered farmers and the business world dependent on farming, to my mind, is that of assisting farmers to ease out of the widespread types of farming along specialized cash-crop lines into that system known generally as the "live-at-home" plan, when the demand for these cash crops decreased. To do this, a vast number of farmers have had practically to learn farming over again, at least to learn a new way of running their business. That this has been accomplished satisfactorily by so many speaks well for the practicality of the county-agent system and for the county agent's ability to teach. When I say "county agent," I mean both farm and home agents. The home demonstration agents and the farm women have given themselves so earnestly to the accomplishment of their part in the "live-at-home" effort that there is widespread comment on the abundance of food and good living in areas where the former system of growing only cash crops and buying the food and feed supply had more and more frequently meant lean years for man and beast.

Farming is a producing business, and the farmer is interested in producing for sale those commodities which will return

(*Continued on page 118*)

Keep It Coming Is the Verdict

IN RESPONSE to the questionnaire sent readers of the Review in May, over 50 per cent of those receiving the questionnaire replied. Of those replying, 80 per cent gave first preference to stories about results obtained in individual counties and the methods used to obtain these results. "Let the Review keep coming," says County Agent W. H. Du Puy of Fayette County, Tex., "so that we can know what and how the other fellow is doing."

Agent Du Puy finds particular interest in comparing notes with Brodie Pugh of Claiborne Parish, La., who gave some of his experiences in a recent issue of the Review. Agent Du Puy says further, "I enjoy every issue of the Review very much. It helps to keep me boosted up. Sometimes, after hammering away on an extension possibility without getting it put over, we are inclined to let up and drift along with the current for a while and maybe let it die altogether. The Review has given me some pointers on where I can do some pinch hitting, and by using different tactics get my problem over."

This, without question, is the service all of us would like to have the Review give.

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Farm Board Emergency Credit

JAMES C. STONE
Chairman, Federal Farm Board

DURING the past three years banks and other lending institutions have been sharply reducing credit. Since July, 1929, banks have contracted their total loans and investments by more than $12,000,000,000. In many areas at present little or no bank credit is obtainable for any purpose.

On the contrary, within this interval the Farm Board has made loans aggregating $1,019,214,638.36 to farmers' cooperative associations and to stabilization corporations. Moreover, the board is responsible for an even larger expansion of credit than this figure would indicate. Banks and other private investors have furnished approximately two dollars of credit to cooperatives as primary loans for every dollar of credit that the board has supplied as secondary loans. Obviously, Farm Board loans have played an important rôle in governmental efforts to prevent total collapse of the credit and price structure.

Crisis Faced

The board had scarcely been inaugurated when the greatest economic crisis of this generation commenced. Disaster threatened agricultural prices which, with other raw materials, are always extremely sensitive to changes in demand. Relatively large world stocks of wheat and cotton aggravated the decline in prices of these commodities, resulting from the disappearance of domestic and foreign markets. These conditions boded ill for farmers' cooperative associations which in most instances had not been able to build up the necessary reserves to weather the severe economic storm.

Cooperatives Strengthened

The availability of credit from the Farm Board revolving fund for the support of commodity prices and for loans to farmers' marketing organizations has served to prevent the widespread breakdown of farmer-owned cooperatives during a period of acute economic pressure. During an interval in which bankruptcies of business concerns of all kinds have become increasingly widespread, the system of farmer-owned marketing agencies has been strengthened and extended. No major failure of a cooperative association has occurred since the passage of the Agricultural Marketing Act. In the same period over 4,500 banks and more than 77,000 commercial institutions are reported to have closed their doors.

The methods used by the Farm Board in maintaining the financial stability of cooperative organizations during the past three years are essentially the same as those provided more recently under the Reconstruction Finance Corporation act for emergency support for railroads, banks, and other business units. Experience during recent months has demonstrated conclusively that courageous extension of credit to strengthen overdeflated prices and to prevent the failure of sound institutions continues to be the only reasonable means of meeting the present emergency. The Farm Board has acted consistently along these lines since 1929.

Funds Made Available

Early in the course of the depression Congress, cooperatives, and groups of all kinds called upon the board to use the powers given to it under the act to protect farmers from the effects of disorganized markets for their products. The board acted accordingly, first by assisting cooperatives to make loans to their producer-members to help them to avoid dumping commodities on already weakened markets; and later by reorganizing the cotton and wheat stabilization corporations and lending them funds to purchase and hold stocks off the markets. The funds available were not great enough to extend such activities to all commodities or to stop completely the decline in wheat and cotton prices. The operations did succeed, however, in moderating the decline in prices and in shielding farmers from the full effect of price demoralization until they had had time to begin to adjust their operations to the new conditions.

Loans Extended

As prices continued to decline and as markets disappeared, prices dropped so sharply that in many instances loans to cooperative associations, which appeared conservative when made, eventually exceeded the sales value of the commodity. The board then faced the alternative of calling the loans, dumping the commodities on an already overloaded market, and wiping out operating assets of the cooperatives and any hope for further payment for the growers' equities, or of continuing the loans in the hope that subsequent recoveries in prices would be sufficient to repay the loan and pay something to farmers in addition to the initial advances. In view of the harm which would have come to all farmers from large forced sales and glutted markets, the board elected to follow the latter course, which it felt would best serve the interest of agriculture.

Producers Control

A concrete example of the use of the revolving fund to furnish emergency credit where ordinary credit facilities had practically disappeared, is to be found in the livestock industry. Farm Board credit has made possible the establishment of six regional livestock credit corporations, operating through a subsidiary finance corporation of the National Livestock Marketing Association. These finance agencies have a total authorized capital of $5,250,000 with an aggregate paid-in capital of $2,693,375, of which $393,375 has been supplied by farmers and ranchmen. With this capital these agencies have a line of credit with the intermediate credit banks amounting to approximately $25,000,000. Loans totaling more than $15,000,000 have already been made by these organizations to thousands of stockmen located in 28 States. The control of production financing which can be exerted through such organizations will give producers a much-needed degree of united control over output.

Financial Summary

The costs and benefits of the emergency-relief measures undertaken by governmental and private agencies during the past three years can not be adequately appraised until the depression is over and the full record of the efforts to relieve it can be viewed in retrospect. This applies to the emergency phases of the financial operations of the Farm Board as well as to other parts of the Government financial-relief program.

On July 2 outstanding loans from the revolving fund amounted to $487,362,908.32, of which $170,402,938.87 was to cooperatives and the remainder to the grain and cotton stabilization corporations. Since the board was organized cooperatives have borrowed $357,103,399.49 and have paid back $186,700,460.62. The revolving fund of $500,000,000 created in the Agricultural Marketing Act has been increased to the extent of about $9,000,000 as a result of interest collections.

4-H Club Work Contributes to The Dairy Industry in South Dakota

CHARLES W. PUGSLEY
President, South Dakota State College

THE EXCELLENT SHOWING made by heifers, cows, and herds owned by 4-H dairy club members in South Dakota has served as an eye opener to others in their respective communities. This movement has served not only to place high-producing stock into the hands of potential dairymen, but has also served as a demonstration to the community of what can be done.

From a beginning of only eight members in Lawrence County in 1921, the 4-H dairy club work has increased until in 1931 there were 755 members enrolled in the State. These owned stock conservatively valued at about $100 per member. This development is in line with the increased amount of dairying in the State and probably accounts for the increase to no small extent.

The 4-H dairy club program has been adopted by a number of counties. Extension workers realized at the outset that the work could have its greatest effect by means of an intensive promotion plan in a number of counties rather than to have a few scattered clubs in every county. It is interesting to note that the counties which took up the work in recent years have studied the methods of those preceding them, have avoided what errors there may have been, and have improved on the plan in the light of experience.

As an example, take Beadle County where dairy club work was begun in 1928, having eight members sponsored by the Kiwanis Club of Huron. These members procured some good calves, made a good showing, and unconsciously pointed out the possibilities of what might be done with such a plan on a much larger scale. As a result of their work various agencies became interested. In the spring of 1929 R. A. Cave, the county agent, brought together representatives of the county farm bureau, the Huron Chamber of Commerce, The Evening Huronite, the secretary of the South Dakota Bankers' Association and others.

Committee Studies Methods

The first recommendation of this group was that representatives be sent to other counties where a comprehensive plan had been used. Accordingly a committee was dispatched to Marshall and Clark Counties where it spent several days in the investigation, studying the methods employed and the results obtained. Members of the committee stated at the time that they did not satisfy themselves with the report of the county agents or bankers' associations in these counties but they went directly to the farm homes of a number of the club members. Their report was very favorable and with some minor changes they drew up a similar plan.

Club members and their winning calves at the State fair at Huron, S. Dak.

The next step was the reorganization of the Beadle County Bankers' Association which had been inactive for some time. They took up the project with great enthusiasm, each banker agreeing to finance whatever projects were organized in his community. A committee including a farmer, banker, and the county agent purchased two carloads of grade dairy heifers, 82 head in all, that same spring. The calves were placed in the hands of their 4-H owners within 60 days after the committee got under way. There were 106 boys and girls enrolled that year as compared with 8 the previous year. A number of calves were purchased locally in addition to the two carloads which were shipped in from other dairy sections. Great care was taken in the selection of these calves to see that they came from tested dams of more than 300 pounds production per year. Finances were placed on the basis of a conditional sales contract under which the member had three years if necessary in which to pay for his calf.

During each succeeding year new members have been added to the roll and more calves obtained for them. Many of those who started with grades as early as 1928 have now purchased one or more purebred animals and are gradually replacing the grades. A number of these heifers have produced more than 300 pounds of butterfat at the age of two or three years. A purebred Holstein owned by Alan Oviatt finished a year's test March 5, 1932, with 598 pounds of fat.

In the same county one club, of which Fred McKichan, banker, is the local leader purchased a purebred Holstein bull and the members cooperated in building a safety bull pen. The plan has worked out successfully and has been copied by clubs in this and other counties of the State.

Using another illustration which goes back just a little further, we might refer to Marshall County. Under a plan worked out by L. D. Nichols, who was county agent there in 1923, the Marshall County Bankers' Association and the Marshall County Fair launched the first extensive 4-H dairy campaign. This was distinctly a grain-producing county but had great possibilities for dairying. More than 300 boys and girls have received training through the 4-H dairy club work and, according to most recent figures available, more than 700 head of high-grade and registered dairy cattle on Marshall County farms trace their origin to this movement. A cow-testing association was organized and has completed five years of operation. A bull association, a county Guernsey breeders'

association, and a county Holstein breeders' association have been organized. Two cooperative cream stations were started, one of which is in the process of becoming a cooperative creamery. These things have been accomplished since the 4-H dairy program was adopted eight years ago. Several dairymen in the county have stated that this development was accelerated by and was the partial result of dairy club work.

Increased Production

Calves from dams of high-producing records were selected. Time has shown this policy to be well justified. Records of the cow-testing association the first year show an average production of 255 pounds of butterfat, while 21 cows owned by club members averaged 280 pounds, even though they had not yet reached maturity. The following year 20 club heifers in the association averaged 318 pounds of fat, excelling the average association cow by 35 pounds in production and $14 in net income.

Dairy-club work in South Dakota has been characterized by a conscious effort to intensify the work in certain counties where there has been a good local response. The first step is to consult with and call a meeting of all organizations interested or likely to be interested. The field is surveyed both from the standpoint of its value to the individual, to the community, and to the welfare of the county. If it seems desirable from all angles to undertake such a program the cooperation of all organizations is actively solicited. In this way it becomes everyone's program and everyone wants to see it made a success.

Picture, if you will, a calf show sponsored by a commerce and community club. When the county fair suspended operations in Grant County the commerce and community club undertook to put on a 4-H dairy club show in which the club had been interested from the beginning. For two years now the business men of Milbank have constructed pens on their main street in which to keep the calves and pigs belonging to the 4-H club members who wish to exhibit. Incidentally, the inspiration back of this plan is none other than W. S. Given, a banker, who was also instrumental in starting the first extensive dairy campaign in Marshall County, several years before. This local interest and local effort is, to a large degree, responsible for the whole-hearted response of a great many communities and the corresponding results. The same thing might be said of Clark, Springfield, Dell Rapids, Lennox, and a number of other places.

Farmers Build Community House

Home demonstration club women serve a home-grown dinner to the builders

Woodlawn, the cooperatively built house at New Vernon, Ark.

"WOODLAWN", is the name of the New Vernon community house in Columbia County, Ark., built by 50 men and 32 women of the community. The building was sponsored by the home-demonstration club, which had no central meeting place in the community. The site, a 1-acre pine grove sloping down to the road, was donated. A committee of men and women of the community met with the home demonstration agent and county agricultural agent to draw up definite plans for the building, which includes an assembly room 20 by 50 feet, community kitchen, storeroom, and two porches. Native logs were used for the building and split shingles for the roof. All this material was donated by various families of the community. The only new material purchased was flooring for the assembly room, windows and window facings, nails, and ceiling for the assembly room. Three men cooperated in setting up a simple sawmill where the logs for the building were sawed. A special all-day meeting was held at the building when 30 men worked all day roofing the house, the women serving them a home-grown picnic lunch at noon.

The building as it now stands is paid for and has a total expenditure of only $82.92. Of this amount $25 was a prize won by the home demonstration club in a pantry-stores contest.

Adequate local leadership is needed in any program of this sort. For the most part, leaders have been selected by the sponsoring organization and drawn from the ranks of farmers successful in their communities. They have been helped greatly in their work by means of feeding schools and leaders' conferences conducted by G. Heebink, the extension dairyman, and H. M. Jones, the State club leader. Series of dairy leaders' conferences are arranged each year to present material which leaders or older members may give at meetings. Each leader is within reasonable driving distance of one of the conferences. Such demonstrations as proper feeding, the making of equipment, halters and stanchions, grooming, horn polishing, hoof trimming, blanketing, showing, and the like are included. That leaders appreciate this help is shown by the fact that some of them traveled more than 50 miles to attend such an all-day conference.

Over the past decade 4-H dairy club work had developed in South Dakota more rapidly than any other project. This is due to the fact that it has been well planned, has a definite objective, is of a more permanent nature than any other project and meets the need in a State where dairying should be on the increase. This program not only introduces better dairy stock into the various communities, but it trains hundreds of future dairy and mixed farmers in the best-known practices of the business. As long as it continues on these sound lines it will succeed and expand.

New York's Land Utilization Program

C. E. LADD

Dean, New York State Colleges of Agriculture and Home Economics

NEW YORK STATE has faced its problems in land utilization and during the past three years has developed a definite land policy. It has also organized a program of work to carry out this policy.

It is the land policy of the State of New York to differentiate clearly between its various classes of farm lands; the land which is clearly suited for permanent agricultural use shall be developed as highly and as intensively as possible with hard-surfaced roads, electrical power, good high schools and health facilities available for every farm as fast as these are economically possible; the land which is unfitted for permanent agricultural use shall be transferred from private to public ownership and used for growing trees, furnishing recreational opportunity, water-supply protection, beautification of the State, and timber production. Or stated more concisely, the land policy of New York consists of three things: First, classification of land; second, developing the best land as highly as possible; and third, transferring the poorest land to public ownership and reforesting it.

State Land Policy

The development of a State land policy has been to a considerable extent the result of the growth of public opinion concerning the idle land problem. Nearly a quarter of a century ago President Roosevelt's Country Life Commission, with Dean Liberty Hyde Bailey as chairman, called attention to the abandoned farm problem in southern New York, and President Roosevelt himself made a trip to some of these farms. About eight years ago the Chenango County Farm Bureau board of directors passed a resolution calling upon the College of Agriculture to make a study of one of the townships in that county to determine what should be done to meet the abandoned farm problem.

As a result studies were started which extended to many other townships. These studies were carried on by graduate students under the direction of Dr. G. F. Warren. The work was inexpensive and yielded a vast amount of information.

As soon as this information was available, the more important data were placed on charts and presented for discussion at agricultural meetings. These were discussed by practically every farm bureau in the State, were published in agricultural papers, and in various other ways were brought to the attention of the people.

Survey of Resources

In 1929, Governor Roosevelt's Agricultural Advisory Commission made a special study of the needs of the State as to a survey of its agricultural resources. From the beginning this whole movement was nonpartisan in character—a Democratic governor and a Republican legislature joined whole-heartedly in 1930 in making an appropriation for a survey of the agricultural resources of the State of New York.

An important part of the survey of agricultural resources is the land classification work. In this an effort is made to classify large areas of land as to the agricultural possibilities, to classify the roads which shall serve this land, and to determine where electrical lines should be located so as to best serve the land. All available data are used. These include soil maps and climatic data and a large number of farm-management survey records. In addition to these, a cover map is made and certain other data as to values of land, income from land, and crop yields are gathered.

Land Classified

On the basis of these the land is classified into five groups: Group 1 contains the land which should be reforested as early as possible. Group 5 contains the best land in the State which should remain permanently in agriculture. Group 4 contains land which is nearly as good as group 5, will remain permanently in agriculture, but is not quite the highest class of land in the State. Groups 2 and 3 are intermediate groups.

The conclusions that come from such a study may be illustrated by the following: In one poor county in central New York, after classifying the land, it was found that 14 per cent of the land should be reforested immediately, and 22 per cent ought to be reforested some time. This gives 36 per cent of the land to be reforested during the next generation. If this land is reforested it was found that 224 miles of road, or 20 per cent of all the road mileage in the county, could be closed, with a resulting saving to the county. This is not as good as it seems, as some of the roads will be kept open for forestry and recreational purposes. It was also found that 29 school districts, or 22 per cent of the school districts in the county, could give up their schools. This means in our State an average saving of about $1,400 per district. A development of this sort will undoubtedly lead to a combination of some townships. It might possibly lead to a combining of counties, although this is much less certain.

If land groups 1 and 2 are to be reforested it is also recognized that it will be necessary to do this with public funds. In spite of anything that can be done to relieve taxation or to aid in other ways, private individuals, corporations, and private businesses in general do not reforest much land.

Reforestation

About four years ago a legislative commission was appointed to investigate the whole problem of reforestation. As a result of their studies, two pieces of legislation have been enacted. The first provides State aid to counties for reforestation work. It is essentially this: If any county will purchase land and reforest it, the State will pay half of the cost of the land and the reforestation work up to a maximum of $5,000 to any one county in any one year. The forest, of course, remains the property of the county.

The second piece of legislation was a constitutional amendment which provided for a 15-year program appropriating a total of $20,000,000 to purchase and reforest something over 1,000,000 acres of land. This constitutional amendment was approved by the people on November 3, 1931, and the State is definitely embarked upon the program.

You might well ask, "What do the people expect to get out of this big program? Why were they willing to vote for an expenditure of $20,000,000?" Remember that the studies preceding this work have been carried on during the past seven or eight years. The results of those studies have been presented to the people through countless extension meetings. The people have come to know the situation throughout the whole State. In the State government the whole movement has been a nonpartisan one. Both political parties have favored it. Apparently the people expect to obtain the following things: Recreational facilities for

(Continued on page 118)

A Wyoming Lamb Demonstration

A TWO-DAY farm congress lamb demonstration in Wyoming has aroused more interest and produced more comments of satisfaction from the farmers of Converse County than any of the other farm congresses which have been annual events in the county since 1923. County Agent A. E. Hyde got the idea for this program at the extension conference in Laramie when K. F. Warner of the United States Department of Agriculture conducted a meat-cutting demonstration. Together with Dick Jay, county agent of Johnson County, and Gayle Newbauer, home demonstration agent of Converse County, they planned it out. Mr. Hyde was responsible for organization and arrangements. He acquainted the people of the county with the details of the plan very thoroughly by newspaper articles, circular letters, and talks at meetings. An especial appeal was sent to sheepmen explaining that the type of program should prove of importance to promote their lamb sales. Fourteen of these sheepmen brought their own fat lambs on the opening day.

Fat Lamb Judging Contest

Sixty-four men and boys reported for the fat lamb judging contest which started promptly at 10 o'clock. Guessing of lamb weights came first, after which three pens of fat lambs were judged on a competitive basis. A thorough explanation of the points to look for in fat lamb judging was given by Mr. Jay before the contest and an explanation of the placings immediately after.

The next phase of demonstrational work was conducted with the practical leadership of local butchers, with Mr. Jay explaining the methods employed. Proper methods in killing and dressing were given. Each step in the killing was demonstrated at the head table. The contestants followed step by step. All phases of this part of the demonstration progressed well except a few bad jobs in skinning. Then carcasses were hung up to cool over night and this day's work brought to a close with interest still at its height.

On the second day, the competitive judging of fat carcasses was begun. Mr. Jay first explained what constitutes right weight finish, quality of meat, and a good job of dressing, then conducted the competitive carcass judging work.

An interested crowd of both farm men and women had been gathering steadily until 150 people were found present during the cutting work, which took place during the afternoon of the second day. Each phase in the demonstration on cutting was given at a center table by Mr. Jay, then the process followed up by each individual cooperator at each table. The crowd sat at one end witnessing the entire procedure and showed most interest in the making of such cuts as the crown roast or the mock duck.

250 People Dine on Lamb

During the noon hour on the second day the various lamb cuts were served to a large and appreciative crowd. Methods in meat cookery were explained by Lavinia Stevens, a 4-H foods club girl, and by the home demonstration agent. Serving of "lamberger" was given for the first time. Great variation in servings created much interest and added greatly to the importance and results of the occasion. Two hundred and fifty people, all eager to taste the servings, dined on the lamb and other good things.

The prize awards were announced before 500 people attending the ninth annual farm congress "stunt night" program in the evening of the second day. Awards included first, second, and third prizes in the lamb weight guessing contest, the fat-lamb judging contest, the carcass judging contest, and also the winning lamb dressing team and the best dressed lamb carcass.

National 4-H Club Radio Program

Saturday, September 3

Canning 4-H products. Dorothy Murphy, 4-H club member, Sussex County, Del.

What the home garden gives us. Alfred Hallenbeck, 4-H club member, Greene County, N. Y.

4-H leadership a goal. Alex D. Cobb, assistant extension director from Delaware.

Why club work is effective. Gertrude L. Warren, Extension Service; United States Department of Agriculture.

National 4-H music achievement test.

Early American Music

United States Marine Band

Saturday, October 1

This baby beef went to market. 4-H club boy from Nebraska.

Helping mother to manage the home. Juanita Parsons, 4-H club member, Pike County, Ky.

What 4-H club work has meant to our State. J. W. Whitehouse, State club leader from Kentucky.

What 4-H club work strives for. J. A. Evans, Extension Service, United States Department of Agriculture.

National 4-H music achievement test.

American Operas

United States Marine Band

Courage Should be the Keynote

(*Continued from page 113*)

him a profit. Therefore he will always be on the lookout for any knowledge or skill that will help him to increase the percentage of his yield that tops the market, to cut down the percentage that rates as cull, and to reduce operating costs per unit. This is intelligent production. In advocating this kind of production I believe the cooperative extension service has acted on sound business principles.

The passing months have shown that we are needed. The people we serve have found the continuance of our services essential. Surely no matter what may be the problems and difficulties that confront us individually and as an organization, we shall go forward with courage.

New York's Land Utilization Program

(*Continued from page 117*)

hunting, fishing, and camping; a future timber supply; beautification of the State; and protection against floods and erosion.

Most important of all is the fact that public ownership and reforestation will change a process of destruction of national resources to a process of conservation. Under private ownership this land was becoming poorer and poorer. It was constantly being "skinned" by lumbermen and by others. It was the bait which unscrupulous real estate agents used to cheat many western and southern farmers who wished to try to farm in New York State. This land has broken the hearts and pocketbooks of thousands of families who have attempted to farm it. Public ownership will correct these conditions.

Hooked Rugs Bring Cash To Mountain Communities

MARGARET A. AMBROSE
Assistant Director in Charge of Home Demonstration Work, Tennessee Extension Service

Women making hooked mats

Selling hooked rugs and mats

Designing mats

THE HOOKED RUG fireside industry as it has been developed on a community-wide basis in two east Tennessee mountain communities is turning spare moments into real money for a number of rural women.

In 1931, 45 home makers with 15 helpers in the two communities Asbury, Knox County, and Apison, Hamilton County, made and sold 225 hooked rugs and 4,221 hooked mats for a total of $4,365.25 in spite of adverse economic conditions.

In 1930, the Apison community, the first to become interested in the work, made and sold approximately 500 rugs for $5,000 and 10,000 mats which sold for $10,000. More than 100 people were actively engaged in the work that year.

These rugs and mats have been sold in nearly every State and many large cities of the country from Maine to California. At one time during the holiday season the Apison community had an order for $100 worth of rugs per week from a Milwaukee firm. A Massachusetts customer placed an order for eight rugs that amounted to $121.

The illustrations show some of the activities of the hooked-rug fireside industry in these two communities. The development of this handicraft in these two counties has been largely due to the interest and assistance of the extension service through the county home demonstration agents, Mrs. Elizabeth Lauderbach, Hamilton County, and Inez Lovelace, Knox County.

Exhibit at Fairs

In each community the industry has grown from small beginnings. In 1921 Apison community in Hamilton County had a community fair. Because of press of other duties, Mrs. Lauderbach could not do the judging at this fair so requested a well-qualified Chattanooga woman to do the judging for her. This woman came back and told the home demonstration agent that it was a fine fair and among other things there were numbers of the loveliest braided rugs she had ever seen. Mrs. Lauderbach decided the exhibit should be shown at the Chattanooga district fair. She got in touch with the woman who had been largely responsible for the community fair and persuaded her to see that the rugs were brought to the district fair. The woman in charge of the exhibit was Mrs. F. D. Huckabee. Mrs. Huckabee tells that they brought so much to the fair, rugs in particular, they could not get it all in the space allotted to the community exhibit. While they were debating what to do with these surplus rugs the manager of the women's building came by, and begged that they bring them to her building and enter them where they could be sold. They entered them and sold all of them almost before they were displayed. Mrs. Huckabee said she went home with her hands full of dollars to be distributed to the women who had made the rugs. They were delighted. It had not occurred to them before that there was a demand for braided rugs.

Seeing that the braided rugs sold well, those who knew how to make hooked rugs began to make them. Mrs. Huckabee says the first hooked rug in the neighborhood was made by a woman who obtained the pattern, needles, and directions by sending in four new subscribers to a magazine.

The next occasion presented for sale of the rugs was at a harvest market held at the Hamilton County court house in Chattanooga under the supervision of Mrs. Lauderbach. Here both braided and hooked rugs sold well, and many orders were left. The first mail order came through Mrs. Lauderbach's office from a woman in Cape Cod, Mass. Mrs. Lauderbach referred it to Mrs. Huckabee. Mrs. Huckabee was not appointed to the position of head worker or manager for the community industry; she just grew into the position. First as a manager of the occasional exhibits and sales, later as designer, the one who obtained the raw material for making the rugs, the teacher of new workers, then the sales manager for a large number of the workers.

To-day, 10½ years after the first sales were made, in many homes in the Apison community some time is being given to the hooking of rugs and mats, and through their sale some money is being added to the family income. In many homes the industry provides the only cash income.

Instruction Given

In addition to her work at Apison, Mrs. Huckabee has assisted Mrs. Lau-

derbach in other communities in the county, giving instruction in rug making to groups of girls and women who are gradually building up their own markets. Because of her success and ability as a teacher and her cooperation with Mrs. Lauderbach when the first farm women's week was held at the University of Tennessee in 1924, Mrs. Huckabee was asked to conduct a class in the making of hooked rugs. A number of farm women from different parts of the State were interested and attended the class. Some women finished the rug they began and made many more; some finished the one they began and never made another, and some never finished the one they began. One woman who attended this class was Mrs. Susie Armstrong of the Asbury community, Knox County. She knew how to hook rugs and had hooked many, but she had never been able to sell any great number. She probably profited more from the class than any other woman in it. She went home determined to make better and more beautiful hooked rugs. In her determination she was "aided and abetted" by a fine neighbor and friend, Mrs. W. H. Moore, and her home demonstration agent, Miss Lovelace. She studied color and color combinations. In order not to be in direct competition with Mrs. Huckabee's community she decided to use a different needle which would make a different looking product. At first she copied designs with carbon paper, later she found she could draw designs free-hand. She made beautiful mats and rugs and they began to sell. She had to teach others to hook so she could keep the demand supplied. Thus Asbury community became a center for hooked rugs.

Talent Developed

It might be well to state that anyone can get instructions that will enable them to hook rugs but not everyone can make beautiful hooked rugs. It is like lace making or wood carving. These two communities are fortunate in that they have women such as Mrs. Huckabee and Mrs. Armstrong who are endowed with artistic tastes which enable them to design and direct the making of articles of beauty for the home which demand a ready market and place needed cash in the possession of the creators. Home agents have also rendered a great service to these communities in the form of encouragement, suggestions for improvements, and in securing markets for the finished products.

All this has meant to these two communities can not be told altogether in dollars and cents. The workers feel a satisfaction in their work—they are creating something beautiful.

Illinois Uses Garment Exhibit

IN ADAMS, Coles, Fulton, Kane, Hancock, and McLean Counties, Ill., the preliminary education of prospective leaders for study groups in parent education is in progress. The members of these leader groups have been carefully chosen and represent different geographical areas, social groups, and in some places various organizations. It was thought advisable to have members of these groups realize that the clothing a child wears may materially affect not only his physical development, but also his mental, social, emotional, and æsthetic development. Therefore, plans were made this year to use an educational exhibit of self-help garments for children in those counties where leadership groups are functioning.

An exhibit of this character was supplied by the Bureau of Home Economics of the United States Department of Agriculture. In each county preliminary plans were made about two months in advance of the meeting when this exhibit was to be displayed. Circular letters, cards, and publicity material were prepared and distributed. Edna Walls, specialist in child development and parent education, accompanied the exhibit and conducted the meetings with the assistance of the home adviser and selected members of the group.

The exhibit included 8 garments for infants and 25 for children of preschool age. While simplicity was the distinguishing feature of the garments, they were also attractive and dainty. The wardrobe included everything from a bib which baby could put over her own head and fasten herself by means of fascinating draw strings to playsuits with the necessary zippers conveniently placed in front of the legs instead of at the side where they are tantalizing to reach and aggravating to zip, even for mother.

The bias cut allowed freedom for the baby; the double fronts were an additional recommendation for the garments; daintily finished handmade ties were used in place of the usual tiny buttons.

In the garments, buttonholes were easily located by means of handy but dainty tabs. The buttons were large and few so the small children could find and fasten them. As few thicknesses of cloth as possible were used around the buttonholes so that tiny fingers could bend the fabric and plenty of room was allowed for growing arms and legs. Simplicity marked the garments throughout so that, if desired, they can be ironed by being run through a mangle.

Cotton fabrics predominated throughout the garments, since this activity lent itself to the department's effort to develop new uses for the cotton surplus.

SOME 20 YEARS AGO, when I. O. Schaub, now dean of agriculture at North Carolina State College, was the first 4-H club agent in North Carolina, he worked with a group of boys in Haywood County in promoting better corn growing in the community. Occasionally the present farm agent in that county, J. L. Robinson, says he finds a farmer who was a member of the original club. One of these men is Grady Wilson who produced 119 bushels of corn on an acre of land when he was a club boy.

"Mr. Wilson is still proud of the record he made as a club member," says Mr. Robinson. "I visited him a few days ago and found one of the neatest little farms that I have seen anywhere. His father followed after the lesson he had learned from his son and later made 140 bushels of corn on 1 acre. He stopped cultivating so much land and planted his steep slopes to pasture. Grady now has a part of this old farm and he produces all the corn he needs on less than 3 acres each season. Grady has a 2-year rotation of corn, wheat, and volunteer red clover. His usual yield of corn is about 100 bushels an acre made with commercial fertilizer. His present ambition is to raise this average to 150 bushels an acre."

Our Cover

WHITE COUNTY, Ark., farm families have been making persistent effort to live at home and to live well. They heartily followed the leadership of their home demonstration agent, Clytice Ross, in growing more and better vegetables and fruits each year and in canning surplus vegetables, fruits, and meats for the less productive seasons. The pantry store of Mrs. C. B. Marsh, pictured on the cover page, shows typical results of these five years of concentration on the problem of well-planned meals the year round. Mrs. Marsh had in her pantry store 867 quarts of fruits, vegetables, and meats, and 4 bushels of dried fruits. Reports from 153 families, Miss Ross says, showed an average of 328 quarts of canned products and 89 pounds of dried fruits and vegetables ready for winter, with the contribution of poultry flocks and dairy cows yet to be added.

A Year's Progress in Marketing Grain Cooperatively

C. E. HUFF
President, Farmers National Grain Corporation

AS THE GRAIN crop season of 1932 comes into full swing it is pertinent for farmers to ask how far we have gone in the matter of developing national cooperative grain marketing and to what extent they have benefited by the progress that has been made.

Most important among the benefits that have been gained is the major fact that the American grain producer now has the opportunity to enter the market places with his commodity in his own right. In these days of low grain prices, it may be difficult for the producer to visualize the advantages that accrue to him through this entry into the market under his own banner. Forty-cent wheat is not conducive to cheerfulness when compared with $1.50 wheat. What the farmer may fail to realize is that without the competitive presence of his own national organization in the field, the price of his wheat might have fallen even below the despised 40 cents. He may not be able to place a value, in dollars and cents, on the intangible benefits that come to him in higher market levels, and in increased bargaining power that are his because he has a national agency in the field founded upon the principle of paying as much, rather than as little, as possible for his grain.

Nation-wide Agency

Development of a nation-wide cooperative agency puts the farmer in the position of being able not only to sell at the highest possible price at the local point, but to carry his commodity through to the ultimate buyer at the lowest possible cost.

The farmer does realize that the private trader is not concerned with the price level of the commodity in which he deals, or if he is concerned it is merely that price levels be sustained at the point that will stimulate trading to the greatest possible extent. Thus, rather than be concerned in the maintenance of domestic prices above world levels, the private trader often is found actually seeking to maintain world prices domestically as a means of stimulating trade.

Farmers National Grain Corporation recently had an interesting experience along this line. An export firm was selling the market short in the early movement of Southwest wheat. Farmers National Grain Corporation, having for its purpose the maintenance of the best possible level of prices, decided to buy all such offerings as a means of price protection. Quite a substantial amount of wheat was covered by the corporation's purchase contracts, and thereupon demand was made of the seller for delivery of a substantial part of the purchases for a steamer, which we were

C. E. HUFF
President Farmers National Grain Corporation

loading at Galveston. Having sold the market short, and the Grain Corporation having maintained the price level against their sales, they were unable to supply the wheat without a very substantial loss to themselves. They demanded of the Grain Corporation that cancellation be permited them at a price far below the current market. This the corporation refused to allow. Thereupon officials of the export firm hurried into Washington and made a frantic appeal to governmental authorities, insisting that Farmers National Grain Corporation was ruining their business. They threatened to default on their sale and to leave the matter to arbitration or for court settlement. Finally, and reluctantly, they made settlement with the Grain Corporation, and the price structure in the entire Southwest area was protected against the decline which would have inevitably followed the short-sales tactics of the exporting firm but for the presence in the market of a cooperative organization, capable of maintaining producer prices.

Benefits to Producers

There are other noteworthy examples of benefits to grain producers through national cooperative marketing, examples that may have in them an element of intangibility, but which, nevertheless, put dollars and cents in the grain farmer's pocket. It is evident that by having his own qualified and experienced agents at each important market the cooperative shipper is able successfully to combat the distinct discriminations which formerly existed by reason of the fact that the old-line buyers, including both mills and grain dealers, were fundamentally against anything cooperative, and missed no opportunity to embarrass and put the cooperatives at a disadvantage. The cooperative shipper now is not compelled to "peddle his wares" nor assume the attitude of asking the buyer, "What will you give me for my car of wheat?" On the contrary he is in a position to demand from the independent buyer the full market price, knowing full well that his own national marketing agency stands behind him; is constantly ready to pay him every fraction of a cent which the market will justify, or store his grain for him should he choose to await a better market on which to sell. In this matter of storage alone the discrimination was acute as, for instance, when storage space was scarce it was customary for an old-line dealer to provide adequate storage for the independent shipper, whereas the cooperative shipper was refused accommodations in order to force him to sell at a sacrifice on the day his car arrived, regardless of demoralized markets and the justifiable expectancy of improved demand and prices within a reasonable period of time.

The influences wielded in price making and in the control of the flow of grain by the Farmers National Grain Corporation have been of particular benefit to the wheat producers of the Southwest, which section is fast developing into the largest and most important production area of the United States. This applies particularly to southern Kansas, Oklahoma, and Texas, where wheat moves with a rush and in great volume

from the combine, and where storage facilities are insufficient for the prompt unloading and proper housing of the grain. In past years the grain trade has reveled in this situation, which at times has caused market gluts and embargoes and which has created disproportionate spreads between the price of cash wheat and the futures, thus enabling the private buyer to purchase his wheat upon the proverbial bargain counter. In the summer and early fall of 1929, for instance, conditions at Galveston were so congested that 7,000 cars of wheat were on track at one time. There were many instances of cars shipped in August which were not unloaded until December. It is hardly necessary to detail the costly deterioration in quality, car service, and disheartening discounts which prevail when such conditions exist.

Stocks Shifted

The Southwest was threatened with a similar situation in the summer and early fall of both 1930 and 1931, but the Farmers National Grain Corporation, in conjunction with the Grain Stabilization Corporation, performed a major benefit to agriculture by shifting stocks of grain from points threatened with congestion to more strategic points, where ample storage space was available—at the same time forcing every bushel on board ship that could be merchandised in foreign commerce, thereby keeping open all trade channels both domestic and export.

An indication of the enormity of such operations is that during one single week in early August, 1931, this corporation had under way (loaded in box cars and lake and ocean steamers) more than 30,000,000 bushels of wheat in process of transfer, as heretofore described. It purchased and handled during the fiscal year ending May 31, 1932, in excess of 148,000,000 bushels of grain, not including that purchased from or handled for Grain Stabilization Corporation. Certainly no individual or private agency or any group of private agencies could have accomplished these results. Only an agency of nationwide scope, with the interest of the producer uppermost in mind, could and would have done so. The results achieved by creating this space and permitting new crop wheat to be properly merchandised, housed, transferred, and exported have in many instances made an actual difference in value to the producer of anywhere from 7 to 15 cents a bushel during the first several months of the harvest rush to market.

In our so-called spring-wheat territory—North Dakota, South Dakota, and Montana—the principal farm-to-market movement is to Minneapolis, St. Paul, and Duluth: A tremendous percentage of this wheat is "smut" damaged and discounts frequently average 5 cents a bushel under good quality wheat, and it is certain that it was the former custom of the private dealer to penalize the shipper for "smutty" wheat to the fullest extent possible. This "smutty" wheat, as a matter of fact, can be washed and made merchantable at a cost of about 2 cents a bushel. This service the Farmers National Grain Corporation has been glad to render and reflect back to the producer, thereby creating a positive and permanent market for "smutty" wheat. The noncooperative producer, as well as the cooperative producer, has enormously profited by this policy, inasmuch as the private competitors of the Farmers National Grain Corporation have been compelled to adopt similar tactics in order to obtain their necessary supplies.

In a little less than three years grain farmers have built the largest grain-handling organization in the United States, if not in the world. It has been built with substantial soundness, because it has a foundation of all that the last 35 years have built along the lines of cooperative marketing; all they have developed of cooperative experience; all they have brought into being of cooperative cohesion. Every substantial grain-marketing cooperative in the United States that was marketing on a central or terminal scale in any degree whatever, with a single exception, is a stockholder and an active member in the Farmers National Grain Corporation; and no other nation-wide cooperative has equaled that record.

Grain Exporting Points

Farmers National Grain Corporation has its export connections in every corner of the world. Its westernmost offices are Los Angeles, San Francisco, Portland, Tacoma, Seattle. Its northernmost is Grand Forks, N. Dak. It has offices in Duluth at the head of the lake, and there they receive from the prairies of the Dakotas and Minnesota, and as far west as Montana, millions of bushels of grain, quantities of which pass down the lakes, shipped to Toledo, the newest office of Farmers National Grain Corporation.

Exports Increased

The easternmost office is in Baltimore. In the South grain is handled through Galveston. The grain farmer reaches the Occident or Orient through his own representatives. Farmers National Grain Corporation moves grain to every grain-consuming country in the world that uses United States grain and is maintaining the domestic price above the world level in doing it. Exports have been increased, and the domestic price maintained higher than the world level.

Cooperative grain marketing contemplates a study of the map of the world as to transportation, a study of conditions as to demand, and the attempt, with the whole picture before us, to put the grain where it ought to be when it ought to be there, without back haul, without duplication of effort, without constant changing of hands. There is the widest possible difference between handling a carload of wheat with a commission motive and dealing with the American farmers' crop as a means of increasing agricultural income and making the farmer a livable return and agriculture a calling to be proud of.

Older Club Members Active

The Iroquois Club of Ohio County, W. Va., is composed of older club members who have won their 4-H pins and who want to accept some definite responsibility for younger club members. They have finished the year with a record of activity which would satisfy any young person.

Some of the girls chose the big-sister project and agreed to be responsible for some 4-H project in their neighborhood. Two big-sister parties for all 4-H girls in the county were given during the year by the Iroquois girls. Several other members chose dramatics as their particular field and produced three demonstration plays last year which were the first plays presented in the county by a rural group. Following the Iroquois example six clubs in the county gave eight plays first at home and then at Oglebay Park in a dramatic festival. Dramatics are becoming an established means of recreation in the county. In addition, nine community meetings with special programs, three father and mother banquets, and two public vesper programs were sponsored by this club.

One girl took as her special charge the county 4-H paper "The Bugle." She has trained the reporter appointed from each of the county 4-H clubs in the art of reporting club news and is showing considerable ability in getting results from her staff. One of the boys decided to specialize in visual instruction and has rigged up an old lantern and shown the lantern slides for "Plowing," "Dreaming," and "America the Beautiful" as he taught the younger 4-H club members these new songs.

Measuring Extension Results in Deschutes County, Oregon

AN INCREASE of 3 tons of hay per acre on 16,000 acres of alfalfa, an increase in the average production of butterfat from 194 pounds to 260 pounds per cow, an increased yield in wheat of 5 bushels, barley 3½ bushels, and oats 9 bushels, and the establishment and guidance of a $60,000 seed industry and a $100,000 turkey industry are only a few of the measurable results of county agent work in Deschutes County, Oreg., in 16 years.

Deschutes County is a new country. The farms are irrigated having been reclaimed from the desert during the past 22 years. Formerly a high plateau covered with sagebrush and juniper trees, the establishment of a number of small irrigation projects has made more than 1,200 farms in that county and an adjacent portion of the neighboring county of Crook.

A community that is still being developed as this one is offers a rich field for profitable accomplishment. Direct canvass of a representative number of farms in the county shows that every one has been influenced by extension projects. On the 45 farms visited, 217 practices had been adopted and on 17 of the farms the number of practices adopted exceeded 6.

Alfalfa is Important

Alfalfa is the basic crop of the community. Official figures record the yield as 2 tons per acre on approximately 12,000 acres in 1919 and 3 tons per acre on 16,000 acres five years later. This increase in yield was the result of application of sulphur to the alfalfa fields of the county. Five demonstrations were established in 1917, and the results were so outstanding the following year that farmers purchased 300,000 pounds of sulphur which was applied to 3,000 acres of alfalfa. It was found that when 100 pounds of sulphur costing about $3 was applied, the yield was increased a ton per acre for three years. Later smaller annual applications became the standard practice. Occasionally land plaster is used when prices are in line, but it is the sulphur in the land plaster which the farmer buys.

When the first county agent started work the cropping system of the region was not developed. Potatoes had been established as a cash crop but varieties had not been standardized. A standardization and marketing project resulted in standardization on Netted Gems and the establishment of market outlets. Considerable potato-seed business was developed by an extensive certification program and demonstration plots in larger commercial producing centers.

In recent years the need for a second cash crop developed so in 1925 the county agent persuaded five farmers to try harvesting seed from their clover. In four years there were 120 clover seed growers producing $60,000 worth of seed, and the number of growers is increasing each year. Following are the steps taken by the county agent in establishing the seed industry:

1. Through field tours, publicity in local papers, circular letters, and meetings, the results of these early seed-production demonstrations were broadcast. This procedure resulted in increased acreage, and increased acreage brought clover hullers and improved cleaning machinery.

2. In locating seed for planting clover fields, only seeds of highest quality, free from noxious weeds, were obtained.

3. Introduced Ladino clover as a seed and pasture crop which returned growers $14,300 for seed produced in 1929.

4. Demonstrations were established which proved the value of sulphur dust in controlling clover mildew. This practice has become standard in the county and saves growers a loss of from 1 to 3 bushels of clover seed per acre.

5. Provided certification service for Ladino clover, alsike, and alfalfa seed.

Small Grains in Rotation

Although not a commercial cereal area the small grains fit in the rotation and are grown extensively for feed. United States census figures show the yield of wheat increased 5 bushels per acre, barley 3½, and oats 9 bushels. These increases were a direct result of standardization on the adapted varieties shown in demonstration trials. Warehouse records show that now 98 per cent of the wheat is Federation, 95 per cent of the barley is Hannchen or Trebi, the recommended varieties, and 90 per cent of the oat crop is Markton, a smut-proof oat which yields well in that region. The Markton may be replaced by Victory, now being demonstrated, which appears to be a still better yielder.

Dairying had a place in the Deschutes County farm plan. The number of cows in 1919 was 1,889, with an average production of 194 pounds. Bull associations were organized that year. Considerable time was spent in assisting in the purchase of better sires and breeding stock. The first county-wide tuberculosis test was made in 1921 to reach all but 11 herds in the county. This work was continued until the number of reactors became only a fraction of 1 per cent. Annually a series of feeding and management meetings was held during the winter months. Three years ago control work on infectious abortion was started and is now in progress.

Improving Pastures

More than one-half the dairymen of the county now have improved pasture as a result of a pasture-improvement project. These pastures have a carrying capacity double that of the common bluegrass and clover pastures first established. The new pastures are a mixture of grasses with Ladino clover base. Due to a great degree to this dairy program, production of the 4,250 cows in Deschutes County in a recent year was 260 pounds on the average, and the average for the cows in the cow-testing association organized in 1917 was 312 pounds.

Turkeys do well in central Oregon. Deschutes County farmers used to raise a few turkeys as a side line. The birds were dressed hit-or-miss and sold to the local stores in the holiday season. With a surplus developed in 1929, W. T. McDonald, then the county agent, organized a marketing association affiliated with the Idaho Turkey Growers' Association and assisted in the cooperative marketing of the crop. Prices received under this arrangement were so satisfactory that turkey production became an important industry. After three years the cooperative marketing set-up was changed somewhat but still continues. Largely as a result of killing and dressing demonstrations the number of top-grade turkeys assembled in Deschutes County was one of the highest percentages in the Northwestern Turkey Growers' Association, the central sales agency. From $5,000 in 1922 the value of the turkey crop increased as a result of this marketing program to approximately $1,000,000 last year.

In early days before crop production could be successful it was necessary to destroy the hordes of jack rabbits and ground squirrels which migrated from the untilled desert land onto the new farms. County agents organized the

farmers into community protection groups, held demonstrations on poison preparation and distribution, and headed up intensive eradication campaigns.

In the county agent's office in an irrigated county a level and a rod are essential equipment. Establishment of strip-border irrigation was one of the accomplishments of the county agent. One year, as a result of demonstrations, 4,000 acres of land was prepared in this manner.

Many Calls on County Agent

As could be expected, the office of the county agent in Deschutes County is a busy place. There are in many years more office calls per hundred farmers than in any other office in Oregon. The programs have been established after definite plans had been made, and it is this planning which accounts to a great degree for the results obtained, because during the first six years the tenure of county agents was exceedingly brief, as up to 1922 five county agents had been employed. From September, 1922, to November, 1931, W. T. McDonald carried on the program with conspicuous success.

Eradication of pests and establishment of cash crops were the first steps. Irrigation methods, forage crops, and foundation dairy cattle were the next series of objectives. Then, standardization and improvement of crops and dairy cattle, and establishment of the turkey side line were the logical procedure.

In all the results obtained the field demonstration has been the outstanding extension method in Deschutes County. The field demonstration, supplemented by field meetings, tours, and good publicity, is the combination mainly used.

THE BUCKS COUNTY, Pa., egg auction with 200 farmer and poultrymen members has sold over $150,000 worth of eggs since its organization last July. Encouraged by this success, two other cooperative auctions have been organized. Forty farmers of Montgomery, Berks, and Chester Counties will market eggs from 37,000 birds through an auction at Centre Point, Montgomery County, and 21 farmers in Lehigh and Northampton Counties have organized an auction at Bethlehem to handle the product of 30,000 layers.

A SHIPMENT of Hawaiian Island potatoes was recently made to San Francisco, the first to be shipped to the mainland since 1857. A second shipment will soon be made to New York. This is an interesting development of the extension service in building up supplementary industries.

A Land Clearing Contest

A LAND CLEARING contest in Pierce County, Wash., aroused a great deal of interest in a new method for destroying large fir, spruce, and hemlock stumps worked out by the State extension service. The contest as planned by County Agent A. M. Richardson and R. N. Miller, State extension economist, was open to any farmer living in the county and he was free to use any method of land clearing he chose. Each contestant cleared 1 acre of land and plowed it to a depth of 6 inches or more with no débris left on the land. Each kept a careful record of the labor performed, necessary cash expenses, breakage, and labor hours. The contest ran from October 1 to March 1. Thirty farmers entered the contest and in the face of the most adverse weather conditions, 15 farmers finished and met all the requirements.

As soon as the contestants announced that they had staked off their acre, the judges made their first visit, at which time they confirmed the size of the acre, carefully measured all stumps, listed the kinds of stumps on the acre, determined the soil types, and made other observations necessary in determining the winner of the contest. Blanks for recording hours of labor and expenditures and for noting the machine used for clearing were left with the contestants, and these contestants mailed the records each month to the office of the county agent, where a careful compilation was maintained. At different times during the winter, the county agent and judges visited the different contestants to observe their work and methods.

Before the end of the contest, the extension specialist worked out a system of stump points to be used in judging. In this way, differences in size and kind of stumps, as well as type of soil, were overcome. For example, a fir stump would receive more credit than a cedar or hemlock stump, while a green alder or maple would receive more credit than fir stumps of equal size. Blind stumps would receive more points than the regular stumps, because it is harder to remove blind stumps than regular stumps.

Results of Contest

On March 7 and 8 the judges made their final inspection and soon afterward announced the winners. Charles B. Massie, jr., Puyallup, Wash., was awarded first prize. Using a forced-draft burner, he removed 63 stumps of the following sizes: ten 12-inch, four 16-inch, nine 20-inch, six 24-inch, fourteen 30-inch, eight 36-inch, six 40-inch, and two 48-inch firs; one 10-inch and one 36-inch cedar; and one 12-inch hemlock, running the burner 399 hours at a cost of $4.75 for current, and with 213 hours of labor, which, figured at 25 cents per hour for labor, and an added $2.50 arbitrary overhead for the burner, made his total cost for the acre $60.63, or 9 cents per stump point. This man has had considerable experience with using the forced-draft burner.

Methods Used

Following him with a cost of 9.4 cents per stump point was Fred Graetzer, who in the winter of 1931 burned out 17 acres of stumps with a vacuum cleaner. Of the men finishing, five, or one-third, used the forced-draft system of burning and burned all of the stumps and débris found on their acre. Another prize winner used explosives and a team, but he was unable to burn the stumps blasted and pulled, merely dragging them to the side of the acre and leaving them, agreeing to burn them next summer. There was a great difference in the degree of physical labor required under the old-fashioned systems and the forced-draft burner perfected by the extension service.

The prizes were awarded at a special meeting of the Tacoma Chamber of Commerce, at which time the winner of the contest described the method used and received a prize of $126. The winner of the second place received $75, third place $50, fourth place $25, and fifth place $20.

The contest was well written up with illustrated articles in Sunday papers and in local papers, causing a great deal of comment. The fact that the cash cost of the winner was only $4.75 created a tremendous amount of interest. It was further shown that this man did not use a team, power puller, or any equipment other than the forced-draft burner, and that the labor involved was very light. The extension service recommends the use of a gas-powered puller in connection with the burner.

The contest accomplished the desired result of showing that land clearing could be accomplished at a very low cash cost by earnest settlers. During 1931 more than 5,000 new settlers have purchased land in the cut-over sections of western Washington, and the number of new settlers will probably be considerably larger in 1932.

The Hog Outlook Situation for Fayette County, Ohio, 1932

COUNTY AGENT, W. W. Montgomery, Fayette County, Ohio, has been especially successful in his outlook meetings for hog growers. The following talk is typical of the way he and other Ohio county agents presented the hog outlook for 1932 to the farmers of their counties, following discussions of the situation with the economic specialists of the State extension staff.

FAYETTE COUNTY has held the forefront in hog production in the State since 1921. In 1930 from the farm account summaries, it was found that 66 per cent of the gross income on those farms was from hogs, 15 per cent from dairying, and 11 per cent from poultry.

With this one farm enterprise producing such a large percentage of the gross income annually on your farms, you will be interested in the outlook situation of the hog industry for 1932.

The number of hogs on farms as of January 1, in the years given, for the county, Ohio, and United States have been as follows:

Year	United States	Ohio	Fayette County
1900	52, 600, 000	3, 188, 563	75, 438
1910	49, 300, 000	3, 105, 000	93, 560
1920	60, 159, 000	3, 084, 000	79, 309
1925	55, 770, 000	2, 440, 000	84, 645
1930	55, 301, 000	2, 078, 000	80, 000
1931	54, 374, 000	1, 974, 000	84, 000
1932	59, 511, 000	2, 072, 000	71, 900

Fayette County produces more hogs for the size of the county than any other one in the State. We have certain advantages in this county for pork products and that is the reason that most of our farm incomes come from this source. Our State is now an importing State. In other words, it consumes more hogs annually than are produced here. The population of the State has increased 15 per cent in the decade from 1920 to 1930 and hog population has decreased 33 per cent.

Hog Prices Determined by Total Production

The price of hogs is determined for you men by the price of hogs on the Chicago market plus freight. In other words the number of hogs produced in the entire Corn Belt is more important than the number of hogs produced in Ohio or Fayette County.

Fortunately for you hog men, the rapid decline in the commodity price level, or the sharp decrease in the price of hogs, came at a time when the hog-production cycle was on the downward trend or near the bottom of the trough. This is shown by the fact that total United States production in the last hog cycle was 54,000,000 on farms January 1, 1931, and 59,500,000 January 1, 1932. Hog production declined in the United States for 1929, 1930, and 1931. Preceding that period, it had increased for the two years 1927 and 1928.

The June pig survey for that year, 1931, showed the heaviest increase—18 per cent—of sows bred for fall farrow, of any year since the pig survey has been in progress by the United States Department of Agriculture.

Number of Pigs Increased

An increase of 19.7 per cent in the number of pigs raised in the United States this past fall over the fall of 1930 is shown by the December pig survey. This is the largest increase in the fall pig crop ever reported. In Ohio the increase was only 8 per cent. From the standpoint of you men in Fayette County, this is at least somewhat favorable. Combining this increase in the fall pig crop with the 2½ per cent increase in the number raised last spring, the total for the year 1931 was about 9 per cent larger than the total number raised in 1930.

As a result of this large farrow, the cycle apparently turned up with the beginning of 1932 with 59,500,000 hogs on farms January 1. This might lead to the belief that we had started on an upward cycle in hog production in this country. However, the rapidly falling price level, and especially of hogs, may cause some slowing up in total production. With 1910–1914 equaling 100, or the pre-war period of prices, the all-commodity index was 141 for 1928, 139 for 1929, 126 for 1930, and 107 for 1931. Farm prices for those years in the United States were 145, 144, 120, and 82. At the same time the index number for hogs stood at 81 for 1931, and for January, 1932, at 53, or 47 per cent below pre-war prices. The price of hogs did not begin to decline as quickly as some other things but has fallen farther and more rapidly during the last year than any other farm commodities except the grains. While this is unfortunate for you hog producers, it might be well to consider the fact that if deflation continues, other commodities in all probability will fall and reach the same low level as hogs, and therefore, it is a question whether a man should shift his farm enterprise into some other line, which seems high now but in all probability will fall more rapidly from now on than the price of hogs. The fact that grains, corn, wheat, oats, have fallen rapidly, leaves the corn-hog ratio favorable to you men.

The average price of hogs on the Chicago market for 1930 was $9.47 per hundredweight; for 1931, $6.16 per hundredweight; and for January, 1932, $4 per hundredweight.

Industrial Production Declined

Industrial production had declined to 45 per cent below normal for April and factory pay rolls were below. Industrial production was at the lowest of any point in history. Pork is the poor man's meat and during periods of unemployment more pork and less higher-priced meats are eaten. Per capita consumption of pork and pork products during 1931 was slightly higher than in 1930. Any marked increase in consumer demand quite largely depends upon the hoped-for improvement in general business conditions, and the resulting increase in the consumers' purchasing power.

Export and Foreign Situation

One of the most important factors causing our apparent surplus of hogs at the present time is the loss of our export trade. Lard and pork exports decreased 49 per cent for pork and 20 per cent for lard the first 9 months of 1931 compared to the same 9 months in 1930; or for the year, exports of pork fell off 44 per cent during the year and lard exports 26 per cent. This decrease in exports during the last 10 years is equivalent to 6,000,000 hogs. About 10 per cent of the total hogs produced in the United States were normally exported in pork, pork products, and lard.

Germany and Denmark at the post-war period were slaughtering less than 4,000,000 head. In 1931 this had increased to 28,000,000. Other countries on the Continent have greatly increased hog production. These countries are trying to produce and live at home. Hog slaughter during 1931 in Germany and Denmark, the two leading hog-producing countries of Europe, was the highest on record.

United States pork exports at the post-war season were amounting to the equivalent of 10,000,000 to 12,000,000 head. For 1931 it was less than 4,000,000. This drying up of export trade has been a serious handicap to the swine industry here in the Corn Belt and has materially affected the income on your farms. With the general economic conditions which prevail in these countries at the present time, there is little prospect of material increase in demand for America's pork products during the current hog marketing year.

Cold-storage holdings of pork on June 1, 1932, were 4.6 per cent lower than a year ago and about 3.4 per cent under the 5-year average. The amount of lard in storage on June 1 was 25 per cent more than a year ago and 7.6 per cent less than the 5-year average.

Summary of Hog Situation

To summarize the present hog outlook situation for you men, we find about the following conditions:

1. Sows farrowing in fall of 1931 compared with fall of 1930:

Ohio---------- 10.4% more.
United States------ 19.5% more.

2. Pigs saved in fall of 1931 compared with fall of 1930:

Ohio---------- 8.3% more.
United States------ 19.7% more.

3. Breeding intentions indicate a very slight increase in the number of sows to farrow next spring in the entire United States.

a. Decrease in the Corn Belt, where 80 per cent of the hogs are normally produced.

b. Large increase in other parts of the country, especially the South.

4. Four per cent more hogs under 6 months of age on farms in the Corn Belt on December 1.

5. Export demand for pork decreasing rapidly.

6. Storage holdings of pork above last year and about equal to the 5-year average.

7. These reports indicated heavier market receipts during the spring and early summer than last year.

8. In view of the fact that our loss of exports is equivalent to about the difference in the number of hogs between a low point and a high point in the hog-production cycle, it seems entirely possible that we may not have the increase in hog production now which would normally be expected from our position in the hog cycle.

Homemade Relief Suggestions

If the present depression period is to last as long as other depressions of similar variety, then sticking close to the shore is going to be one of the first requisites. In our farm-account work we have found that the efficiency factor in livestock and crop production has played a large part in the farmer's income.

Therefore, I would suggest that you men attempt to get as large a number of pigs saved per sow this year as possible and cull out any unprofitable sows. Produce some legume, soybean, alfalfa, or sweetclover hay to supply a part of the protein in the ration.

Watch the market closely and market your hogs at the most desirable weights, a truck load at a time, when they are finished, rather than letting too many of them pass the most desirable market stage. Your cooperative association offers you regular opportunity for this.

Remember the sow, cow, and hen have always proved the most profitable for our farming conditions. You farmers here in Fayette County have the advantage over western farmers by being closer to markets in the East, with high freight rates unfavorable to the western producer, and by being on the edge of the Corn Belt section.

Stretching Clothing Dollars

HOME makers in 24 Illinois counties have formed groups this winter to study ways and means of making old clothes look like new ones, reports Edna R. Gray, home economics extension, University of Illinois. Each group studied its own needs and made suggestions as to what should be included in demonstrations presented to it.

The enrollment was not limited to home-bureau members, and in some counties, particularly where no organized home bureau existed, one series of open meetings was held, at the end of which enrollment for succeeding meetings was taken. In a few counties it was considered wiser to make all meetings open to the public.

The content of the county thrift projects has varied as widely as have the plans for carrying them out. Care of clothing on hand, pressing, mending, dry cleaning, laundering, spot and stain removal, stripping color from used materials, dyeing, and modern methods of construction have all formed part of some county project. All plans have included a clothes clinic in which the adaptation of present styles to making over garments from 1 to 20 years old has been discussed. Much of the subject matter presented in the clothing clinics was included in a 4-page mimeographed leaflet, Disguising Last Year's Clothes. This was distributed widely to members of clothing thrift groups and to others sufficiently interested to write for it. One other piece of mimeographed material, Seams and Seam Finishes, has also been circulated among members of clothing thrift groups in order to make effective reconstruction of old garments more certain.

Subject-matter outlines were prepared by the specialist for the use of home advisers and others presenting any phase of the clothing project.

County home bureau executive boards have found many ways of freeing time on the home advisers' schedules for holding these many extra meetings and home advisers have been untiring in their efforts, not counting the many extra hours of work devoted to making clothing thrift meetings worth while. Du Page, Hancock, and Kane Counties found well-trained, experienced home makers to lead these local groups with some advice and assistance from the home advisers, whereas Mason, Fulton, McLean, and Iroquois have each arranged for part of the clothing thrift work to be carried by local leaders trained by the home adviser or specialist, the rest to be presented in demonstrations by the home advisers.

Reports of results are beginning to come in. Really attractive, well-made dresses not lacking in style quality have been exhibited at several county meetings.

At the Piatt County clothing clinic, 28 women received suggestions for the making over of 43 dresses. At the Douglas County clothing clinic, 25 women received help on 33 dresses and 1 coat.

One woman, member of a clothing thrift group in Knox County, where work for a home bureau organization is now going on, reported that she had already saved enough money for her first year's home bureau dues as a result of the use of information given in one meeting where cleaning processes were demonstrated.

THE 13 COUNTIES carrying the nutrition project in Maryland reported 216,086 quarts of canned fruits and vegetables; 8 counties reported 20,815 quarts of meat canned; 18 counties reported 60,703 quarts of preserves and fruit butters; 8 counties reported 136,092 pounds of meat cured; and 8 counties reported 223,333 bushels of fruits and vegetables stored.

Controlling Bots in Horses

DR. H. M. McCAPES, extension veterinarian in Missouri, tells how the work of controlling bots is conducted in his State:

"During the summer of 1931 my attention was attracted to the fact that the nose bot fly was occurring in increasing numbers in some parts of the State. As this pest has been relatively unknown in Missouri until recent years and few farmers in the State know how to combat it, a preliminary campaign for the control of horse bots was introduced to control the incidence of botflies that annoy and excite horses, sometimes causing teams to run away and injure themselves.

"Work was undertaken in 16 counties during the fall and winter of 1931 with the result that about 4,500 head of horses, mules, and colts were treated for the elimination of bots. Local veterinarians were employed by farmers to treat the animals and the organization work enabled the veterinarians to serve at a considerable reduction in fees, the work being done at a cost of 50 cents per head.

"In Marion County farmers of three communities had their horses treated with very satisfactory results under the plan of organization directed by F. R. Cammack, county agent. Seventy-five farmers in the county owning 412 animals brought their horses to a central point to be treated for bots. Six local veterinarians cooperated by administering the treatment to the horses in each of the communities.

"It is planned to follow up this work again next year and attempt to get a larger number of farmers throughout the State to adopt the plan of having their horses treated annually for bots and certain other injurious parasites.

"In the late winter of 1931 there was a demand from the Dresden community in Pettis County for treatment of horses for bots and other injurious parasites. Veterinarians of Sedalia and the county agent went to the community and held a meeting for the purpose of discussing the situation with about 40 farmers in attendance. The horses were treated with carbon disulphide in capsules, which is the only effective treatment known for destroying bots in horses. Three men were appointed to get the names of farmers and number of horses owned, so that each man could be notified where to bring his horses for treatment on the date set. Forty-five horses were treated for nine different farmers.

"Many of the farmers reported that good results followed the use of the treatment.

"The bot control work stimulated splendid cooperation between veterinarians and extension agents and made it possible for them to become better acquainted in communities where their professional services can be used to fine advantage to the livestock industry.

"Controlling bots and certain other injurious gastra-intestinal parasites of horses for which the same treatment is effective, protects the health, growth, and development in colts and young animals, lessens the frequency of colic in work horses, and increases their working capacity on the same feed. We propose to push this project in our extension program of work in the State of Missouri."

Cooperative Sells to Home Markets

NEW HAMPSHIRE has been fortunate in that many products have been sold within a few miles of the farms where they were produced, and up until the last few years potato growers in the southern half of the State enjoyed a splendid market in their neighboring towns for their entire output, says County Agent E. W. Holden, of Merrimack County.

The development of chain stores and wholesale concerns, which largely purchased outside of New Hampshire, and the improvement of roads and trucking facilities changed the entire market situation. A survey by the State experiment station showed that approximately 197,000 bushels of late-crop potatoes were shipped in to New Hampshire annually. The markets of Merrimack County, chiefly those of Concord and Franklin, suffered more from this competition than any others of the State. Just how this condition was met is told by County Agent Holden.

"Several years ago our growers realized that something must be done to correct these conditions if potato growing was to continue as a profitable enterprise. The trade of chain stores had gradually assumed a place of importance in the market; so the first logical step was to devise some plan which might be acceptable to them.

"A scheme of marketing was outlined by a few of my county growers, and one of the largest chain-store systems was approached in the fall of 1929. The management agreed to give our marketing scheme a trial in 20 of their stores located in Manchester, Concord, Franklin, Laconia, and a few smaller centers. Two years of trial demonstrated that the plan was sound from the standpoint of both the producer and the buyer.

"Then a committee of the Farm Bureau Federation was appointed to determine whether our program of marketing could be expanded. After a study of the situation and some changes in the original plan, the committee succeeded in interesting another chain-store system which operates 127 stores in New Hampshire. Arrangements were made to supply 70 stores in the central part of the State. Since then all other stores of this company, with the exception of the 10 northernmost units, have been added to the project. This means that 137 stores of the State, buying more than 100,000 bushels of potatoes, will be supplied this season by New Hampshire growers under this plan.

"Now let me explain in a few words just how the plan operates. The first requirement is a quality product. The Government price quotations in the Boston market are the basis of sale. The grower is required to furnish supplies as needed, guaranteeing the grade, while the buyer is expected to advertise the potatoes as New Hampshire grown. Matters of distribution and general supervision of the project were placed under the direction of the New Hampshire Farm Bureau Federation. The overhead cost under this set-up has been very low.

"This year's results are further proof of the soundness of this plan; that it is a means of protecting New Hampshire markets for State growers at a fair price for their goods; that through guaranteeing supplies and quality it answers the demands of buyers; and that through centralized supervision it helps to eliminate shortages or surpluses in the market supply. It means to consumers in New Hampshire that they can now purchase potatoes that are grown in New Hampshire and which are guaranteed to be of good quality. They will also know that there is only one handling charge between the price they pay and what the farmer receives.

"The plan is one which offers unlimited opportunity for expansion with independent grocers and chain-store groups. If properly operated it should strengthen the important potato enterprise of the Granite State."

Film Strip Prices Lower

NEW LOW prices for United States Department of Agriculture film strips will prevail during the fiscal year 1932-33, according to an announcement recently issued by the Office of Cooperative Extension Work of the United States Department of Agriculture. Dewey & Dewey, 5716 Thirty-fifth Avenue, Kenosha, Wis., was awarded the contract for film-strip production because of the low bids submitted in competition with other firms.

The prices for film strips until June 30, 1933, will range from 14 to 85 cents each, depending on the number of illustrations in the series. The majority of the 135 series that the department has available will sell for 28 and 35 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.

Many extension workers believe that the most effective film-strip series are those that have been prepared from photographs taken locally by the agent. For agents wishing to have film strips made up from their own pictures, the new prices are also cheaper. The price is 15 cents per frame; that is, 15 cents for each picture, title, diagram, or other visual medium used in the series. This price includes the negative and one positive print of the series. Additional positive prints may be purchased by the agent or groups of agents cooperating in the production of one film strip at inexpensive prices. For instance, a film strip series of, say, 40 illustrations would cost $6 for the negative and one positive print. Additional positive prints could then be purchased at 28 cents each, or, if ordered in quantities of 10 or more strips, 20 cents each.

Localized Film Strips

"We are very much pleased with the results obtained from two poultry film strips on 4-H club work" says Edward S. Walford, assistant extension poultryman, Connecticut. These two series, "Better Homes For Hens" and "Growing Healthy Chicks the 4-H Way" were shown to 332 members at 23 club meetings by Mr. Walford. They are loaned to local leaders on request and the counties each have a set of the two which they use frequently.

The film strips were made up of pictures of club work taken in Connecticut. They were prepared for the use of county club agents and local leaders to show 4-H poultry club members the various types of houses and brooder houses that are giving successful results to other club members in the State and to reinforce the six points of the 4-H Grow Healthy Chick Campaign. Detailed notes upon which they can base their lectures are supplied with each series.

Twelve localized film strips have been completed recently for the use of county extension agents, specialists, and other extension workers by the Department Extension Service. The photographs used were all local pictures either selected or taken by the agents themselves. Prints of the series were made on standard-width motion-picture film suitable for use with film-strip projectors. The series are as follows:

Series No. 1071, Basic Information for Indiana Farmers (47 frames); No. 1072, How to Grow Thrifty Pigs in Indiana (37 frames); No. 1073, Dairy-Herd Improvement Association, Maryland (50 frames); No. 1074, Potato Growing, Ohio (100 frames); No. 1075, Results of Churchill County Home Vegetable Garden Contests, 1931, Nevada (75 frames); No. 1077, Purdue School of Agriculture, Indiana (65 frames); No. 1078, Girls' Room Improvement Work, Nebraska (55 frames); No. 1079, Onward Oklahoma (67 frames); No. 1080, Producing Profitable Pullets in Indiana (40 frames); No. 1081, Wyoming 4-H Club Members and Activities, Series B (57 frames); No. 1084, Rural Community Life in the Old World, Kentucky (54 frames); No. 1086, By Forest Roads and Trails, Oregon (55 frames).

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.

IN ROUTT COUNTY, Colo., 105 women attended demonstrations on washing and carding native wool for use in making comforts. When wool pelts sell for 25 cents and wool bats cost $5, it pays to wash and card raw wool for home-made comforts, according to the home demonstration agent.

BELIEVING that the radio is a real method of telling others what is being accomplished by 4-H club work, four club agents from the central New York group got together with the agricultural program director of Station WFBL at Syracuse, N. Y., to work out a program.

As a result of this meeting, the station has given over a period of 15 minutes each Saturday noon to be devoted to 4-H club folk.

The counties carrying on this program are Jefferson, Oswego, Madison, and Onondaga. Each club agent takes his turn in preparing the program.

In accordance with the agricultural program director's wishes, the programs are put on by the club members themselves, and each week a large group of them are present from the county having charge. The programs to date have included: (1) Community meeting, (2) the organization and election of officers of a club, (3) a business meeting of a club, and (4) planning for the 4-H garden by a garden club.

New Motion Picture

A new motion picture on the control of the prairie dog and the ground squirrel has just been released by the Department of Agriculture. This picture points out that even in the early days these rodents were an annoyance and their burrows a source of danger to range riders, and that with the settlement of the West, rodents increased, their natural enemies being reduced and cultivated crops providing abundant food. It goes on to show how these rodents live and how the destruction they cause to crops, dams, dikes, and reservoirs, sometimes drives stockmen and ranchers to the brink of bankruptcy. Their depredations on watersheds resulting in serious erosion are shown. Settlers seeking Government aid against the inroads of these rodents brought the Biological Survey onto the scene. This bureau, conducting studies in both field and laboratory, evolved methods of procedure and poisoned baits by which these rodents are now being controlled. The picture shows how the baits are mixed and applied, control crews at work, and the results of a cooperative clean-up campaign. The end of a day's work in the crew camp furnishes a bit of comedy to end the picture.

The film is two reels in length and may be borrowed in either 35 or 16 millimeter widths. Borrowers pay the cost of transportation from and to Washington, D. C. Application should be made to the Office of Motion Pictures, United States Department of Agriculture, Washington, D. C.

·ACROSS · THE · EDITOR'S · DESK·

Their Money's Worth

THERE is no extension agent, I am sure, who did not read with keen interest in the August issue of Country Home the vigorous editorial entitled, "Cut the Dead Wood." Speaking of the county extension agent, it reads, "The low prices to-day leave us no room for inefficiency or waste in either production or marketing. We need all the help we can get and there are plenty of instances in every county where the agent has helped a farmer to make enough additional money to pay his taxes and more. This is no time to dispense with one of the few local employees whose work increases the wealth and income of the county."

The editorial, as you will remember, discusses, also, the cost per farm of maintaining an agent in a county. Eighty cents a year is the figure given.

I get from this editorial two things. First, the necessity for strict concentration in extension work in the county on whatever can be done to increase and conserve the cash income of the farm family. Second, the equal necessity for letting the people of the county know the extent to which, through extension assistance, farm incomes have been increased or conserved and farm buying power has been improved.

Any item in the farm tax bill whether it is 80 cents or 8 cents requires full justification to-day. Yet if every farm tax bill that is paid as a result of aid given to the taxpayer by the extension agent could be so indorsed, I am certain, there would be no question on the part of county governing bodies about whether or not the agent should be kept. That's the problem—to add materially to the farm buying power of the county, and to have all the people of the county know what you have accomplished.

The Tide Turns

READING a statement on farm population issued by the department in July, I found that 207,000 more people moved onto farms in 1931 than went from the farm to the city. This number looked rather insignificant to me when compared with the 31 millions of total farm population. But in 1930, the balance farmward was only 39,000, and for seven previous years the trend recorded was altogether cityward rather than toward the country. So, whatever may be its final proportions, the movement of people from the city to the farm has begun.

What kind of people are coming to the farms? I asked this question of T. B. Manny of the Bureau of Agricultural Economics. He sees, at least, four groups of people coming to us. First, there are the sons and daughters of farmers who are returning to the home farm and neighborhood. Many of them have lost their city jobs and are bringing their families with them. After this experience, their inclination is to obtain their future living from farming.

Next Mr. Manny sees the foreign born of rural origin, who came to this country attracted by the promise of high industrial wages. These, as a rule, have large families and there are many mouths to feed. Farm life promises them enough to eat, shelter, fuel, and something for all members of the family to do. It would be good, they feel, to get back to the soil.

Out of the city, too, are coming men, 40 years of age and older, who having lost their jobs can not, because of stringent age limitations set by industry, get new positions. They and their wives should have many years of useful occupation ahead. Since the city does not provide the opportunity the country must and does.

Then, there is the part-time farmer who is, also, a part-time worker in industries that have moved in recent years from the large cities to small towns seeking cheaper bases of operation.

The coming of any of these people into a county provides new problems for the extension worker and necessitates further adjustment in the extension program. How can agriculture best absorb these people? That, as I see it, is the question we must set to work to answer.

Real Money

THERE couldn't be a more popular subject just now, I am sure, than turning spare moments into money. That's what Margaret Ambrose, of Tennessee, assistant director in charge of home demonstration work, tells us the rural women of her State are being helped to do. In one of the communities she talks about, the homemade rugs and mats made and sold brought $15,000 during the year. In a number of homes it was the only cash income.

From the beginning of home demonstration work, the development of home industries and of income from other home activities has been an important part of the program in many counties, but never, I think has there been a more favorable time for expanding this part of the program than now. Miss Ambrose reminds us, though, that the development of a home industry is not merely a matter of giving instruction. The home demonstration agent, she points out, must also give encouragement, suggest improvements, and find a market for the finished product.

There's more to it, too, from the standpoint of the individual woman than being instructed and willingness to receive such instruction. She must have aptitude and enthusiasm. She must develop, too, if she is to succeed, a real pride in her creative ability. As Miss Ambrose puts it, "Anyone can secure instructions that will enable her to make a rug, but not everyone can make a beautiful rug." It must mean, then, more than just a way to get money.

Let's Have The Truth

T. M. CAMPBELL, field agent in negro extension work for the lower tier of Southern States, brought to my attention a statement once made by Booker T. Washington that comes mighty close to fitting the present situation. It has, I am sure, particular application to the many conferences of all sorts that we as extension agents are called on to attend. Here it is:

"We might discuss many wrongs which should be righted but it seems to me that it is best to lay hold of the things that we can put right, rather than those we can do nothing but find fault with. Be frank with each other; state things as they are; do not say anything for mere sound because you think it will please or displease another. Let us hear the truth in all matters."

R. B.

NEW PRICES.—For the fiscal year ending on June 30, 1933, prices for Department of Agriculture film strips will run from 14 to 85 cents per strip depending upon the number of illustrations in the series. Most of the 135 subjects available on film strips will sell for 28 and 35 cents. Film strips can be made from local photographs for 15 cents per frame, which includes the negative and one positive print.

NEW CONTRACTOR.—Dewey & Dewey, 5716 Thirty-fifth Avenue, Kenosha, Wis., submitted the lowest bid and has been authorized to produce Department of Agriculture film strips.

HOW TO ORDER.—Send orders direct to Dewey & Dewey. At the same time send to the department a request to authorize the sale. Blanks may be obtained for this purpose. Orders will be filled as soon as the firm is notified of the department's approval. Payment should accompany the order. Film strips are delivered postpaid.

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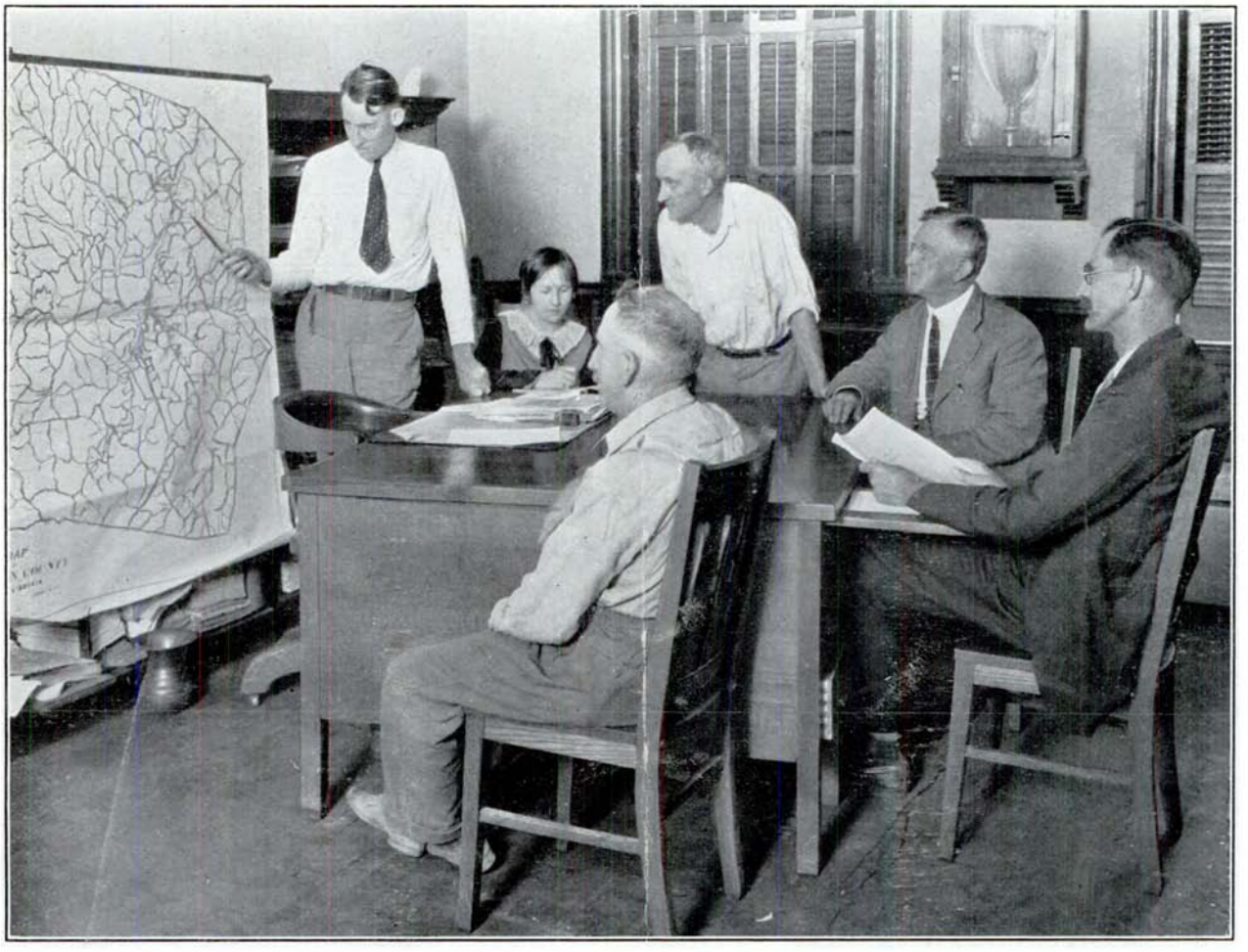

A COUNTY PROJECT COMMITTEE PLANS ITS WORK

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

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In This Issue

CANADA has an answer to the question of how to keep young men and young women interested in farm life. J. E. Whitelock, assistant director in the Province of Ontario, tells us how their short courses in agriculture and home economics for young people are conducted, and how these young people organize junior farmer associations and junior institutes in their home communities.

U. BENTON BLALOCK, president of the American Cotton Cooperative Association, presents the record of the cotton cooperatives for the past year. The 215,000 members of these associations in the South are beginning to realize full benefits of mass action in marketing a great agricultural commodity.

IOWA growing one-fifth of the country's output of hogs, points with just pride to state-wide progress in obtaining increased efficiency in hog production. E. L. Quaife, extension animal husbandman, shows us that the average number of pigs weaned per sow increased from 4.6 in 1922 to 6 pigs in 1931 due to better methods of breeding, feeding, and sanitation.

DAN E. MILLER, county agent for Howard County, Mo., compares different devices for collecting farm information. He feels that the local leader is more satisfactory than mail questionnaires and random sample interviews. A complete farm report was obtained by him from leaders in his county at an average cost of 4.4 cents per farm.

OREGON has mobilized 20,000 4-H club boys and girls in its state-wide fire-prevention campaign to eliminate the fire hazards on the farm. The reason is to be found in the fact that $3,000,000 worth of farm property was destroyed by fire in Oregon in 1930 and 1931.

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WHAT next in 4-H club work? This is the thought-provoking theme of a discussion of the evolution of club work and some of its present-day problems by Director O. B. Martin, of Texas. Director Martin puts strong emphasis on the well-planned, well-executed demonstration as fundamental in making 4-H club work effective.

On the Calendar

Outlook Conference, Atlanta, Ga., November 8–11.
American Royal Livestock Show, Kansas City, Mo., November 12–19.
Land-Grant College Meeting, Washington, D. C., November 14–16.
International Livestock Exposition, Chicago, Ill., November 26–December 3.
National Boys' and Girls' Club Congress at International Livestock Exposition, Chicago, Ill., November 27–December 2.

EXTENSION EVENTS

Annual Extension Conference, Lincoln, Nebr., November 21–23.
State Home Economics Association, Dallas, Tex., November 24–26.
County Agents' Conference, State College, Miss., December 1–10.
Annual Extension Conference, State College Station, Fargo, N. Dak., December 10–15.
Extension Conference, Kingston, R. I., December 13–15.
Annual Extension Conference, St. Paul, Minn., December 13–16.
Extension Conference, Amherst, Mass., December 19–20.
Annual Extension Conference, East Lansing, Mich., December 13–16.

HOW can we maintain a satisfactory standard of living under present conditions? Flavia Gleason, State home demonstration leader in Florida, finds the answer in the ways Florida's rural women have converted surplus garden, poultry, and dairy products into cash and have developed the sale of cut flowers, plants, Christmas wreaths, and other specialties.

WOOL-GRADING meetings in 28 principal sheep-raising counties in Wisconsin were used to bring to woolgrowers practical information leading to the improvement of wool quality and prices obtained. From 20 to 80 woolgrowers attended each of these meetings.

THE EXTENSION SERVICE REVIEW is issued bimonthly by the EXTENSION SERVICE of the United States Department of Agriculture, Washington, D. C. The matter contained in the REVIEW is published by direction of the Secretary of Agriculture as administrative information required for the proper transaction of the public business. The REVIEW seeks to supply to workers and cooperators of the Department of Agriculture engaged in extension activities, information of especial help to them in the performance of their duties, and it is issued to them free by law. Others may obtain copies of the REVIEW from the Superintendent of Documents, Government Printing Office, Washington, D. C., by subscription at the rate of 25 cents a year, domestic, and 45 cents, foreign. Postage stamps will not be accepted in payment.

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

Extension Service Review

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Work with Young Men and Women in Ontario

J. E. WHITELOCK

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AGRICULTURAL extension work, through the medium of agricultural representatives or county agents, was first introduced in the Province of Ontario in 1907. From the first those in charge have realized the possibilities and opportunities of extension work with young people.

The field of junior extension activities in Ontario may be divided into the following four main divisions:

1. Rural school fair work for boys and girls, 10 to 14 years of age.
2. Boys' and girls' club work for boys and girls, 12 to 20 years of age.
3. Short courses in agriculture and home ecenomics for young men and young women, 16 to 30 years of age.
4. Junior farmer associations and junior institutions for young men and young women, 16 to 30 years of age.

It is with the two latter phases that this article will briefly deal.

Short courses in agriculture were adopted as a policy of the Ontario Department of Agriculture in 1912. These courses, in general, extend over a period of four weeks, although courses extending over a period of three months have also been held annually in a number of counties since 1921. In all, 696 one-month courses and 78 three-month courses, with a total attendance of 22,554 young men, have been held since their inception. The courses are under the direction of the county agricultural representatives. The 3-month courses are organized and conducted under the same management, but the courses of study are largely handled by specialists sent out by the department of agriculture. The course of lectures includes, in addition to a study of some elementary science, the more practical features of a regular agricultural course, that is, stock and seed judging, pruning, cow testing, rope splicing, treating grain for smut, poultry culling, soil testing, as well as a study of such subjects as feeds and feeding, farm crops, drainage, and the treatment of common diseases of farm animals.

Courses in Home Economics

The courses in home economics for the young women were first conducted in 1916. Since that time, upward of 20,000 young women have attended either a 1-month or a 3-month course embracing a study of cookery, home nursing, and first aid, sewing, laundering, and other household arts. These courses are also under the direction of the local agricultural representative, but the course of study is administered by specialists from the institutes branch of the department. The courses in agriculture and home economics are held at the same centers. It should also be pointed out that they are of a more or less itinerant nature, that is, held at different points annually in the various counties. It is perhaps worthy of mention to note that in the county of North Simcoe, one agricultural representative for the past few years has conducted two 1-month courses each winter, the second 1-month course being a follow-up to the first year course the preceding year. Approximately 60 per cent of the young men who attended the course the preceding year return for the 1-month course the second year. The remainder of the class is made up of an equal number of young farmers who, for some reason, were unable to attend the first year. This clearly indicates that the young people find the courses worth while and that they are highly regarded throughout the Province. The average age of the young men and women attending these courses is between 19 and 20 years.

In the short period of one month, or even three months, it is impossible, how-

York County junior annual livestock judging competition

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ever, to do much more than create an interest and a desire for furthering knowledge. The idea of welding these young people into organizations with common interests was conceived in 1914. Since that time, therefore, it has been a general policy to organize the members of the class in agriculture into a junior farmer association and the members of the household science class into a junior institute. Their motto is "Self-Help and Community Betterment," and they therefore carry on separate programs of particular interest to the members of their respective group. In general, these organizations meet monthly, although in some places weekly meetings are held.

Programs of Associations

As is borne out by the survey made in Wentworth County, which is mentioned in part 3 of the splendid report, The Relation of Age to Extension Work, made by W. A. Lloyd, United States Department of Agriculture, approximately 90 per cent of these young people remain on the farms. The two organizations usually meet the same evening at the same center, but hold separate meetings for the first hour and a half. Following these, the two organizations meet for a joint social hour. The outline which appears below is the May, 1932, program for the Ayton Junior Institute and Junior Farmer Association in Grey County. These are typical of the programs being carried on by the two organizations throughout Ontario.

PROGRAM

AYTON JUNIOR INSTITUTE AND JUNIOR FARMERS MAY, 1932, MEETING

Junior Institute (Young Women)

1. Minutes of last meeting.
2. Roll call—Answered by Who's Who and Why in Ontario.
3. Business.
4. Topic—Food and Its Relation to the Human Body, Marjorie Schenk.
5. Directors: Reta Benninger, Eleda Gerhardt.

Junior Farmers (Young Men)

Chairman, Irwin Fisher

1. Minutes of last meeting.
2. Roll call—Answered by name of cash crop.
3. Business—Judging competition, Markdale.
4. Topic—Potatoes, Thomas Benninger.
5. Discussion led by Milton Becker.

Joint Meeting

Chairman, Fred Seim

1. Minutes of last meeting.
2. Current events, Dorothy Lobsinger.
3. Program committee: Florence Fisher, Lorne Domm.

These programs are planned by the executive of the two organizations with the assistance of the local agricultural representative and usually extend over a period of 12 months. It is most significant that both junior farmer associations and junior institutes are most successful in communities where they work in close cooperation. There are now 156 such junior farmer associations, with a membership of 4,875 in Ontario and approximately 100 junior institutes with slightly over 2,000 membership. In 18 counties there are county organizations which foster interassociation contests and also are responsible for the county program. These include such activities as the following: (1) Stock and seed and domestic science judging competitions; (2) plowing competitions; (3) public speaking; (4) debating; (5) musical festivals; (6) dramatic contests; (7) agricultural and domestic science projects; (8) community projects; (9) athletic field days; (10) educational tours and excursions; (11) educational exhibits at fall fairs; (12) experimental and demonstration work.

The agricultural and domestic science projects referred to include projects with grain, swine, sheep, potatoes, farm bookkeeping, garden and canning clubs, home beautification projects, and the like. These projects are in the main similar to those conducted with boys and girls in club work but of a more advanced stage.

The average age of the young people enrolled in these two organizations is between 22 and 23 years of age. The average length of membership is approximately five years, although there are many records of young people who continued to take an active interest for over 10 years. In fact, a small percentage of the members continue to play an important part in the organization even after their marriage when they are operating their own farms or homes.

With the exception of the assistance given by the agricultural representative in the planning of their programs and his attendance at an occasional meeting, the young people "run their own show." This develops initiative, self-reliance, confidence, leadership, and the type of citizen of greatest value to his community and country. On the other hand, when closer supervision is given, some of those that might fall by the wayside are saved. The prestige of the junior farmers and junior farm women of Ontario stands high throughout the Province and a large percentage of the members are making their mark in the life of rural Ontario.

Graduate Courses

A record-breaking attendance of 79 was the response of Louisiana extension workers to the special 3-weeks course in extension methods given for the first time by the Louisiana State University as a part of the regular 1932 summer session at Baton Rouge. The inauguration of professional-training courses on the graduate level for extension workers in the service was the outgrowth of a request for such work made of Dean J. G. Lee, jr., of the College of Agriculture by a committee of the State associations of extension workers last year.

In addition to the course in extension methods, required by all extension workers in attendance, opportunity was provided to select one subject-matter course—farm meats, poultry, home dairying, food preservation, or soil management. Classes met for two periods each day, so that exactly the same ground was covered as in the usual 6-weeks summer session. The number of courses taken by a student was limited to two, instead of the usual three or four.

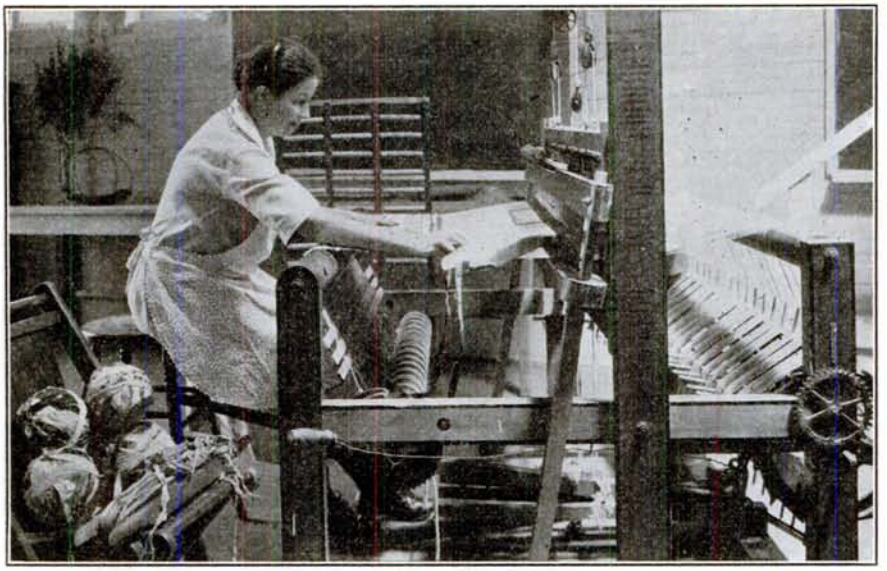
The course in extension methods was taught by M. C. Wilson, in charge extension studies and teaching, and Mary A. Rokahr, home-management specialist, of the United States Department of Agriculture. This course dealt with extension objectives, measures of extension accomplishment, and fundamental values underlying the means and agencies employed in extension teaching, their relative influence, adaptability to varying kinds of subject matter, and returns per unit of cost. Attention was also given to ways of improving use of result demonstrations, method demonstrations, circular letters, news stories, farm and home visits, community meetings, and the other extension teaching means and agencies, in order to increase their efficiency. Programs and plans of work, record and reporting systems, and other professional requirements of extension workers were included.

Of the total attendance of 79, which is the largest class of the kind ever held, 62 were experienced extension workers, 34 county workers, 16 specialists, and 12 supervisory and administrative workers. Thirteen Smith-Hughes teachers were in attendance, the remaining four being unclassified graduate students.

Dr. Roy Davenport, head of the department of agricultural education, and J. G. Lee, jr., dean of the College of Agriculture, are looking forward to the development of a professional-training center for extension workers as a part of the new graduate school of Louisiana State University.

Florida's Home Industries Pay

FLAVIA GLEASON
State Home Demonstration Leader, Florida Extension Service



Weaving a rug from discarded garments

THE ECONOMIC conditions of the last few years have brought many problems to our farm families in Florida. We find the women asking how they can establish or maintain a satisfactory standard of living when the sum total of family finances is at the lowest possible ebb. Our home demonstration agents are called on to develop programs of work which will improve home conditions generally, but with the provision that such programs require the expenditure of small amounts of cash. At the same time, and seemingly with every expectation that their needs will be met through home demonstration work, we find the women asking for help in securing this necessary cash. We find it is characteristic of the cosmopolitan group of rural women with whom we work in Florida that out of their need the women have developed a wealth of initiative in using the resources already at hand for profit as well as for pleasure.

Home Resources

The program of home demonstration work in Florida is based on the development of the resources of the farm and the farm home, and because of the foundation work already done in the years since home demonstration work started in Florida, it has been possible to add to the family income by the development of home industries. Written reports which come to the State home demonstration office show that the women and girls in Florida marketed home products to the value of $97,297.09 during 1931, thus creating wealth where none had seemed to exist.

Sales from the "living, growing demonstrations," which we in Florida believe fundamental in home demonstration work, have netted the largest amounts of cash to the farm home maker. Fresh fruits and vegetables brought the women of one county a total of $17,120.16, while the garden and orchard products in another county reached the total of $6,000. The high standard maintained for canned fruits and vegetables has made it possible to build up excellent trade for these products. One woman reports $500 received for her jellies and marmalades. One woman has an income from this source for 1931 of $530, another realized $500, and yet another $2,471. The sales of poultry products have been most gratifying. The women in one county sold their produce for $11,168.58 last year, while the total poultry sales reported by home demonstration women in the State from home poultry flocks reached $52,980.39. Surplus lard from the hog killing and pillows from the feathers of the ducks have done their bit. The women have converted the surplus from gardens, poultry flocks, and dairy into salable commodities and have turned their skill in culinary affairs into regular incomes from baked goods and canning. Bees have contributed wax and honey, one woman having realized $100 from her honey alone. Standard packages of "homemade butter" and cottage cheese from surplus dairy products totaled $2,500 in one county. Cut flowers and plants have run into big figures, one woman having earned $100 last year, while one other woman sold $77 worth of Easter lilies.

Native Plants Used

A great variety of gift articles are made from native materials found in such generous quantities in the State. Basketry is one of our most familiar crafts. North Florida has contributed honeysuckle and needles from the longleaf pine. South Florida has offered in abundance the sand-colored wire grass and the fronds of the palmetto and palm. Baskets of all sizes and shapes, hot-dish mats, shopping bags, chair seats, and clothes brushes have been made and sold. The coconut palm trees, which make such a definite contribution to the witchery of South Florida, have yielded bark for pocketbooks, shopping bags, hand-painted Christmas cards, place cards and menu cards at all-Florida banquets, covers for portfolios, and such. The shell of the fruit itself has responded to polishing and completely deceives you as to its humble origin. It is no wonder that a ready sale has been found for the ceremonial dippers, the vases, and trinket boxes which have been made of it. Its fronds have been used for making baskets and hats, while its fruit has been used in cooking pies, breads, cakes, and finally into cakes of coconut butter. One woman during the past year reported sales amounting to a total of $333 from coconut articles alone. The humble gourd has served as a source of income. Women have raised the matured gourds, have cut, polished, and decorated them into bowls for different purposes,

Gourds make attractive ornaments

lamp bases, bird houses and toys that beguile the interest of all grown-ups. The success of this venture is evidenced by the report of one woman whose sales of gourds netted her a sum of $340 in one year.

Christmas wreaths from the luxuriant shrubbery of the State have been made with such skill and keeping qualities that the demand for them has reached far places in the United States. At the close of its first season of wreath-making, one county reports $140 earned. In another county one woman earned $72 at the Christmas sales.

Many wreaths are made by the Florida women

Forests and Ocean Contribute

The native woods of Florida have been drawn upon again to make carved trays, book ends, boxes for trinkets, footstools and costume bag handles. Old and decaying trees have done their bit by growing vari-colored lichens from which one woman was artist enough to create delightfully unique flowers for a note of color on the costume. Even the sea has been forced to yield its treasure. Some ingenious woman discovered how to float the vari-colored sand onto cardboard in such a way that a picture is created of the tropical woods of Florida. No less ingenious is the idea of using the tiny shells as decorative pictures on tallies, place cards, and calendar pads. Even the sponges from the blue Gulf of Mexico have been transformed into bright nosegays for the coat of milady.

Crafts developed from other than native materials have also been remunerative. Sizable incomes have been realized from tooled leather, pewter, rugs, and weaving. Bags, coin purses, book covers, portfolios, key holders, book-end covers, and gold stick bags in tooled leather have found a ready sale, one woman realizing $812 from this source. The development of interest in leather work and pewter can be traced to the trip to France made several years ago by two Florida home demonstration agents, who studied in France under arrangements made possible by Mrs. Ola Powell Malcolm, Office of Cooperative Extension Work. Rugs have been hooked, braided, and crocheted with such skill that an appreciable number have been sold, one county having marketed $1,500 worth. Hand weaving is being revived as a home industry.

How have these results been accomplished? Perhaps standardization of products has been the factor of first importance. Home demonstration agents have tried to keep a high standard of quality before the women as the first requisite for sale. The fact that Florida entertains an immense number of people for both winter and summer vacations has also been a factor in our favor.

Cooperative Sales

Through cooperative sales one of the college institutions of the State has purchased all the poultry products that one county could furnish as well as placing an immense order for canned vegetable mixtures. One county maintains a bulletin board in the home demonstration agent's office where seller and buyer may list their supplies and demands. In another county seasonal exhibits of salable products are held in the courthouse and every article for sale is tagged with price, and name and address of manufacturer. In one of the southern counties a mimeographed market sheet is sent to all tourist, local, civic, and social organizations. In yet another county a travel market was conducted during the tourist season, rotating to the three largest towns with two days in each place. Roadside stands have been used in some places. Home demonstration shops have been maintained in four counties. One of these shops netted during 1931, $5,742.48 and another $9,500. Chambers of commerce have bought packages of preserved fruits to use for advertising purposes, while some of the railroad systems have found homemade preserved sweets of sufficiently high quality to give several annual orders for them.

In addition to this, a great deal of marketing is done by the housewife from her own home. Many women have built up gradually a clientele of satisfied customers for their products. In many cases the local groceryman has bought the products exclusively. One county reported its women had received $600.53 from sales made in this way.

Home demonstration agents in Florida expect to continue to develop the sales of home-produced or home-manufactured products. As home demonstration agents, we are learning by experience and expect to profit further from the technical assistance given home demonstration women and girls by the specialists in agricultural economics.

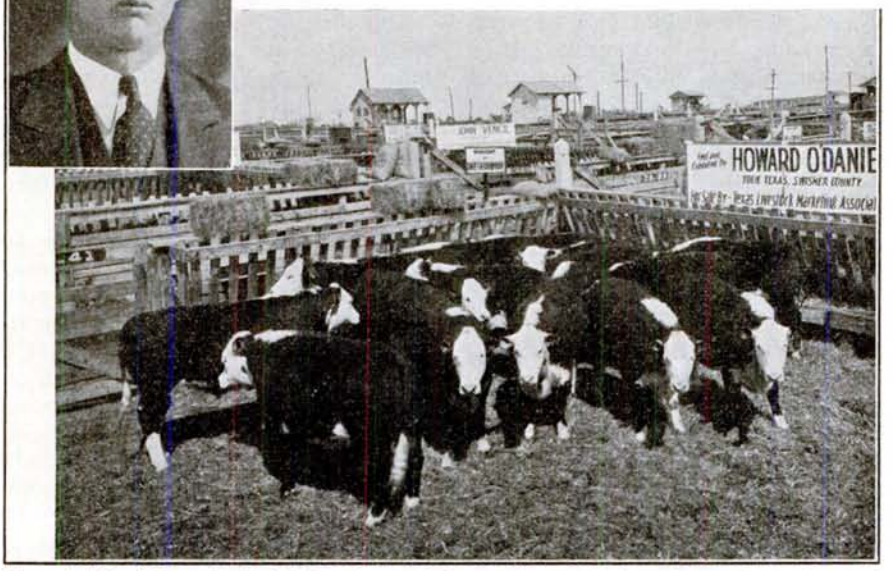
FOURTEEN "whole farm demonstrations" have been started by C. M. Knight in Red River County, Tex., and he plans to visit each one every month. "We have decided to call these 'Five Year Whole Farm Demonstrations' for the reason that we know no farmer will be able to do the number of things that he wants to do in one year, or even in three or four years," says Mr. Knight. "At the first visit an inventory is made and plans made for the future. A survey of things needed to be done is made and plans laid for those to be done each year and the time of year to do them. It is our plan to develop a diversified key farm in each of the 14 communities and at the same time develop as many cooperators as possible."

THE WOMEN of Rice County, Minn., have been especially interested in a series of meetings on the subject "Ways to Save Time and Money," conducted by the home demonstration agent, Gwendolyn A. Watts. Miss Watts' talk was mimeographed and given out so that the suggestions could be carried home. She suggested about 50 ways of saving time and money in home cooking, sewing, home management and gardening, which were illustrated with actual samples, posters, or patterns.

Each meeting added new ideas of ways to save time and money introduced by the women themselves. Several communities decided to hold community institutes where each woman would bring samples of her work and display them for the benefit of all.

What Next in 4-H Club Work?

O. B. MARTIN
Director, Texas Extension Service



Howard O'Daniel's carload of 4-H calves which won first at Tulia and Amarillo and second and third at Fort Worth in the 1931 fat stock shows. (Inset) Howard O'Daniel

THE RECORDS of each of the four 4-H club members who won the 1932 trips to Washington showed profits of more than $1,000 each. Edna Ladewig of Gonzales, carrying poultry as her demonstration for three years, realized $1,345.71. Orth Yowell of Montague County fed out 87 pigs in three years with $498.74 profits and raised a flock of turkeys from which he sold 5,380 pounds at a profit of $748.08, thereby running his total profits up to $1,346. Marie Matzner of Tarrant County made $881.80 with a market garden demonstration carried through three years and $92.80 last year from poultry, totaling $974.60. Howard O'Daniel of Swisher County made $1,870.28 feeding out baby beeves during his four years of club work. Each of these club boys and girls has an everwidening circle of influence as one of the results of their success, and each of them has a fairly well-defined sense of responsibility to pass on to others the fruits of their experience in developing their demonstrations through several successive years and various difficulties. They have each appeared from time to time on various local and State programs to tell the story of their achievements to the public.

This year, at the annual short course at the Agricultural and Mechanical College, extension officials authorized the award of badges of distinction to the 25 boys and 25 girls whose records were the best in the Lone Star State. This award was based on the yield, profit, history, and effects derived from their demonstrations. The badges will be publicly presented to the recipients of the honor in their own counties by prominent men and women. In deciding to establish this annual distinguished service award here in Texas we had in mind to emphasize the use of very definite measures for success in club work. Yields from the demonstration are shown in bales, tons, pounds, bushels, gallons. Profit always is shown in dollars and cents. The record in figures and in the club member's own story of how the work was done constitutes the history. The effects of the demonstration—how it will influence the demonstrator's future activity; how family, neighbors, or friends were influenced by it; how it was shown to visitors; how it was exhibited in fairs (if it was); how it was sold—are all told by the demonstrator, together with any pictures, drawings, or news stories which go to indicate details of the work which has been done.

But, though we ask for these last-mentioned items it is distinctly understood that they are supplementary and not basic to the judging. Nor are our judges encouraged in the use of vague and complimentary terms; such as "outstanding" or "completed project," representing opinion only and not based on the above-named hard and fast measures of agricultural success well known to the farmer and farm wife, neighbors, and other club members. Not only should the units of measurement be standard, but the judging should be above question. Committees of men and women of known integrity, not related to any boy or girl to be judged, should do this work. We feel that those who work with club members can not be too insistent on honest thinking and dealing in these matters because of the effect example has on the future lives of these adolescent boys and girls as well as because of the skeptical attitude of the public toward work that becomes known as being constituted chiefly of talk and club lists.

Much talk and long lists of club membership which bear no genuine relation to activity carried on by club members, vague and undefined standards of work measurements, awards of honor which carry with them no real sense of achievement on the part of the boy or girl or recognition by family, neighbors, and friends of work well done—these are the real enemies of 4-H club work. And, since mere enrollment is not sufficient to convince a thoughtful public of the efficiency and service of this extension agency, an honest revision of the club rolls making actual participation in agricultural work itself the acknowledged basis for membership would go far toward vitalizing the whole club movement.

When Will B. Otwell of Macoupin County, Ill., started the first corn clubs in 1899 he gave out seed corn in the spring and asked the boys to bring in exhibit ears in the fall. Five years later he collected a great display of these for

Sylvia Callaway of Dallas County, Tex., who started a permanent vegetable garden at a very small cost from which she furnishes her family table and cans the surplus

the World's Fair at St. Louis. But when Dr. Seaman A. Knapp, the founder of extension work in this country, began to work out clubs for boys he found that most of these corn clubs were inactive though county fairs were still encouraging boys to bring in exhibit ears and seemed careless that many of the exhibits came from parents' cribs. About 1906–7 the boys from Texas and Louisiana asked to have their work put on the same demonstration basis as that of the men, and this was done. In 1909, Doctor Knapp called the staff together and worked out a formula with which to appraise junior demonstration work. The plan for grading the acres of corn was yield 30; profit 30; story 20; and exhibit 20. The agents and club members soon got that idea of 30–30–20–20 through their heads and accepted the fact that the exhibit, from being the main basis for judging, was now valued at only 20 points. As the work has gone on and other demonstrations have come forward it has been found practicable to maintain the same value for yield, profit and story; but the exhibit, in Texas at least, has become only one of the many ways in which a club member's demonstration can be shown to the public and its object lesson spread before the community, so that the last 20 points we allot to "effects."

Yields Increased

It was not long after the work went on the demonstration basis that the boys began to report yields of more than 200 bushels of corn produced at very reasonable costs. Their stories as to "How I grew my crop" and the influence of their demonstrations in their own neighborhoods were told to presidents, governors, Congressmen, and to the public in general, and approval and aid to the work was forthcoming. Walker Lee Dunson of Alabama made 232.7 bushels at a cost of $0.199 per bushel and Jerry Moore of South Carolina made 227.7 bushels at a cost of $0.43. The number of boys making yields of more than 200 bushels is told in dozens, those making 150 in hundreds, and those above 100 in thousands. It has been interesting to follow some of these boys a little way down life's road and note what their adult lives have been. Dunson became a prosperous and successful farmer in the locality where he was born and married a red-headed club girl from North Carolina whom he met on a prize trip to Washington. Moore went into vocational agricultural teaching and later into experiment station work.

But before there could be a red-headed club girl for Walker to marry there had to be girls' club work, and that came soon after the work was well established for boys. It came first as tomato clubs, just as the boys' work had come first as corn clubs. And just as the boys' work has gone from corn clubs to other crops and to animal husbandry, so girls' work grew and developed into food preservation as the tomatoes were canned. Even before the Washington office had decided what would be next for the girls some of the older and more experienced home demonstration agents had already interested some of the girls in poultry work as the next demonstration. And, after that came work in the kitchen and pantry, and in bedrooms and yards, every single piece of which had a judgeable economic value, even to the last which added definitely to the sale value of the place when trees were made to grow and beautiful shrubs surrounded the house. Not only has the work had a money value, but it has had a vast health value too. Teachers have noted that girls who were working out-of-doors in the tomato clubs lost their pallor and straightened up their shoulders. Trained nurses have noticed that families are better fed where club members have had garden, poultry, and dairy demonstrations. And, doctors have noted that yards which have been drained, leveled, sodded, and planted no longer breed mosquitoes, and premises organized for beauty do not have heaps of filth to breed flies.

In the early teens of the twentieth century the success of these club boys and girls helped greatly in the passage of the Smith-Lever Act which established the cooperative agricultural extension work. Between James Wilson, that Secretary of Agriculture who served longer than any other cabinet officer ever has, and Woodrow Wilson, the President who signed the Smith-Lever Act, boys' and girls' club work became established in this country on a very firm and sound basis.

Students of education must be impressed with the way the principles of evolution have worked out in the 4-H clubs. Boys and girls both started with one crop. The idea was "This one thing I do." Perseverance by club members and sympathetic guidance by those in charge developed a progressive system which is a real contribution to both agriculture and education. The writer takes a modest pride in being the first man appointed by the United States Department of Agriculture to do club work, in being the author of the 4-H design, and in having a part in giving direction to the 4-H club work in its most formative period. Its future is of necessity a matter of deepest interest to me.

Iowa's Local Leaders

How local leadership has grown among Iowa farm bureau women during the past 11 years is shown by figures compiled by the Iowa Extension Service.

According to Neale S. Knowles, State leader of home economics extension, Iowa in 1920 had a few more than 1,000 local leaders. This number has grown steadily until in 1931 more than 10,000 farm women were acting as local leaders for home-economics projects in their various school districts.

This growth in leadership is the result of a long and painstaking program of organization. Iowa farm bureau women are organized under the leadership of county and township chairmen. The local leaders in each school district are farm women who are interested in the home-economics project and fitted for leadership. These local leaders attend training schools held by the home demonstration agent or by a home-economics specialist in counties which do not have a home demonstration agent. The leaders then hold follow-up meetings in their school districts for the local farm women.

Among many other examples which could be given to show the importance of this training is the average number of schools per county serving hot lunches which has increased from 12 per county in 1921 to more than 40 per county in 1931. The fact that more than 1,500 mothers reported improvement in the health and growth of their children during 1931 as compared with none in 1926 is also an indication of the successful results obtained.

In another field the average number of pieces of furniture refinished per county has grown from about 10 in 1924 to more than 250 during each of the past three years. Nearly 1,200 women reported adoption of such health practices as wearing of properly fitted shoes and changes in type of clothes worn in 1931 as compared with 100 in 1926.

In the home-management project, according to reports of local leaders, approximately 1,850 women made better plans of work during 1931 as compared with little more than 100 in 1925.

A COMMUNITY in North Carolina which is about 100 per cent in growing one variety of medium staple cotton sold its entire crop to one broker last year and received nearly $5 a bale premium above the middling ⅞-inch staple price. In Union County, where the farmers have been growing principally one variety of this medium staple for several years, the markets pay better prices than do surrounding markets.

How Cotton Cooperatives Are Serving the Farmer

U. BENTON BLALOCK
President, American Cotton Cooperative Association

IT IS NOT the fact that the cotton cooperatives handled 2,000,000 bales of cotton last season which is causing disturbance among the private cotton traders, and their demand that governmental aid be withdrawn from the co-ops.

Two million bales cooperatively handled last season still left 15,000,000 bales for the private trade. But, the cooperatives have forced the private merchants to a new peak of efficiency and a new low margin of profit. The burden of the private traders' complaints at the recent Shannon Committee hearings was: "The co-ops are paying prices that are putting us out of business." The men making those statements are not going out of business, as a rule. Rather, they are tightening their belts, cutting expense, and accepting greatly reduced profits. They are meeting the prices which the cooperatives have forced upon them. At points where the co-ops do not compete with them, they are able to recoup somewhat, and build reserves with which to battle the co-ops at other points.

Services to Growers

This increased efficiency and lowered profit, which the co-ops have brought about, is having its flareback on the co-ops themselves. The co-ops render numerous services to the grower which the private dealers do not attempt. These services all cost money, no matter how economically administered. They must be paid for by the farmer who sells through the co-op. They are figured in the price the member receives. If that price is less than he could have obtained through the street buyer, the member is often inclined to think that his organization has failed him—whereas, in fact, he is many dollars a bale better off because of it, and can well afford to sacrifice the 25 cents or 50 cents a bale that he might occasionally get by sending his cotton through outside channels.

In 1928-29, it is shown by Louisiana Bulletin 221, merchants were paying Louisiana farmers $12.75 a bale less than the New Orleans market for inch and an eighth staple. Last season, when the co-ops had greatly increased their influence in Louisiana, premiums on this staple were only a dollar or two below the New Orleans market. The difference of around $10 a bale had been transferred from the buyer's pocket to the farmer's. Similar records might be quoted from all Cotton States.

The merchant must meet the co-op price or lose the cotton. He can not meet the co-op price with his old high-profit, high-cost system, and he has gone on a new basis of lower costs and lower profits. Most of the cotton cooperatives have also been steadily reducing their costs. State associations which had a

U. Benton Blalock

cost of several dollars a bale a few years ago operated the past year at less than a dollar a bale. The American Cotton Cooperative Association, central sales agency for 11 State and regional associations, had the remarkable record last year of operating at around 50 cents a bale, made possible by its huge volume of 2,000,000 bales, as well as by a high degree of efficiency.

Cotton Classified

The street buyer, often with no office expense, looks at the farmer's sample and says he will give so much for it. He gives the farmer no authoritative information as to the class. Usually he buys all staples at one price, which is the easiest and cheapest way, but a way which puts a penalty on the grower of better staple. The co-op, on the other hand, maintains an office in which an expert classer, usually Federal-licensed, gives the grower a written statement of the grade, staple, and the market value.

The street buyer is done with the farmer as soon as he pays for the cotton. But the co-op maintains various pools for the farmer's choice and must keep a record of each bale and of payments made thereon from time to time. These services to the individual must be paid for out of the price of the cotton. Likewise general expenses, such as those of the traffic department, are borne by the co-op to an extent unknown by the average cotton merchant. The traffic department of the American Cotton Cooperative Association this season was largely instrumental in winning a reduction in freight rates on cotton, over the determined opposition of the largest private firm in the world. This freight reduction has meant a dollar a bale or more added to the crop of hundreds of thousands of cotton farmers in all parts of the South.

Protective Services

How much does the grower know of all this, or how much does it influence him, when he finds that the street buyer will pay 25 cents a bale more than the co-op can obtain for him? The co-op is selling 90 per cent of its cotton to mills, at prices at least as high as those which the most efficient of the private dealers can obtain. If the co-op were simply a buying agency, eliminating its classing and other protective services, paying what it took to buy the cotton in "hard" markets and making it up by paying lower prices in "soft" markets, the matter would be greatly simplified from a cost standpoint. But this cost reduction would come back on the farmer, multiplied many times. The protective services of the co-ops mean far more to the farmer than the added cost, as comparison of prices now and in former years between interior markets and central markets conclusively proves.

Testifying before the Shannon Committee at Memphis recently, Dr. Tait Butler, editor of the Progressive Farmer, said, "Before the co-op classing offices were opened, farmers in small towns in Memphis territory were getting $2.50 to $3.75 a bale less than the Memphis price. Now they are getting within 75 cents to $1.25 a bale of the Memphis price"—a saving to the farmer of $1.25 to $3 a

bale. Yet thousands of farmers are carrying their samples to the co-op offices, having them classed free, and then using the co-op price to boost the private buyer 25 cents a bale and let him have it.

Influence of Farmers

Outside of the direct benefits mentioned, the co-ops have given new evidence the past year of their ability to make the farmer's influence felt in national affairs. Through united action of the co-ops and southern bankers, 7,000,000 bales were held off the market at a critical period last fall, as a result of which the market rallied immediately better than $5 a bale. The cotton co-ops, with their 215,000 members, have been the most powerful influence from the Southern States in recent agricultural legislation. In 1-variety cotton projects, generally accepted as the only practical way of building and maintaining a dependable supply of improved cottonseed at reasonable costs, the co-ops have taken the lead, and in one State alone, Mississippi, coordinating their efforts with those of the extension service and other agencies, the co-ops have been instrumental the past year in putting more than 60,000 acres into 1-variety projects in more than 40 communities.

It is unthinkable that business and agricultural leaders of the South should permit the undermining of a system which has been of such tremendously constructive benefit. But the private traders who have been forced by the co-ops to reduce their costs so drastically are in deadly earnest carrying on a campaign to shake public confidence in the institutions which have cut off their former profits.

Agricultural Papers Help

It is significant to note that in this struggle every prominent agricultural paper of the South is wholeheartedly with the co-ops. Clarence Roberts, editor of the Oklahoma Farmer-Stockman, recently made a speaking tour in behalf of the cotton cooperative of his State, during which he said, "Faith in their own ability to work together is the thing needed most of all by Oklahoma farmers. Somehow the belief is abroad that farmers won't or can't cooperate, and that when they do, their efforts are certain to result in failure. The truth of the matter is that farmers' organizations are to-day among the most successful in the Nation. Not a single co-op, to my knowledge, has failed in Oklahoma in the past two years."

After private traders had turned their guns for many days upon the cotton cooperatives at the Shannon Committee hearings, Congressman E. E. Cox of Georgia, who conducted most of the cotton hearings as joint chairman, said he had gone into the hearings "admittedly hostile," but had now concluded that "the cooperative movement is bound to spread, and it will spread because of the undoubted value of the services that the co-ops render."

The rate at which the movement spreads will depend largely upon the zeal with which extension service workers and other agricultural leaders strengthen the farmer's faith in his own ability to cooperate and demonstrate the folly of supporting the private buyer for the sake of the small increase in price which the latter offers when forced to it.

4-H Fire Prevention

Twenty thousand 4-H club boys and girls of Oregon have been enlisted in a State-wide fire prevention campaign recently launched by the State fire marshall department working in cooperation with the extension service of Oregon State Agricultural College.

The club members will try to eliminate the fire hazards about the farm. The boy and girl in each county who do the best job will each receive a gold medal or pin from State Fire Marshall Averill. The club member making the best record of fire prevention in the State will receive a scholarship at the 1933 club short course. A 24-page manual for club members showing common fire hazards and how they can be removed is used as a basis for the work.

The need for this training among 4-H club members is shown by the records in the department of the State fire marshal which show that Oregon farm properties to the value of $997,000 were destroyed by fire in 1930, and that this loss was increased to $1,897,000 in 1931, a total loss of nearly $3,000,000 of farm property value in only two years. The State's annual fire loss amounts to $8,000,000, and it is estimated that 90 per cent of the fires which cause this serious undermining of the State's resources can be prevented.

FIFTY-TWO 4-H and farm women's clubs, scattered throughout 33 counties of West Virginia, presented a 1-act play entitled, "Bringing Up Nine."

This play is a dramatization of the advantages of a county library service to a mother of nine in bringing up her children successfully and is adapted from Mary K. Reely's State traveling library play, Uncle Sam Brings It to Your Door. It is issued by the committee on library extension of the American Library Association.

Threshing Machines Carry Poster

The threshing season in Perry County, Mo., this summer was reminiscent of the summer of 1918 when the sides of threshing machines were used for the display of posters carrying messages pertinent to the successful waging of the World War. The message carried on Perry County machines this summer was equally pertinent to successful warfare—the combat carried on against the Hessian fly.

In casting about for a way to get his message on fly eradication to Perry County farmers quickly and surely, County Agent J. A. Fairchild hit upon the idea of a poster on the sides of the threshing machines. Practically every farmer in the county works around a threshing machine at some time during the season, and in addition a threshing crew usually is an open forum where the relative merits or demerits of a given proposition are thoroughly discussed.

Two hundred posters were printed at a cost of $2.75 and one placed on each side of every threshing machine in the county. In addition, the posters were placed in mills, elevators, country stores, banks, and other public places so that full coverage of the county was obtained. Mr. Fairchild believes that in addition to getting his message before every farmer, there was the added advantage in getting this information out when threshing yields were being noticed and discussed.

Dealing with the Soil and People

"THE TWO permanent and fundamental factors that a county agent has to work with are the soil and people. That is why soil conservation by terracing and boys' club work have been and still are my chief concerns. Work done in these lines lasts over into the next generation." Such is the sage philosophy of George Banzhaf of Milam County, Tex., who is in his twenty-fifth year of continuous service in that county.

Almost a generation in extension, he has stayed on in Milam County because of an ideal given him by Dr. Seaman A. Knapp, and because he believed he could help to bring to his county that "new dawn of a better day" which permeated the agricultural thought and writings of the early part of the century. Through these many years, Mr. Banzhaf has helped and satisfied his people because he has been a plugger, has stuck to fundamentals, and has scrupulously avoided controversy.

"If the same farming methods were used now that were in vogue 25 years ago, farmers would sure be up against it," declares Mr. Banzhaf. "Farmers are to-day more prosperous, have a higher standard of living, have better homes, and more and better machinery. I attribute most of this improvement to our farm journals and to extension work. Looking at our work by the year is discouraging but by comparing conditions now with those of 10 or more years ago I find that influence which is so hard to measure in any one year, looms up as one of the greatest factors in the work.

Early Work

"Take my early corn and cotton work, for example. Back in 1908 farmers thought seed was seed, so I established 75 demonstrations with as many men, each one planting 3 bushels of Government cottonseed bought from A. D. Mebane, and a little good Laguna corn seed. I visited each of these demonstrators every month in a 2-wheeled sulky or on horseback, starting out Monday morning and returning Saturday night, and boarding around in the meantime. Most of them didn't know what it was all about at first, and some of them were quite suspicious, but curiosity led them into the work. It was the success of these early demonstrations that made the work stick here. I still work with a few of these original demonstrators but on different things now, for as I started out to say, the indirect influence of these demonstrations has been so great that for years practically all farmers have recognized the value of good seed and careful cultivation."

Clubs Organized

In 1910 the corn club idea was brought to Milam County and Mr. Banzhaf organized a club with a membership of 100. Corn club work was a success right from the start, as an indication of which he recalled that one of the first annual club fairs had ninety 10-ear exhibits. A cotton club was added in 1913 and a pig club in 1914.

George Banzhaf

"It was easier to get corn club members then than now," asserted Mr. Banzhaf, "for there were no other distractions, and parents seemed to encourage it more then. Still, I should not complain for I have never had less than 80 members and never more than 150. These club boys of mine have made good in the world. I think club work has made them better farmers and has taught them that farm life can be profitable and satisfying. About 75 per cent of them have gone into farming right here in Milam County and most of them are counted among the most progressive farmers we have.

"I took up terracing in 1914, as a new-fangled scheme that looked good. It took years of individual terracing to demonstrate that this is a paying practice. I estimate that one-fourth of our farms are terraced. It is impossible to keep up with the demand now. This is a good thing, for it has forced us to work out a way to terrace faster. I've trained many farmers to terrace and they help others.

"As to other work, I spend about half of my time on miscellaneous calls. The college says I shouldn't, but I haven't yet figured how to get out of it.

"County agents grumble about reports, but they shouldn't. When I started work I had to send in a report every night. Along about 1912 this changed to weekly reports and in 1921 the monthly report was adopted. We had no annual report until 1914. I consider reports very necessary for they are a part of record keeping, and how can you extend the influence of demonstrations without having some ammunition to shoot? From the very start I used records in newspapers and in holding demonstration field meetings. Such gatherings were usually fairly well attended and still are.

"The cooperation of both farmers and town people in Milam County has always been very fine, and it has been their open-mindedness and fairness that has made results possible. Everyone here understands what county agent work is, and they regard the job as a permanent one. We ought to accomplish much more in the next few years than in the last 24. And say," he called out the door, "tell the boys that soil and folks stay a long time in counties."

MARGARET LATIMER of South Dakota and George M. Harris of Kentucky, the two winners of the Payne scholarship for nine months study in Washington, took up their headquarters in the Office of Cooperative Extension Work early in October. They are studying the activities of the Government as it affects the farm and farm home and working on a research problem under the guidance of the Department of Agriculture. Miss Latimer is a graduate of the South Dakota State College and is especially interested in foods. She was an active member and leader in her 4-H club for seven years. Mr. Harris is a graduate of the University of Kentucky with eight years of club work to his credit. Dairying is his specialty.

A MAGPIE poisoning contest for 4-H club members is being started in Larimer County, Colorado, at the suggestion of B. F. Shader, leader of the Jolly Fifteen 4-H Club of the Harmony and Timnath districts, according to D. C. Bascom, county extension agent. Members of the Jolly Fifteen Club are challenging all club members in the county in the drive to destroy magpies because they prey upon young chickens and turkeys and do other damage.

Jobs Local Leaders Have Done

AN EXTENSION study of county agents' problems made in connection with obtaining a master's degree at Cornell University showed the selection of local leaders to be one of the most difficult to solve. The success which Lincoln D. Kelsey, assistant county agent leader in New York State, has had in this field was brought to the attention of the editor by H. W. Hochbaum. Mr. Hochbaum spoke with such enthusiasm of Mr. Kelsey's work that this statement by Mr. Kelsey was obtained for readers of the Review.

WE SAY we are developing leaders. Haven't you often wondered just how much leadership you really have developed? Even when leadership has been displayed on the part of some one, who can say just how it was developed? When we lift a milk can we reach for the handles. Where are the handles in this job of leadership? If we are to carry the responsibility of developing rural leaders, we must brush aside all confusion of academic elements therein and grab the handles of practical accomplishment. These handles are *the job* and *the man*. What is the problem and who is best fitted to solve it? What job is to be done and who is the man who has the best combination of experience, character, and training to do it?

Things are done sooner and with greater certainty when the job is clarified. You enter a neighboring yard. The dog's voice growls and the tail wags. You hesitate and action is uncertain. But, you surprise or displease a strange dog in his own yard. He comes directly for you. The voice growls and the tail doesn't smile. Then it becomes clear that you must climb the nearest tree without further deliberation or let the dog taste of you.

Choosing Leaders

By far the largest class of leaders working in agricultural extension are local leaders. If their usefulness increases they are developing. If the right man is picked for each job his usefulness will increase. It is important to have the job clearly in mind as well as the ability of the man.

Illustration is the better part of dissertation. It is the most practical part at least. The following are samples of a few of the jobs which local leaders have done in New York State recently. Perhaps the listing of them or the presentation of them is the best guide to helpful thinking. These are not presented as ideal local leaders but as "men in the making," examples of types, various conceptions, and results.

1. In the spring of 1932 the crop-production loans were made available to farmers of New York State. In Cayuga County there were some farmers who deserved and needed this service. The job required a local committee with farm and business judgment as well as time enough to serve without pay to investigate each application before sending the papers to Washington. Clarence S. Post, of Auburn, N. Y., was chosen as one member of the committee. His experience with business methods as well as farm practice gave him the right training. Being retired from active service he gave his time rather freely to the work of looking up each loan carefully, which resulted in protecting both the interest of farmer borrowers and the Reconstruction Finance Corporation. He was the right man for the job. He had the respect and confidence of all concerned.

2. Low prices for milk and price cutting due to unorganized groups of dairymen selling in the New York City market led to the formation of an emergency committee of the New York Milk Shed. This committee represented all dairy sections and interests. It put out a provisional contract intended to unite all dairymen in one organization. Its success depended on getting local men to act as leaders without antagonizing unorganized groups and on a careful educational program. In Lewis County, N. Y., the situation required immediate action. E. M. Sheldon and Orin Ross, both of Lowville, were chosen as local leaders. Mr. Sheldon is an assemblyman and farmer and Mr. Ross is a master farmer, former county agent, and operates a farm with 90 cows. They began carefully planning and holding small meetings. Each week they increased the size of the group by inviting in key men. By wise publicity and farm visits they have enlarged the local committee of workers until a recent gathering had 180 dairymen present. The steady progress they report shows that the local leaders were chosen wisely and additional local leaders are being developed and enlisted to complete the big job in hand.

3. The dairy committee of the Tioga County Farm Bureau wanted to improve its program. After gathering all the economic data and considering the dairy outlook the committee members found that they needed more information about what farmers were really doing. In other words they wanted a survey of actual farm practices. How many farmers weigh their milk? How many raise enough legume hay? These were questions needing answers. Their county agent drew up a questionnaire, and the committee headed by H. W. Petzold, of Oswego, N. Y., as chairman, went out and took this survey of farm practices on about 60 farms. When this information was summarized a month later the committee was in a position to draw up a program of farm-practice recommendations with the reasonable knowledge that they knew what the dairymen were doing. Mr. Petzold, being a good dairy farmer and one who quickly adopts improved practices and keeps records on his own herd, saw the wisdom of this procedure. He took the lead in helping the dairy committee formulate a program which the county agent could carry out in the expectation of reaching the largest number of dairy farmers with what they needed most in agricultural extension.

Aid Given to Other Farmers

H. C. Loomis, of Dryden, N. Y., has been a faithful committeeman, for years, of the Tompkins County Farm Bureau. When the 1930 drought in the South and West brought an appeal to New York farmers to send food by the carload to the stricken area, local leaders with courage and vision were needed. Men must go out and solicit help in a new way never before undertaken. Mr. Loomis roused his neighborhood to the need and secured donations enough to encourage the county agent to attempt to fill a box car. When the job was completed Mr. Loomis and other local leaders had filled a freight car to the roof with farm produce of all kinds from New York farmers to less fortunate farmers in the South. This local leader had the confidence and respect of his neighbors. He had the will to do good and the determination to put through the job. The job was clear to him and he did it.

These few illustrations are actual cases of local leaders in action. The kinds and type of work needed are almost innumerable. We must divide to conquer. The maze of rural problems is staggering. We must constantly simplify the problem, by isolating jobs, clarifying issues, and setting aside nonessentials. When these jobs are clear, the type of leaders required will also be clear. It follows also that men accept responsibility more readily when the work is definite and not confused with too much "method" or "extension machinery." After all—is it not the common-sense approach?

Iowa Measures the Value of Swine Extension Activities

IOWA, the great swine-producing State, has been hammering away on better production methods for years. Recently E. L. Quaife, one of the State's extension animal husbandmen, took a look backward to see just what the results had been and this is what he says about it.

Examining a brood sow

WHAT SORT of a measuring stick can be applied to extension work activities? As an illustration, what has been accomplished in swine production during the past 10 years? What results can be shown? Has there been any improvement, and if so in what respect? Are the farmers adopting the suggestions of the extension workers and the recommendations of the agricultural college? These and other questions of a similar nature have recently been put up to the Iowa animal husbandry section workers, as well as to extension workers elsewhere.

Swine extension work is more fortunate in this respect than with some other lines of work because of the surveys made by the United States Department of Agriculture through the rural mail carriers. The work along swine production lines has been of such a nature that it would reflect upon the size of litter weaned and marketed. Breeding stock selection; control of diseases and parasites through more attention to sanitation; a careful attention to the rations fed, all have been emphasized during the past 10 years, and have contributed to better success with the litters produced. With this in mind, we turned to the rural mail carriers' pig surveys and found that in the spring of 1922, as reported in the 1923 report, the first year a complete survey was made which was comparable with surveys of later years, Iowa farmers weaned an average of 4.6 pigs per sow, while in 1931 they weaned an average of 6 pigs per sow. In other words, the Iowa farmers produced as many pigs in the spring of 1931 as they did in the spring of 1922, yet they did it with 500,000 fewer sows. There had been a gradual increase in size of litters weaned during those years. It is true, weather is a factor influencing size of litters saved, but hardly does this ever amount to more than a fraction of a pig per sow. What has contributed to this?

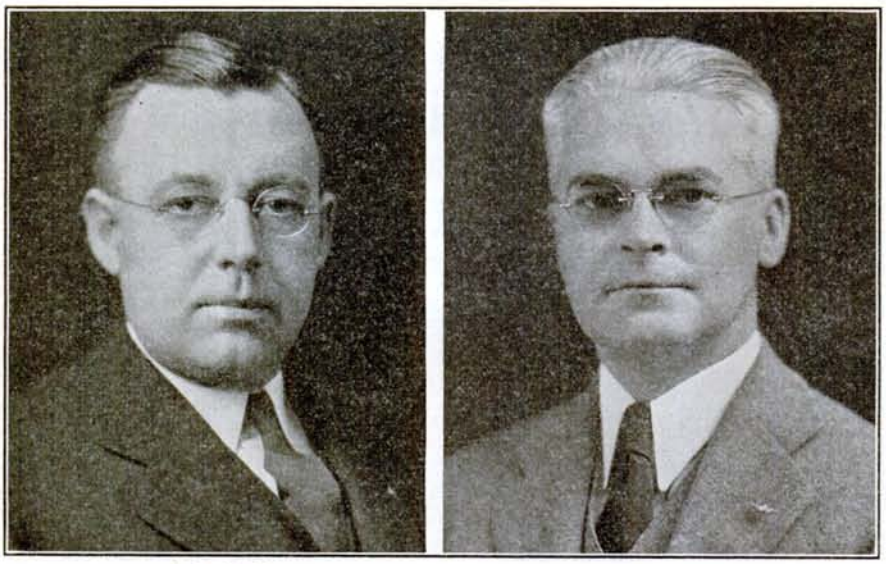
It was in 1921 that we began work to increase the size of litters saved, through the brood-sow selection demonstrations. During the past 10 years these demonstrations have been conducted in every county in the State, and many counties have had the project more than one year. Approximately 1,000 demonstrations have been held, attended by 15,000 people. At these meetings, attention was called to the essential points of a good brood sow, special emphasis being laid upon the indicated ability of the sow to nurse a litter of pigs well. Many good swine producers never knew what "inverted" or "button" teats were until their attention was called to them at these demonstrations. Iowa farmers are keeping better sows than they did 10 and 15 years ago, and they are saving more pigs to the sow.

Heavy losses in little pigs through worms and infectious diseases have also been factors reducing size of litters saved. Since 1920 the project on sanitation has been conducted in every county in the State. Thousands of meetings and scores of demonstrations have been held on this subject. Surveys have shown farmers saving two more pigs to the litter where they employed the system than when the old methods were used.

The swine producer is well aware of the soundness of the principles of sanita-

(Continued on page 140)

Scores of clean-ground demonstrations have been held



C. E. Ladd L. R. Simons

New York Makes Promotions

CARL E. LADD, director of agricultural extension, New York, since 1924, was appointed dean of the New York State Colleges of Agriculture and Home Economics at Cornell University, in July. Lloyd R. Simons, for four years State leader of county agricultural extension agents, succeeds Doctor Ladd as director of agricultural extension. E. A. Flansburgh, who has been assistant State leader of county agents, assumes the position of State leader. R. H. Wheeler, professor in extension service, is to serve as assistant treasurer of the Colleges of Agriculture and Veterinary Medicine.

Iowa Measures the Value of Swine Extension Activities

(*Continued from page 139*)

tion. Practical obstacles such as fencing and watering combined with the trying experiences the farmers have been passing through have stood in the way of a more extensive adoption of these principles. A survey made through the county agents of Iowa indicated 28 per cent of the swine raisers following the recommended plan either entirely or in part.

Perhaps the highest endeavor along swine extension activities were the Chicago, Burlington & Quincy and the Chicago & Northwestern Railroad pig crop trains. These trains made 63 stops, in 62 counties of the State, and were visited by 85,000 people. The questions of economical feeding, marketing, and control of parasites and disease received greatest attention. Two lots of pigs were carried on this train, one lot raised on clean ground and one on old infested ground. The contrast was so great that some doubting "Thomases" questioned the facts in the case. One woman accused us of stealing her pigs, as she said she had identically the same situation at home.

The results of the sanitation program are far-reaching, influencing size of litter saved, and rapidity and economy of gains.

In the matter of economical feeding and rapidity of gains results are difficult to obtain. It is common knowledge, however, that farmers everywhere are able to make their hogs weigh 200 pounds at a much earlier age much quicker than 10 or 15 years ago.

There has been a tendency to work toward a more definite plan of hog production, such as having two farrowings a year, which permits of the full feeding of the pigs from start to finish and the marketing of them at the more desirable weights of from 200 to 225 pounds. This has been made possible through improvement in the choice of the type of hog to be fed, better health, and more efficient combinations of carbohydrate and protein feeds.

The Iowa pig crop contest conducted during the past five years has also been an important factor in emphasizing those practices of swine management which contribute most to rapidity of gain and maximum weight at 180 days of age.

4-H Achievement Program

A nation-wide radio round-up of boys' and girls' 4-H club members to celebrate the conclusion of a successful year of 4-H achievements is scheduled for Saturday, November 5, from 12.30 to 1.30 p. m., eastern standard time. The program will be conducted jointly by the State agricultural colleges and the United States Department of Agriculture and will constitute a national recognition of the successful completion of 4-H activities by approximately 900,000 farm boys and girls in the 4-H clubs.

The 4-H achievement-day radio program will be broadcast over the coast-to-coast network of 57 radio stations in 41 States, in which the radio stations on the network of the National Broadcasting Co. are located. The program will provide both a national broadcast of talks and music over the entire network of stations and individual State broadcasts of achievement-day programs from local radio stations.

The first 15 minutes of the hour will be national in scope and will consist of music by the United States Marine Band, opening announcements, and a talk. 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 State 4-H programs 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 of music and talks will be broadcast from Washington, D. C., to the entire country.

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.

A MIMEOGRAPHED publication, the Monroe County Farm Bureau Hammer, edited by C. A. Hughes, farm adviser, Monroe County, Ill., is a good example of a county paper which obviously reflects the activities of a busy and effective organization. The paper is profusely illustrated with thumb-nail sketches and plays up those issues which are interesting Monroe County farmers right now. The publication boasts only four pages but altogether it is one of the livest papers of its kind which has come to the attention of the editor of the Review for some time.

Cotton Outlook for Spartanburg County, South Carolina

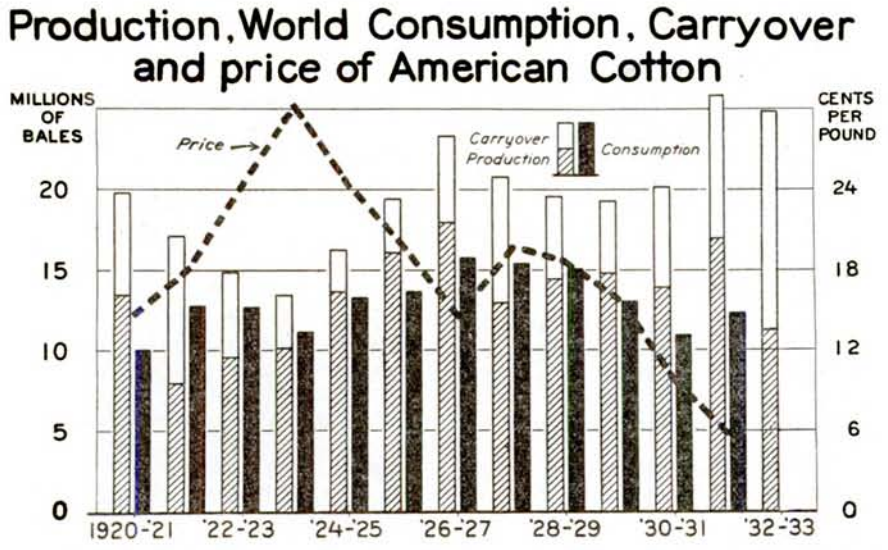
COUNTY AGENT, Ernest Carnes, Spartanburg, S. C., has been especially successful in his outlook meetings for cotton growers. The following talk is typical of the way he and other South Carolina county agents presented the cotton outlook for 1932 to the farmers of their counties, following discussions of the situation with the economic specialists of the State extension staff

NEVER BEFORE in the history of agriculture has it been so important that farmers, in general, secure all the information possible regarding the local, national, and world outlook on all crops and livestock before making annual or long-time farm plans.

Many of you are down in the dumps and don't believe that times will ever improve. The longest depression we have had since 1854 was the 6-year depression of the seventies. It usually takes us longer to come out of a depression than it does to reach the lowest trend of inactivity. As sure as time goes on, we shall pull out of our present dilemma, and opportunities of the future will again unfold to those who keep courage and look for better days.

During the period of 1910 to 1915 prices paid by farmers were on a parity with the selling prices of agricultural products, and during the World War period and until the depression of 1920 farmers actually received more for their products in comparison to what they had to pay for certain commodities that must be bought. It is interesting to note that during the next period of nearly 10 years from 1920 to the fall of 1929, the selling price of farm products has been far below the prices which farmers have had to pay, and since the present depression this differential has become much greater, the prices of farm products declining much more rapidly than certain manufactured prices for things which farmers must buy.

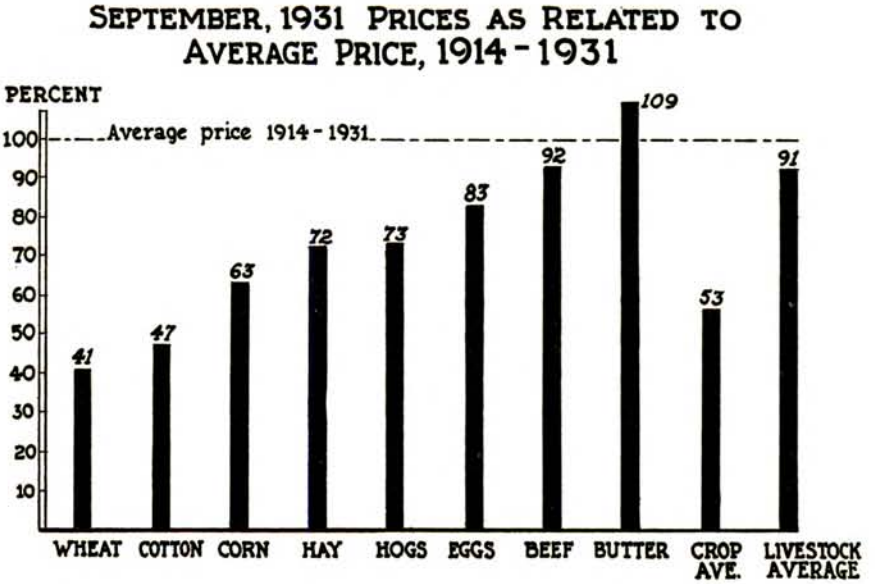
Since cotton is the most important cash crop in Spartanburg County, you are tremendously interested in the cotton outlook. A chart, prepared by the South Carolina Extension Service, gives us the story for the last decade regarding the production, world consumption, carryover, and price of American cotton. During the depression of 1920 we had a supply of American cotton of approximately 20,000,000 bales, having produced about 13,000,000 bales in 1920 with a carry-over of nearly 7,000,000 bales. Because of the depression, mills consumed the following season only about 10,000,000 bales of American cotton, which resulted in a much larger carry-over the following year. Fortunately the following crop of American cotton was only 8,000,000 bales or a little less, and consumption increased about 2,500,000 bales the next year over the previous year, which increased the price of cotton until 1923, when it reached about 28 cents per pound. Production at home had remained around the 10,000,000-bale mark or below for the 3-year period.



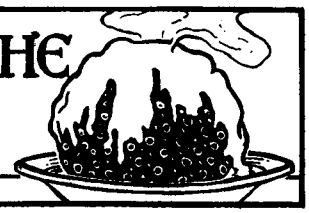
During the year of 1924, the cotton farmer said that low-priced cotton was a thing of the past, and every cotton planter and fertilizer distributor in the South were repaired, oiled, and worked overtime, gradually increasing production for the next three years, reaching the record yield in 1926 of 18,000,000 bales of the fleecy staple.

The inevitable law of supply and demand again gradually lowered the price from 28 cents to 13 cents per pound. At this time the supply of American cotton was about 23,000,000 bales, and again the farmer said that we are ruined. This period of overproduction was caused largely by the rapid expansion of cotton acreage in Texas and Oklahoma. Fortunately most of our industries were enjoying a prolonged period of prosperity,

(*Continued on page 142*)



THE PROOF OF THE PUDDING



THE PROOF of the pudding is in the eating, and the proof of extension work is the net profit on the balance sheet. These are the facts upon which extension work will rise or fall.

Sometimes it takes considerable thought and effort to secure all the facts but digging for such stories, and presenting them in a telling way to as many people as possible is one of the things occupying the attention of the agent profitably right now.

The following examples give the facts on how the individual farmer or farm woman has used extension aid with profit.

Profits in Dairying

The Dairy-Herd Improvement Association of Tillamook County, Oreg., is credited with the development of three good dairymen who study their business, watch their costs, and have fine and profitable dairy herds. The original herd belonged to a hard-working farmer with a 100-acre river-bottom farm. It consisted of 35 cows of mixed breeding, Jersey predominating, headed by a grade Jersey bull. Few if any calves were raised.

When the cow-testing association was formed in the county in 1911 this farmer was skeptical but was persuaded by the extension agent to join. The records showed the need of culling. When the average production of the herd began to rise the value of feeding supplemental grain to the high-producing cows was evident.

Soon it became apparent that the farmer would have to raise his own replacement, for his herd average surpassed his neighbors' from whom he had been buying calves. So he bought a good purebred sire and his surplus calves brought top prices.

Fresh pasture was tried as a means of accelerating production. It produced results and established the value of rotation grazing.

The farmer's two sons became much interested and when they returned from the war went onto farms because they knew their dad had made money on dairy cows.

The home herd has averaged over 400 pounds since 1920 with a 5-year average of 450 pounds. It contains the high cow in the association and nine cows with a production of over 500 pounds of fat.

Defeats Depression with Bread

When the home demonstration club market opened in Jackson, Miss., in April, 1931, a woman living on a small farm 6 miles away brought in 9 dozen rolls to sell. These sold so well, she decided to try loaves too. With the help of the home demonstration agent a loaf was produced which sold so well she could not keep up with the orders. In May the profits were $8.60 and in October, 1,529 loaves were sold at a profit of $93.72. From April to November the profits were $368.89.

She now sells in a number of chain stores as well as on the market. She has installed additional equipment and inclosed the back porch for a convenient workshop.

A Woodlot Pays High Interest

A return of $833.59 from a $100 investment 17 years old when the return at 4 per cent compound interest would be $194.79 is the record made by D. E. Laucks, of Herkimer County, N. Y., in managing an 11-acre woodlot with the advice of the Extension Service.

Charging for work done and crediting the fuel value of wood in that community, the woodland has yielded $70 worth of fuel wood each year for the 17 years, or a grand total of $1,190 after wages for cutting, hauling, and buzz-sawing had been deducted. The other expenses for original cost, interest, and taxes were $356.41 leaving a net return of $833.59. This profit is on what has been cut and Mr. Laucks still has a woodland with a present yield of 25 cords to the acre.

Cow Helps Pay College Expenses

Profits from a Jersey cow raised by Elizabeth Prickett of Wellington, Ala., in her 4-H club work are helping to pay her college expenses. When Elizabeth was 10 years old she obtained her first calf, and now has a cow which on an official 365-day test established a new State record for butterfat production by a 3-year-old Jersey cow. She has developed a local retail market for her milk.

Cotton Outlook for Spartanburg County, South Carolina

(*Continued from page 141*)

and the consumption of our crop mounted to more than 15,000,000 bales and held this rate for three years, and again the farmer sold his cotton for 18 to 20 cents per pound, realizing a margin of profit.

World consumption of American cotton has decreased rapidly since 1928 from 15,000,000 bales to 11,000,000 bales in 1931, while farmers have continued to grow large crops of cotton, producing in 1931 about 17,000,000 bales.

We are now burdened with a supply of 26,000,000 bales of American cotton with a probable consumption of 10,000,000 bales under the present economic situation. This condition has resulted in the present low price of our principal cash crop. If we did not produce a bale of cotton during the 1932 season we would still have a large carry-over of American cotton next year.

I now call your attention to a chart showing price relation of crops and livestock products on a percentage basis as of September, 1931 to the average price received for the period 1914 to 1931. The price of wheat was 41 per cent, cotton 47 per cent, corn 63 per cent, hay 72 per cent, hogs 73 per cent, eggs 83 per cent, beef 92 per cent, and butter 109 per cent. The average for all crops was 53 per cent while that of all livestock was 91 per cent. Therefore, livestock prices in January, 1932, have not fallen as low in comparison as crop prices.

Realizing that Spartanburg County farmers produce more cotton than any other county in South Carolina, and that most of our farms are organized and farmers trained for cotton production, it would be hazardous to attempt to eliminate cotton growing completely for a year.

(*At this point at each meeting Mr. Carnes concluded with a discussion of the county agricultural program for the year as formulated by the county farm council of his county.*

The main points stressed in this program were (1) making the farm self-sustaining, (2) having more than one cash crop on the farm, (3) economic production, and (4) soil building.)

The present situation calls for the greatest optimism for the future. Out of conditions such as these will probably grow a more safe and sane, and less hazardous agriculture. This is a time for deliberate planning, close supervision, conservative spending, and hard work.

Agent Tests Accuracy of Methods

Dan E. Miller

ACCORDING to Dan E. Miller, county agricultural agent for Howard County, Mo., the local leader is the most satisfactory data-gathering device available to the extension worker interested in collecting reliable information on extension accomplishment for his annual report. Mr. Miller's conclusions are based on a comparative study of the use of local leaders, mail questionnaires, and random sample personal interviews, in collecting farm information.

A complete farm report covering 26 questions was obtained from leaders at an average cost of 4.4 cents per farm, whereas the same questions in a mail questionnaire cost 10.2 cents per record. A personal interview by the agent to obtain the same information cost $2.36. These costs include agent's time, secretary's time, stationery, and mileage.

Other conclusions from the study as set forth by Mr. Miller in the thesis submitted to the University of Wisconsin in connection with obtaining a master's degree from that institution are:

1. For any type of question regarding farm practices, amounts of materials used, equipment possessed, types or numbers of livestock owned, or acreage of crops, replies from leader reports, mail questionnaires, and personal interviews with a random sample are reasonably accurate and consistent.

2. The mail questionnaires returned are not exactly typical of the whole group as they show a little higher standard of living, operate on a little larger scale, and a somewhat higher percentage of them follow improved agricultural practices.

3. The answer given by a leader to a question concerning an individual corresponds closely to the way the same individual answers that same question by mail. Both methods correspond closely to the way that same individual answers the question in a personal interview.

4. Leader reports, mail-questionnaire replies, and personal-interview replies agree in practically every case studied with the absolute check afforded by shipping association grading records for the same individual farmer. This check was on the question of lamb castration.

5. The first 50 replies received from 1,300 mail questionnaires sent to all Howard County farmers gave approximately the same results as the total 339 received.

There was little variation after 150 replies were received.

6. The leader reports stabilized when about 200 farmers were reported upon, concerning any practice.

7. Each of the three data-gathering devices (sampling methods) was as accurate and sometimes more accurate than the census gathered at the same time.

Wisconsin Farmers Study Wool Grading

WISCONSIN wool growers had a definite purpose in mind when they came out en masse to go to school for a day at their county wool-grading meetings this spring.

Growers in each one of the 28 principal sheep-raising counties held a 1-day meeting. The forenoon of each meeting found the wool growers studying quality meat production as it applied to lamb and lamb carcasses, while in the afternoon they turned their attention to wool grades and grading and a study of the uses of Wisconsin wool.

Their keen interest in market grades of wool began in 1930 and 1931 when they began marketing their wool through the National Wool Marketing Association and received pay for their fleeces on the basis of grade rather than on weight alone. This procedure was something new in the experience of more than a few growers. To many farmers such terms as "half-blood," "three-eighths blood," "low-quarter blood," or "braid" were new expressions to describe grades as a basis for payment and they wanted to know what was meant.

To answer the many inquiries which arose, the extension workers at their October conference arranged for a series of wool-grading schools for wool producers. Under the generalship of J. J. Lacy, livestock extension specialist, of the Wisconsin College of Agriculture, meetings were scheduled for each of the principal sheep counties. He arranged for two series of meetings to go on simultaneously in order that the entire State could be covered in the short slack time of the early spring.

Mr. Lacy, with the assistance of J. W. Christie of the Bureau of Agricultural Economics, United States Department of Agriculture, made up one team. William F. Renk, State commissioner of agriculture and markets, one of Wisconsin's prominent sheep breeders, assisted by C. M. Allen, of the National Wool Marketing Corporation, made up the second team.

Quality of Fleece Important

Where fleeces had fallen into a low grade it was found to be due to one of three reasons: Wrong breed or a mixture of breeds; improper management of the flock; or a lack of preparation of the fleece. At the meetings attention was given to a consideration of the kind of fleeces produced by each of the principal breeds. In the main, Wisconsin wools are in the three-eighths and quarter-blood classes. The three-eighths blood is the product of the exceptionally well-bred Southdowns, Shropshires, Hampshires, and Oxfords. The low-quarter blood is obtained from sheep of nondescript breeding.

The management of the flock, its feed, and care, as a means of producing strong fiber wool were given careful study at each of the meetings. Good feeding, proper shelter during stormy weather, remedies for parasite and disease troubles were all given consideration as a means of producing higher quality fleeces and carcasses.

That the production of fleeces free from foreign material is entirely within the control of the producer and the fact that burs, seeds, chaff, sand, and dirt, not easily removed in the process of manufacture, result in lower market price, were emphasized and brought to the attention of the producers at these meetings. The presence of these materials in the two clips sold through the national cooperative had been one of the most important reasons for reduced prices received by certain growers.

A number of the minor factors which contribute to the price paid for fleeces such as the kind of twine used, dead or pulled wool, and old fleeces kept over for more than a season were also given consideration in the discussions at the meetings.

From 20 to 80 sheep breeders were in attendance at each of the meetings. Already it has been found that many of the producers with mixed breeds or sheep of mixed breeding have culled their flocks to a single breed or have purchased purebreds to use as a foundation for purebred flocks.

New Film Strips

TWO NEW department film strips have been completed by the Office of Cooperative Extension Work in cooperation with the Bureaus of Dairy Industry and Home Economics. They are Series 278, Some Principles of Breeding Demonstrated with the Herediscope (40 frames), illustrating the practical application of some of the fundamental laws of heredity which heretofore have been little understood by dairy cattle breeders, and Series 285, Livable Living Rooms (50 frames), which illustrates the fundamental principles of home decoration and their application to furnishing the living room and demonstrates that homes may be attractive without great expense.

Previously prepared series specially adapted for use during the next two months follow. They may be purchased at the prices indicated from Dewey & Dewey, 5716 Thirty-fifth Avenue, Kenosha, Wis., after first obtaining authorization from the United States Department of Agriculture. Blanks for this purpose will be supplied upon request to the Office of Cooperative Extension Work.

Series 53. Hog Houses and Equipment, 21 cents.

Series 126. Selecting the Laying Hen, 28 cents.

Series 170. Some Methods of Estimating Milk Quality by Bacterial Tests, 35 cents.

Series 173. Marketing Feeds through Dairy Cattle, 21 cents.

Series 175. The Production of Clean Milk, 28 cents.

Series 209. Aids in Window Curtaining, 35 cents.

Series 238. Come into the Kitchen, 35 cents.

Series 239. Care of the Laying Flock, 21 cents.

Series 258. Fitting Dresses and Blouses, 28 cents.

Series 264. Rug Making—A Fireside Industry, 56 cents.

Series 269. Opportunity Comes to the Rural Girl, 49 cents.

Series 274. Good Equipment Saves Time and Energy, 35 cents.

Six localized film strips were completed during the months of July and August, 1932, by the Office of Cooperative Extension Work in cooperation with county extension agents, specialists, and other extension workers. The photographs used were all local pictures either selected or taken by the agents themselves. The series are as follows:

Series 1087. Marketing Farm Timber in North Carolina (63 frames).

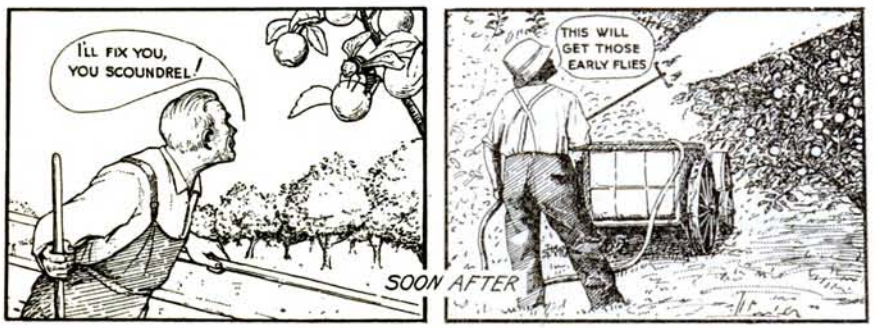
Series 1088. From the Garden to the Pantry, Arkansas (42 frames).

Series 1089. Trench Silos, Colorado (36 frames).

Series 1090. County Agent Work in District Eight, Northeast Texas. Scenes from Field and Forest (55 frames).

Series 1091. Some Essentials in the Production of Milk of High Quality, Indiana (47 frames).

Series 1092. Seed Corn Selection and Storage in Indiana (44 frames).



THESE CARTOONS were used in Maine to supplement work in the control of the apple fruit fly and were sent to the local papers in mat form. "Some papers have used this mat which have used other mats very sparingly," reports Glenn K. Rule, extension editor. Maine has made quite extensive use of mats with extension stories and Mr. Rule says of them, "I am not ready to indorse mats 100 per cent, but it seems to me that our papers will use them in increasing numbers in the future."

National 4-H Club Radio Programs

12.30 to 1.30 p. m., Eastern Standard Time

Saturday, November 5

Third national 4-H achievement program during which the State extension services and the department will provide a joint Federal-State radio program featuring the achievement of 4-H club members during 1932.

Saturday, December 3

Moses leadership-trophy winners.

National 4-H music achievement test featuring modern American music. Played by the United States Marine Band and explained by R. A. Turner.

Cripple Creek----------Stringfield
Youth Triumphant----------Hadley
A Rustic Scene----------Busch
The White Dawn is Stealing-Cadman
Song of the Bayou----------Bloom

Outlook Charts

The Bureau of Agricultural Economics and the Extension Service have joined in the purchase of a new chart-making machine which will make it possible to furnish outlook charts at much lower cost than in the past. By the use of the new machine, charts on cloth can be made for 60 cents each in the 30 by 40 size and on paper for 15 cents each. The charts on cloth are preferable for extension use since they are more durable than those on paper and can be folded and carried in a brief case. To State extension divisions ordering 25 or more charts in one order cloth charts can be supplied at half price—30 cents per chart.

Charts should be ordered by number rather than by title. All county agents have been provided with copies of the chart books for 1932 issued this summer by the Bureau of Agricultural Economics. These books contain nearly all the available outlook charts. All charts will be brought up to date as soon as possible before they are made for use in the field. However, many of them based on actual data can not be changed until next January. To ensure prompt delivery orders should be placed well in advance of the time neeeded.

·ACROSS · THE · EDITOR'S · DESK·

The Soil and People

GEORGE BANZHAF, for 25 years county agent in Milam County, Texas, speaks with authority and out of a ripened experience. The soil and people, he believes, are the fundamental considerations in doing extension work.

Work done with them, Mr. Banzhaf contends, lasts over into the next generation. So in his long service he has made it a point to have never less than 80 nor more than 150 boys enrolled in 4-H clubs. Seventy-five per cent of these boys as they reached maturity have gone into farming and most of them are to-day reckoned among the most progressive farmers of Milam County. They are part of his carry-over into the next generation.

Now as to the soil. Speaking of the early corn and cotton demonstrations conducted under his guidance, Mr. Banzhaf says, "The influence of these demonstrations was so great that now practically all farmers in my county recognize the value of good seed and careful cultivation." In 1914, Mr. Banzhaf took up terracing as a further aid in building up the soil. "It was a new fangled scheme," he says, "that looked good to me." To-day, one-fourth of the farms in Milam County are terraced.

Mr. Banzhaf has a good word for reports. "Don't grumble about them," he says, "you must have records of results and report them to the people of your county. How else can you extend the influence of demonstrations or convince people that extension work is helpful to them?"

"Everyone here," he says significantly, "understands what county agent work is and regards the job as a permanent one." "Tell the boys," is his parting shot, "that the soil and folks stay a long time in the counties."

Twenty Years

A FEW WEEKS ago I attended the annual conference in North Carolina. The conference program was a good one. It got down to basic things—organization, marketing, soil building, how to handle 4-H club work. The thing I remember best, though, was a night session when the local chapter of Epsilon Sigma Phi awarded 11 certificates of service to North Carolina extension workers who had been on the job for 20 years or more. Of these veterans, 6 had been continuously in county work and most of them were still in the counties in which they began work. They were J. W. Cameron, J. P. Herring, F. S. Walker, T. J. W. Broom, A. G. Hendren, and Mrs. Rosalind Redfearn. Mr. Cameron and Mrs. Redfearn have been working side by side in Anson County through all these years and, believe me, they *work together*. Their combined report to the conference on marketing activities in Anson County was one of the best presented.

Commenting on the occasion, J. A. Evans, himself one of the agents appointed by Dr. Seaman A. Knapp in the first year of demonstration work, paid high tribute to these veterans. "There could be no higher tribute to the service and worth of any man or woman," said Mr. Evans, "than to have been able to have served satisfactorily as county extension agent in a county for 20 years."

Make it Human

THE clothing budget became a very human thing under the skillful handling given it by Alice Seely, home demonstration agent for Ocean County, N. J., in her radio talk on the Land-Grant College program in September. Throughout her talk, she expressed the clothing program for Ocean County in terms of what it meant to an individual farm family. Father and Mother Parker and the three Parker children, Doris, Jack, and Paul, each came vividly into Miss Seely's word picture.

Here is the case for the clothing budget as she puts it:

"What did a clothing budget succeed in doing for the Parkers? Besides helping to make 'ends meet' it checked selfishness. Buying according to a plan rather than haphazardly provided a more suitable and attractive wardrobe for the entire family. The clothing budget also gave some responsibility in the selection and care of clothing to the younger members of the family and so helped them to learn the value of money as well as the art of spending it wisely."

This type of presentation, expressing extension results in terms of the experience of the individual farmer or farm family, gives to the public, I believe, its best understanding of what extension work accomplishes in the county. Whether it be through the medium of the radio, the news story, or the local meeting, it makes little difference. The human story is the one that is understood and convinces.

Too Busy for Words

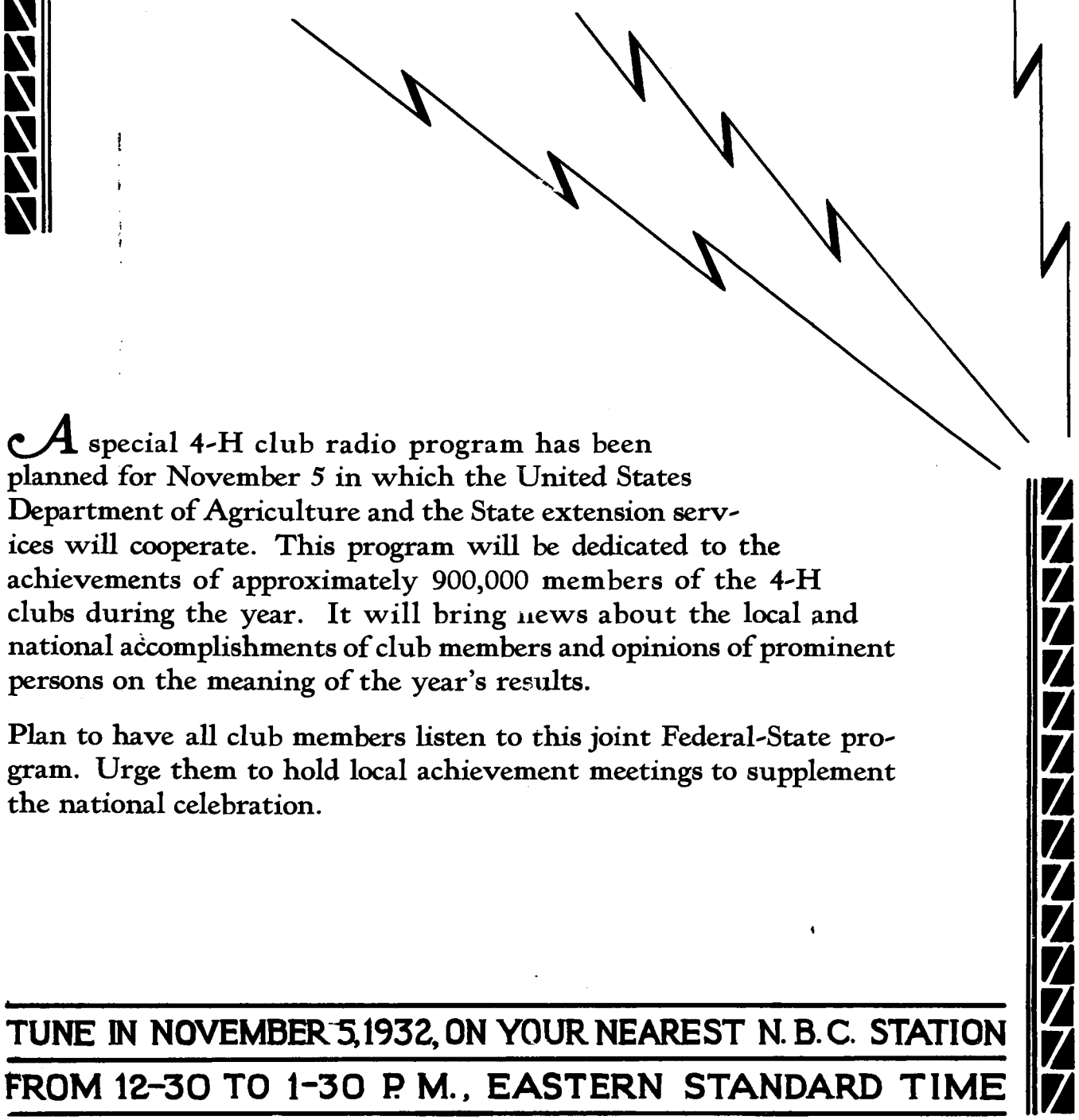
THIS was the situation in which Helen Pearson, home demonstration agent for Frederick County, Md., found herself in 1929. She was trying to meet every month with everyone of the 24 home demonstration clubs in her county. It was a heart-breaking schedule. Yet, I know, that many another conscientious and hard-working agent as a result of her efforts has found herself in this same difficult position.

Happily, Miss Pearson found a way out. So, I am glad to say, have others. She went in for project demonstrators and the plan has worked. She set up six training centers in the county for these project demonstrators, two from each club. The first demonstrations were planned to require plenty of action. The idea was that with a good deal of action and a minimum of talk, it would be easier for the demonstrator to present the subject to her fellow club members.

Refinishing furniture, food preparation, and then as a result of economies necessitated by the effects of a long sustained drought, food preservation and clothing economy, each were extended successfully through these local project demonstrators. The reports of their activities, too, were satisfactory and came in promptly. As a result, it was possible to organize more local clubs, serve many more women, and widen materially the influence of the home demonstration agent in the county. Certainly, I think, a far happier outcome than breaking down under an impossible schedule. R. B.

NATIONAL 4-H ACHIEVEMENT PROGRAM

TO BE BROADCAST NOVEMBER 5



A special 4-H club radio program has been planned for November 5 in which the United States Department of Agriculture and the State extension services will cooperate. This program will be dedicated to the achievements of approximately 900,000 members of the 4-H clubs during the year. It will bring news about the local and national accomplishments of club members and opinions of prominent persons on the meaning of the year's results.

Plan to have all club members listen to this joint Federal-State program. Urge them to hold local achievement meetings to supplement the national celebration.

TUNE IN NOVEMBER 5, 1932, ON YOUR NEAREST N. B. C. STATION

FROM 12-30 TO 1-30 P. M., EASTERN STANDARD TIME