Extension Servi Review

VOL. 5, NO. 11

NOVEMBER 1934

RECEIVED



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

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



In This Issue

YHESTER C. DAVIS, Administra-C tor of the Agricultural Adjustment Act, discusses what is being done through the agricultural adjustment program. He says that the ability of the country and the city to buy from each other has been improved and that there is an actual increase in business activity with important net gains to the people as a whole. For agricultural recovery to go much further there must be further improvement in demand. The problems of the restoration of markets abroad and further industrial recovery at home must be squarely faced if the country is to be restored to full economic health.

D^o local leaders in home-economic extension projects derive benefit and pleasure from their work with other women in their communities? In a discussion of a study made in her State, Essie M. Heyle, Missouri home demonstration agent, summarizes what the local leaders themselves say on this question.



THE LANCASTER Pro-duction Credit Association in Pennsylvania, which makes loans in Dauphin, Lancaster, and Lebanon Counties, had lent \$195,-

000 to 480 farmers up to September 13. This cooperative association of farmer borrowers makes loans at cost to its members.

A^{LFALFA, sweetclover, and reed} canary grass have come to the front in Minnesota's shift from cereal crops to forages. The drought helped to emphasize the outstanding ability of sweetclover to survive and produce under conditions too severe for any other good forage crop.

YAKIMA COUNTY, WASH., is carrying on a big job of farm-debt adjustment work, the committee having dealt with 827 individual cases, involving debts of \$2,100,590, from October 23, 1933, to October 1, 1934, and secured adjustments in 478 cases.

Contents

Page

- Farmers Consolidate Their Gains - -- 161 Chester C. Davis
- Women Find Rewards and Difficulties in Leadership - - - 162 Essie M. Heyle
- Mississippi Enjoys Home-Grown Food and Feed - - - - 163
- Minnesota Shifts to Forage - - - - 165 Crops - - - -
- South Dakota Plans Safer Farming - - - - - - 167
- Time Shows Value of Extension Work -_-- - -- - - - 171
- Meeting Pennsylvania Credit Needs - - - -- - - 172
- New Approach to Seed Wheat Cleaning - - - - - - - 173
- Yakima County Adjusts the Farm Debt - - - - - 174

 A^{s} A RESULT of the live-at-home program Mississippi is better prepared tofeed herfarm population, both persons and livestock, than ever before. The Extension Service conducted a survey of the food and feed needs of the State which revealed the need for increased production of such crops. Farmers were then informed of the food and feed requirements of persons and animals and were shown how to calculate their own needs according to the size of family, the number and kind of livestock, and the average yield of crops.



On The Calendar

American Association for the Advancement of Science, Pitts-burgh, Pa., December 27-January 2. Thirty-Eighth Annual Conven-

tion of American National Livestock Association, Rapid City, S. Dak., January 9-11.

National Western Stock Show, Denver, Colo., January 12-19. Livestock Show and Rodeo,

Tucson, Ariz., February 21-23.

Houston Fat Stock Show, Houston, Tex., March 2-14.

Fifty-Ninth Annual Convention, Texas and Southwestern Cattle Raisers Association, Houston, Tex., March 12-14.

 $B^{\scriptscriptstyle\rm ECAUSE}$ of the whole-hearted cooperation of people in her county Bertha Hausman, home demonstration agent in St. Lucie County, Fla., was able in the short period of 2 months to organize 8 home demonstration clubs with 103 members and four 4-H clubs with 125 members, to hold 41 meetings; and to make 146 farm and home visits, 99 calls on business men, and 22 street calls; besides writing articles for publication and doing many other things. These people provided office space, equipment, a new 4-unit electric range, a sewing machine, signs for the house and office, notebooks, typewriter table, and chairs, and gave much of their time to help start the work.

WHEN South Dakota people foresaw last spring that

should there be another dry summer, crops ordinarily planted would not produce enough to enable stockmen to preserve their livestock they united in a campaign to encourgage the planting of sorghum and millet. Under the direction of the Safer Farming Committee, organizations to push the planting of emergency feed crops were perfected in 42 counties.

 $S^{\rm OUTHWESTERN\, INDIANA}\, {
m farmers}\, {
m have}$ their seed wheat cleaned at home by having portable seed-cleaning equipment moved to their farms.

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

Farmers Consolidate Their Gains

TN MAY 1933, when the Agricultural Adjustment Act was passed, agriculture had been suffering from the existence of tremendous surpluses which had piled up after the disappearance of our export markets. A second acute maladjustment came about last summer through the drought.

These maladjustments really were two aspects of a crisis in farm supplies. The drought put a different face on our surplus problem, which otherwise would have continued for a much longer period. But for thousands of farmers it threatened ruin. That is why the Agricultural Adjustment Administration, with flexible powers conferred by Congress, swung quickly into action to minimize its harmful effects.

In the field of production adjustment 1935 should see a realization of most of the first objectives of the program. By next summer surplus stocks of wheat, cotton, and the major types of tobacco will have been reduced to normal or nearly normal levels.

Our stocks of wheat in 1933 totaled nearly 400 million bushels. It is expected that the carry-over in 1935 will be 125 million to 150

million bushels. With normal yields our 1935 plan will insure a supply ample to satisfy domestic and export demand, leaving sufficient carry-over for the 1936 season, but no burdensome surplus.

The world carry-over of American cotton, which totaled more than 13 million bales on August 1, 1933, was reduced to 10.6 million bales last August 1. If this progress is to be maintained a program of crop control in 1935 will be necessary to maintain this adjustment.

The corn-hog program for 1935 will be designed to produce enough grain to feed a much reduced swine and cattle population. The corn acreage-control measures contemplated will be designed to prevent the setting of the stage for large increases in hog and other meat animal production in the summer and fall of 1935 and running through 1936.

A difficult problem of the future will be the maintenance of a balance between feed supplies and livestock numbers. What we want to do is to avoid the cycles of low prices which have distressed farmers in the past. Reserves of feed and forage depleted by the drought 98289-34



The agricultural adjustment program is passing through a change. In the crisis which caused the program to be launched, agriculture was at the point of collapse. To revive it was the first imperative need. Now that emergency action has brought a measure of relief, the farmers' next job is to maintain their position.

CHESTER C. DAVIS,

Administrator, Agricultural Adjustment Act.

must be restored. But they should be restored without setting out again on the road toward another disastrous adventure in piling up surpluses.

Through the coming winter we shall have to conserve feed supplies. The drought curtailed supplies of grains and feed much more swiftly than had been contemplated by the adjustment program. A year ago we were worrying about the extraordinary numbers of beef animals on the farms. Now, after a period of buying to conserve food supplies, utilize cattle from the drought areas, and protect prices from a glutted market, the Government is helping farmers to maintain adequate foundation herds on the farms.

The crisis of the drought past, our emphasis has swung from a program of buying cattle to that of conserving on the farm the largest possible numbers of good beef and dairy animals. Some advantages have accrued from the drought. It served to a certain degree as a culling program. Reduction of poor stock was greater than reduction of good stock. Emergency buying made so little distinction in price between good and poor stock that liquidation of inferior animals was encouraged. But the consequences of the drought are yet to be faced. The remnant of the herds constitutes the nucleus of our livestock industry, and this we must preserve.

In general, adjustment of supplies with markets has been reached. From this point on the problem is to maintain this balance, increasing our production in step with advancing buying power.

By August 1934 the purchasing power of farm products in exchange for other commodities had a net increase of 44 percent, as compared with March 1, 1933. Paralleling this advance is an increase in the purchasing power of factory pay rolls of 45 percent. It is clear that the

> ability of the country to buy from the city, and the ability of the city to buy from the country have both been improved. There has been an actual increase in business activity with important net gains to the people as a whole. To this improvement our program has certainly contributed.

Henceforth the interdependence of agriculture and industry will have to be frankly recognized in ef-

forts to meet farm problems. The income of farmers, particularly from livestock and other domestic products, bears a direct relationship with factory payroll totals. It is apparent that agricultural recovery cannot go much further without further improvement in demand. In part, we must look to the restoration of markets abroad, and in part, to further industrial recovery at home. These twin problems must be squarely faced by anyone who wishes to see the country restored to full economic health.

An essential factor in the success of the program of the Agricultural Adjustment Administration has been the efficient and loyal field work of the Extension Service. The existence of a trained group of men and women who could be drafted to help with the adjustment program obviated the necessity of building a body of leadership from the ground up. I am confident the members of the Extension Service are as eager as anyone else connected with the program to see it carried forward in the interests of American agriculture.

Women Find Rewards and Difficulties in Leadership

ESSIE M. HEYLE

State Home Demonstration Agent, Missouri Extension Service

N MISSOURI a study of adult homeeconomics leadership showed clearly that women do not begrudge the time given to extension projects, and that they find the time so used rewarding. Only 27 of the 493 leaders who reported felt that the average of 50 hours of labor they had given, the time ranging from $2\frac{1}{2}$ hours to 30 days, was too much; while 432 definitely stated they got more out of serving than it had cost them in time and effort. The study also indicated that leaders are more conscious of the rewards and satisfactions than of the difficulties and dissatisfactions connected with leadership: that the satisfactions they feel most keenly are those connected with serving others, personal development and the widening of their horizon, and that most of the difficulties were those that could, to a large extent, be avoided by more careful program planning, choice of leaders, and better extension methods.

This study made last year was undertaken with three objectives in mind; first, to make women more conscious of the rewards of leadership to themselves; second, to reinspire agents and specialists with faith in the value of leadership to women so they would not be reluctant to ask women to serve as leaders; and third, to point out to extension workers the difficulties the women leaders are experiencing which might be coloring their attitude toward assuming such responsibilities and might jeopardize the success of their leadership. An extensive study was not contemplated.

Before starting the study, the State home demonstration agent discussed informally with six groups, composed of 150 women, the rewards and difficulties of their jobs as leaders. These women, all of whom had had experience in several different types of leadership, seemed interested in discussing the subject and expressed themselves very freely. Their exact words were written on the board, and from the six lists that were thus obtained a summary was made of all of the different satisfactions and dissatisfactions listed. This summary, with a few additional questions, was prepared as an individual check sheet and checked at leaders' meetings. It was checked by . Page 162

493 women who had served in one or more capacities as project leaders, 4-H club leaders, presidents, secretaries, reporters, game and song leaders, or child development chairmen.

Satisfactions listed on the check sheet and considered by leaders as constituting abundant rewards for all their volunteer effort included five general types: joy in serving others, widened social contacts, growth of their own personality, mental stimulus, and greater efficiency in home making. The check sheets revealed a total of 3,786 notations of rewards of the first four classifications and 767 gains of the more tangible character related to skill in home practices. In contrast with these totals, checks noting reasons for dissatisfaction in leadership experience totaled only 1,025.

All of the 493 women checked one or more of the following happy experiences in leadership.

Joy in Serving Others

In volunteer leadership 318 women found reward in the belief that they were helping make their community a better place in which to live, 307 appreciated the opportunity to do something for others, 253 gave service because it provided the boys and girls a better opportunity, and 226 enjoyed the opportunity to use for the benefit of others some talent such as music, writing, acting, or skill in swing, cooking. and gardening.

Widened Social Contacts

Three-fourths of the women, or 369, enjoyed the many new and interesting acquaintanceships made with persons from the county and State. Almost as many, or 364, checked as a reward the pleasure found in the making of new friendships, and 294 reported increased zest in living because of the inspiration, enthusiasm, and fun that came from working with others.

Of the leaders checking the questionnaire, 299 considered their leadership experience as having contributed to their own personal growth because it had enabled them to understand their neighbors and others and to work with them more effectively. Learning to meet strangers more easily was checked by 256. The opportunity to lead others and to see work accomplished under that leadership was appreciated by 196.

To 131 this experience gave a feeling of prestige in the community, or a sense of being needed and appreciated. An equal number of women credited the experience as having accustomed them to speaking in public.

Among their rewards for serving as leaders, 374 stated that the work gave them many new and interesting things to think about, 141 learned to express their thoughts more clearly in writing, and 126 found themselves reading newspapers and magazines with keener insight and interest.

Greater Efficiency in Homemaking From Leadership

It is believed by some that the reason that women are interested in giving time and service to leadership in home-economics projects is a more or less selfish one. It is recognized that those who as leaders have the direct contact with specialists and home demonstration agents have an opportunity to increase their skill and knowledge and to gain new inspiration for their job to a greater degree than those who get the help second-hand through a local leader. Three hundred and six homemakers indicated that they felt repaid for leadership because of the direct help on their problems received from the agent or specialist, 273 because they had gained a new interest in homemaking, and 188 because teaching others meant that they themselves became more skilled and informed.

No one of these advantages, however, was checked as often as 2 of the items on satisfactions in service, 2 of the joys in social contacts, or 1 of the rewards from mental stimulus. In the discussions at the meetings where the questions were set up and those at the meetings where the survey was checked, it was very evident that the leaders were appreciative of the enrichment of their lives which came from greater social opportunities, personal growth, and mental stimulus, and were consciously influenced to accept leadership because of the opportunities of service offered.

(Continued on page 175)

Mississippi Enjoys Home-Grown Food and Feed

"This year has been marked by the largest adjustments ever made in our agriculture, and by a continued improvement in our farm incomes", says L. A. Olson, Director of Extension Work, in a preliminary report on the progress of extension work in Mississippi. "With food, feed, and soil-building crops planted on about 95 percent of the 1,515,000 cotton acres rented to the Government, and with favorable seasons, Mississippi is more nearly on a complete self-sustaining basis than ever before."

M ISSISSIPPI has made unprecedented progress this year toward carrying out an adequate live-athome program on every farm. The larger portion of 1,515,000 rented acres under the Government's cotton-adjustment program was planted to food and feed crops for home use. More attention has been given to home gardening and community canning, poultry raising, production of milk and butter, meat, and molasses for the farm family.

Seasons have been favorable and crop yields normal to above normal. An unusual effort has been made by farmers and farm women to harvest, can, and conserve all food and feedstuffs possible. As a result, Mississippi will go into the

coming winter and next year better prepared to feed the farm population, both persons and livestock, than ever before.

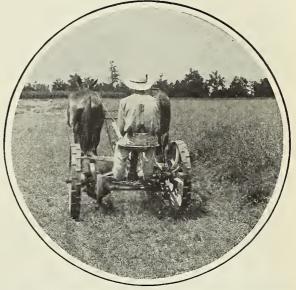
Gains made in crop production in 1934 over 1933, according to the Government's September 1 crop report, include an increase of 4,548,000 bushels of corn, 302,000 bushels of oats, 44,000 tons of hay, 790,000 bushels of sweetpotatoes, 490,000 potatoes. bushels of 3,105,000 pounds of peanuts, and a larger production of soybeans, cowpeas, and velvetbeans.

Significant gains in the

live-at-home program are evident, especially in the Mississippi Delta and other areas of the State with large plantations where the landlords have given their tenants the use of the rented acres for the production of food for their families and feed for their livestock. On thousands of plantations, where little had been done in the past in raising food and feed for home use, each tenant now has a home garden, a patch of sweetpotatoes, cowpeas, sorghum for şirup, and corn sufficient to furnish the family with corn meal and to fatten one or more hogs for meat.

Three factors probably have contributed most to the success of the live-athome program. First, the Extension Service con-

ducted a survey of the food and feed needs of the State based on standard requirements of both the persons and the livestock on the farms and in the towns



A field of alfalfa hay in Coahoma County, Miss., which will help to feed the livestock on the farm.

all of the outlook material furnished by the Department of Agriculture, were presented to farmers at county and community outlook meetings conducted



4-H club member with some of her purebred White Wyandottes which contribute to the farm living.

and cities of the State. This survey revealed the need for increased production of food and feed crops to meet home needs.

The release of 1,515,000 rented acres from cotton production under the Government adjustment program offered farmers an opportunity to meet this need. Results of the survey together with much additional information, including throughout the State during January. Farmers were informed of the food and feed requirements of persons and animals and were shown how to calculate their own food and feed needs according to the size of family, the number and kind of livestock, and the average yield of crops.

County agents who assisted 27,829 farmers in making out their cropping schedules under the requirement of emergency crop loans took advantage of this opportunity to see that farmers allotted sufficient acreage

to food and feed crops to meet home needs.

The State and county home demonstration agents, in addition to expanding their regular work in food preservation with home demonstration women and 4-H club girls, cooperated with the State emergency relief administration in carrying out the most comprehensive canning

(Continnued on page 164)

Conservation Program in Kansas

WATER conservation in Kansas begins where the raindrops hit the ground and follows through to the points where the various rivers leave the State.

The program is being conducted by the Kansas Emergency Relief Committee with the Kansas Extension Service as one of the main cooperating agencies. It is the first intensive program of its kind in the State and has as its main objective, the conservation of water and soil.

In addition to its benefit as a protection for the soil and water resources of the State, the program provides an exsoon cuts into the fields, later developing gullies.

A considerable amount of the valuable topsoil, carried away as silt, settles in ponds and stream beds. It not only ruins the ponds but causes streams to overflow, flooding much valuable lowland.

Terraces, through their ability to make "running water walk", are important in preventing the loss of topsoil and increasing the amount of the rainfall stored in the subsoil. The control of gullies is being brought about not only by terracing but by the use of brush dams and similar checks.



George O. Himes, of Erie, Kans., is one of the many Kansas farmers who are constructing ponds on their farms in which to store water for livestock.

cellent project for the useful expending of at least a part of the funds allocated to the State for relief purposes.

From an emergency standpoint, the program dealt this summer with the locating of wells and supplying of water to stockmen. In many sections of the State, pumping plants were placed in operation to take water from lakes, ponds, rivers, and reservoirs, thus making the water available for watering livestock.

There are four general objectives included in the long-time phase of the program. They are: First, to conserve the topsoil and rainfall; second, keep silt from filling up ponds and stream beds; third, conserve some of the rainfall for irrigation purposes; and fourth, maintain a higher ground-water level.

Small amounts of rain do no harm to the soil as the moisture either soaks into the soil or evaporates. Heavy rains, however, result in much of the water running off the fields and carrying with it much of the valuable topsoil. Not only that but the action of the run-off water Catchment basins, or silt traps, are valuable in keeping this fine topsoil from filling in ponds and causing streams to overflow.

Farm Ponds

While it is hardly to be expected that farm ponds can furnish enough water for irrigating any great amount of land, they are sufficient for the irrigation of gardens or small truck patches. Not only that but the seepage from the pond increases the moisture content of a small amount of ground below the pond.

Ponds, as well as city and county lakes, assist in making additional water available for irrigation purposes through their action in raising the ground-water level. Thus the water may be obtained more readily through the use of wells.

The Extension Service is mainly concerned with the terracing phase of the program. Starting in August 1934, the extension engineer has spent about 2 months supervising a State-wide terracing demonstration program. Engineers of the Kansas Emergency Relief Committec are conducting the demonstrations under his supervision.

During the last week in August demonstrations were held in five counties, with 14,900 feet of terraces being built.

The Extension Service is also assisting in the construction of farm ponds and in the advising of farmers on complete water-conservation programs for their individual farms.

Much of the man power and some of the materials needed in the program are being furnished through relief funds. The program has apparently created a new State-wide interest in the possibilities for soil and water conservation.

Mississippi Enjoys Home-Grown Food and Feed

(Continued from page 163)

campaign ever put on in the State. The program was supervised by the Extension Service and financed by the Emergency Relief Administration. Twenty-nine complete canning outfits were purchased. Local leaders were trained and persons on relief rolls cmployed to supervise the 8,000 community canneries. As a result of this program, approximately 2,000,000 cans of food products were conserved through an 8-week period largely for relief families.

An intensive informational program on the use of rented acres was conducted among contract signers. For example, an 8-page leaflet prepared by the State Extension Service on the utilization of the rented acres was placed in the hands of more than half of the contract signers. The informational material furnished by the National Extension Service, the Replacement Crops Section, and Division of Information of the Agricultural Adjustment Administration, the Farm and Home Hour, the Farm Flash radio program, together with wide use of the press doubtless were important influences in advancing the live-at-home program.

THREE series of community meetings were held in every county of Kansas to explain the Agricultural Adjustment Administration Farm Record Book to contract signers. County agents and local leaders cooperated in carrying on a thorough educational campaign. The record book was explained, and producers were furnished practice supplements for use in learning how to place records correctly in their books. The local leaders will continue to function as advisers, and follow-up programs will be held later in the year to help with any difficulties which arise.

Minnesota Shifts to Forage Crops



Harvesting reed canary grass for seed in Minnesota

A dozen years of intensive work by the Minnesota Agricultural Extension Service have done much to lay the groundwork for the marked shift from cereal crops to forages that Minnesota farmers, along with those of other States, are now finding advisable. Likewise, this forage work helped thousands of farmers to provide pasture during the disastrous drought which reached its climax this year rendering practically worthless the thousands of acres of poorly managed permanent bluegrass pastures upon which many farmers have relied for summer livestock feed.

I N THE broad program of forage-crop improvement and promotion which the Minnesota Extension Service has carried on, two phases of the work stand out in bold prominence; namely, the increased use of sweetclover, especially as a pasture but also for hay, and the introduction to farmers of Phalaris or reed canary grass. Until the Extension Service began its campaign about 8 years ago, reed canary grass was being grown by only a few farmers in one or two southern Minnesota counties.

Both sweetclover and reed canary grass fill unique and important places in the Minnesota forage program. For a full appreciation, the situation must be viewed partly from a historical standpoint. Minnesota's livestock industry developed mostly after the great bulk of the best land on farms was already under cultivation. In consequence, pastures consisted very largely of the poorer portions of the farms and were vegetated with June grass or wild grasses. Very little attention was given by farmers to fertilization or management methods designed to improve or maintain pasture productivity.

Spread of Alfalfa

Coincident with the development of the livestock industry, the use of alfalfa had spread slowly, so that by 1920 its value as a hay crop was quite generally recognized, although the acreage was entirely inadequate to meet the needs and possibilities. Moreover, from the all-round forage standpoint, alfalfa had decided limitations in that it could not stand pasturing well and is unsuited for soils low in lime. Furthermore, the high ini-



Cattle in sweetclover on farm of L. E. Potter, near Springfield, Minn.

tial cost of seed and the difficulty of working alfalfa into short votations discouraged farmers from going into the crop more extensively.

Into this picture stepped the Extension Service with a legume campaign which not only encouraged the growing of more alfalfa but also expansion in clovers, especially sweetclover, which at that time was regarded with considerable hostility by farmers who believed it to be a weed. or at least only a honeybee pasture. In fact, many beekeepers who advocated sowing sweetclover along roadsides or in waste areas were looked upon by their neighbors as public enemies, and there is record of a Minnesota preacher whose advocacy of sweetclover nearly lost him his position. About 1915, farm papers and the agricultural college had begun to advocate sweetclover, but it was not until about 1922 that the campign reached the active stage with the extension agronomist and county agents staging farm demonstrations and talking sweetclover at hundreds of farm-bureau and other meetings, as well as giving it wide publicity. Down through the years this work has been maintained and it has been pushed with special vigor during the last 2 or 3 years, in which the drought has served to emphasize the outstanding ability of sweetclover to survive and produce under conditions too severe for any other good forage crop.

Value of Sweetclover

Not only have the Minnesota Experiment Station and Extension Service done everything possible to encourage the use of sweetclover on soils adapted to its use, but they have also given much attention to the study and dissemination of management practices which enhance the value of this crop to farmers. The rule at present is for farmers to seed sweetclover with a companion crop of small grain, or occasionally to seed it with corn at the last cultivation, a practice which is being encouraged. Another practice which the Extension Service has encouraged is the seeding of timothy with sweet clover, as livestock appear to relish sweetclover better when a variety of forage is provided. Sweetclover has been found to make an excellent hay and is widely used when alfalfa or other clovers fail. The growing practice in making the hay is to cut it with the binder, shock it, and then stack it. When so handled it has been found that the sweetclover cures out in good "tobacco cure" fashion and is relished by all livestock.

Much credit for the spread of sweetclover and legume use, as well as for the general trend from cereal to forage crops in Minnesota is due to the foresight and efforts of Ralph F. Crim, extension agronomist. Several months before the Agricultural Adjustment Administration came into existence, Mr. Crim voiced the philosophy which the Agricultural Adjustment Administration is attempting to carry out, in his presidential address before the International Crop Improvement Association, November 30, 1932. He said, "It is sound farming to sow legumes and grasses on land which today only increases the surplus of grain crops. We could well afford to convert some of the acreage now growing cereal crops to pasture for a few years at least until consumption catches up with production. We need more legumes. The acreage of alfalfa could well be increased. Red clover, sweetclover, and soybeans have not been overworked."

Mr. Crim's remarks were widely circulated through the press of the Nation, and in Minnesota they were given special publicity by a leading seed company which published the foregoing excerpt on posters circulated to elevators and feed stores throughout the Northwest.

Today, sweetclover is widely known in the western half of Minnesota and elsewhere on the rich limestone soils, or on those that have been limed. Furthermore, with the eloquent testimony given by the drought conditions to the value and dependability of this crop, the prospects for future expansion look exceedingly bright.

Reed Canary Grass

There are very large areas in eastern and central Minnesota not adapted to sweetclover production without liming or other treatment which the financial condition of farmers now practically prohibits. However, widely scattered throughout these same areas are numerous peat bogs, many of which were at one time considered practically worthless for any purpose, being in most years so wet and soggy that they could not even be pastured or driven over with a team. Here

it was that reed canary grass offered a unique solution.

Reed canary grass is believed to have been brought into Waseca County from Germany 40 or 50 years ago and was found to thrive on bogs in that area, producing excellent crops of pastures or hay and maintaining a stand continuously for 30 years or more. Still, only a handful of farmers were using the crop until an article in a Minnesota farm publication aroused the interest of farmers and staff members of the experiment station. Immediately the experiment station and the Extension Service extended their investigations and trials which, coupled with the dissemination of information about the crop, has resulted in its adoption throughout the peat bog areas where it has proved a lifesaver as a pasture and hay crop for the intensive dairy farming carried on in various parts of the State.

Not only have thousands of farmers with land unadapted to legumes been enabled to grow a high quality, superyielding forage, but at the same time they have been able to make invaluable use of large areas of their land which heretofore were almost worse than useless.

It has been found that reed canary grass stands are fairly easy to obtain. The seed is sown very early in the spring or, where standing water makes it difficult to get on the bogs in early spring, the seed may be sown in October to germinate the following spring. On weedy lands seeding may be delayed until the last week in June or the first week in July. Bogs can be successfully used for reed canary grass production even when they are so wet they will not bear the weight of machinery except when frozen underneath. The crop grows so vigorously and the roots mat so well that animals can pasture on the bogs without danger of miring, or hay may be harvested with machinery.

In addition to much publicity, many demonstrations and numberless platform discussions on the value and methods of producing this crop, the Extension Service and experiment station have done much for the reed canary cause by developing better methods of harvesting seed, assisting prospective growers in locating sources of seed, and otherwise facilitating the exchange and distribution of seed. Likewise, the experiment station has assisted in developing a satisfactory seedharvesting machine which can be constructed at little cost from a discarded grain binder.

A great deal might be written of the forage promotion and improvement service rendered by the experiment station and Extension Service in Minnesota. To complete the story, much would need to be said of the encouragement of the use of alfalfa, soybeans, adapted varieties of clovers, Sudan grass as an emergency crop, and so on. Just now, bromegrass and crested wheatgrass are being tested for Minnesota conditions. Improvement of sweetclover varieties is underway, The complete story would include much regarding the work of developing and popularizing better management and utilization methods in connection with forage generally. More and more attention is being given to the search for better varieties of permanent pasture crops and for better methods of maintaining and improving permauent pasture productivity.

Future forage improvement cannot be foretold, but there can be no question that the popularization of sweetclover and of reed canary grass are feats destined to hold unrivaled places among the contributions of the experiment station and Extension Service to the State's agronomy and her agriculture generally.

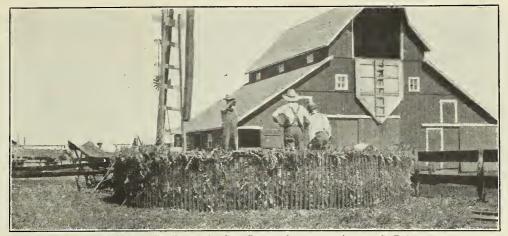
Home Economic Values

The economic value of home demonstration work in Kentucky last year was more than half of a million dollars.

The vegetables, fruits, meats, and other foods canned as a direct result of the work had a minimum value of \$319,569. Home furnishings made as a result of the work were worth \$87,855; home sewing, \$44,634. Other parts of the work and their values are: Home management, \$35,562; home millinery, \$5,687; home dry cleaning, \$4,340; home crafts, \$9,282; 4-H club clothing, \$11,733, and 4-H club canning, \$6,991.

Aside from the economic value, Director Cooper of the Kentucky Extension Service points out that: "A large part of the home demonstration program cannot be measured in dollars and cents. Greater happiness and satisfaction of the home maker, more beauty and comfort in home surroundings, higher standards of health, greater appreciation of life are intrinsic values that cannot be measured."

Home demonstration work was conducted in 464 communities in the State, with 6,242 women enrolled in home makers' clubs, and 11.583 girls enrolled in the work. With the aid of 3,298 volunteer local leaders, 40,037 persons were reached. A total of 10,657 meetings were held, attended by 376,980 persons. Help was afforded in relief work for 10,582 families.



Filling a crib silo on the Sam Lassen farm, near Aurora, S. Dak.

South Dakota Plans Safer Farming

South DAKOTA farmers are thankful for sorghums and millet. These two crops have helped them to battle the drought which has stalked the State, severely testing farmers and farming practices. This year in many parts of the State the intensity of the drought has been such that even the best methods have availed little, but in sections where the farmers have had half a chance the superiority of scientific, intelligent farming has been demonstrated.

One of the major changes made this year to meet adverse weather was the substitution of sorghum for corn over wide areas. The South Dakota Extension Service has long recommended sorghum as a drought- and grasshopperresisting crop with advantages which should make it a part of the regular farming system in sections of the State where rainfall is usually limited. Scattered here and there many farmers have planted it for years, but not until 1934 was it planted wholesale in every corner of the State. Thirty-five years ago, in the spring of 1899, a series of tests with amber "cane", Kafir corn, kursk millet, and several varieties of proso millet were started at the Highmore Experimental Farm, which is maintained by the State college. Throughout the entire 35-year period this experimental farm and others have served well to obtain crop facts of value to South Dakota farmers and land owners.

Since 1930 the Extension Service has planted sorghum variety demonstration plots in various parts of the State to show the relative values of the different varieties of this crop and to refute the claims of some irresponsible salesmen who sold unsuitable sorghum at high prices to South Dakota farmers.

Foreseeing that should the State experience another dry summer, crops ordinarily planted would not produce enough feed to enable stockmen to preserve their livestock, citizens last spring generally united in a campaign to encourage the planting of sorghum and millet. The

> dry summer did comethe driest on record, in fact. Under the direction of the Safer Farming Committee, organizations to push the planting of emergency feed crops were perfected in 42 counties. The State Safer Farming Committee was composed of Emil Loriks, president of the Farmers Union and secretary of the South Dakota Holiday Association; H. B. Test,

president of the Farm Bureau; J. J. Martin, master of the Grange; W. S. Given, chairman of the agriculture committee of the South Dakota Bankers' Association; C. E. Sanders, president of the Press Association; and Robert D. Lusk, managing editor of the Evening Huronite. Organizations which these men represented all got behind the campaign. Dr. C. S. Betts was chairman of the Beadle County Safer Farming Committee, which was the parent organization. The South Dakota Extension Service cooperated in every way with the committees, supplying much of the information disseminated. Regular news channels and circulars were also utilized by the Extension Service in distributing information.

The Safer Farming Committee distributed approximately 10,000 posters urging the planting of emergency crops, and 35,000 copies of the Safe Farmer, a 4-page newsprint paper which stated editorially, "The purpose of this publication, the Safe Farmer, is to encourage a cropping program in South Dakota that is adapted to dry weather conditions. Through this program it is hoped that, despite subnormal rainfall, farmers may be assured of sufficient feed for their livestock next winter, pasturage during the summer and fall, a large producing flock of chickens next winter, feed for the chickens, and a supply of garden food for table use."

Farmers everywhere rallied to the objectives of the campaign and planted an estimated 500 to 600 carloads of sorghum and millet, an amount many times that planted in any previous year. The relief administration in the State purchased more than 9,000,000 pounds of sorghum and millet and distributed it to farmers.

(Continued on page 168)



A grain sorghum variety demonstration plot on the Shelby Coleman farm, Mission, S. Dak.



THIS 13-aere plot furnished 11,197 bunches of fresh vegetables, 97 bushels of sweetpotatoes, and 36 hampers of English peas between September 1, 1933, and April 28, 1934. The land was donated for relief garden work by a Negro mail-carrier; the work was supervised by the Negro county agent; and the food was distributed through the relief agencies of Alachua County, Fla.

South Dakota Plans Safer Farming

(Continued from page 167)

Rains did not come abundantly so that even these crops could not grow normally, but a large part of the feed which farmers have is sorghum and millet. This, together with Russian thistles, some corn, wild oats, and wheat or other small grain cut for hay will furnish winter feed for livestock. Grasshoppers threatened this spring, but a systematic poisoning, using approximately 12,000 tons of bait furnished by the Government, together with ecoperation from the weather in this matter, has reduced "hoppers" to about normal, according to an egg survey recently completed. Livestock numbers have been materially reduced, thus slashing feed requirements. Nearly 1,000,000 eattle have been disposed of in the emergency drought-relief program, and thousands of sheep are now leaving farms and ranches which are unable to maintain them during the winter.

South Dakota farmers are making wide use of other practices recommended by the Extension Service in preserving what feed they have. They have built pit, trench, and crib silos. The Extension Service has told them that the feeding value of such emergency feeds as Russian thistles, mixtures of oats and foxtail, stunted corn and sorghum, is more fully preserved in the silo than if fed dry. The experience of farmers in Powell Township in Edmunds County and just across the line in Faulk County is typical. Gar Griffith, in Faulk County, built a large trench silo in 1933 and found it so satisfactory that this year be built another on a second farm in which he has an interest. The silo he built in 1933 is located on a hillside, the trench opening being toward a creek. The trench is 125 feet long, 18 feet wide at the bottom, and 30 feet at the top. The depth is about 12 feet.

Mr. Griffith's success with this type of silo encouraged his neighbors, the three Richards brothers, to each construct one. Working together they have ensiled their limited fodder of corn, Russian thistles, and whatever other suitable material they could gather.

Herman Township in Lake County is a booster for silos, nearly every farm having one. Nearly every type of silo commonly ^uused, except creosoted wood stave, may be found within a radius of 5 miles from Junius. Herman Township has always taken an active part in extension work, has supported the county agent in every way, and is reaping the benefit therefrom. Emergency silos are doing their part in nearly all portions of the State.

Those who have experienced successive years of drought with South Dakota are convinced that the lessons these years have taught will not soon be forgotten. Especially, they are sure that sorghum will have a more prominent place in the cropping system than it has had in years past.

C OUNTY agricultural agents are aiding in the land-use survey now being made in Florida under the direction of the National Resources Board. The utilization of marginal and submarginal areas to better advantage is the principal object of the survey.

Extension Program Aids Tenant Farm Family

A live-at-home program planned in 1928 and which has been followed for the intervening years has brought about a very definite improvement on the farm of Michael Nathaniel, a Negro tenant farmer of Sumter County, S. C. In the years 1926 and 1927 he had made very little progress under his old plan of work and was determined to make improvements, but he needed aid and information. In conference with his county agent plans were made for some changes and improvements in his farming. He then talked these plans over with the landlord and obtained his cooperation in the plan.

In 1928 he followed the recommendations of the county agent in a more balanced planting of farm crops. In addition to the regular crops of corn, cotton, peas, and potatoes, he planted a yearround garden, sugarcane, oats, peanuts, cowpeas, and sweetpotatoes. He also purehased a high-grade cow. Each year he has followed a somewhat similar plan, increasing the acreage of certain crops and obtaining a cash income which he reinvested in poultry and a cow for home milk, butter, and eggs.

By following the extension plan of balanced farming this farmer has not only been able to produce his home food and feed supplies but he has been able to educate two daughters and a son. One of the daughters is teaching in a neighborhood school and serving as the local 4-H club leader. The son, likewise, following an extension program, won the State record for corn production in Negro 4-H. club work during 1928.

This demonstration has not only improved the living of the Nathaniel family but 11 other farmers in the community have taken up the practices which he has followed in improving their own farms.

N KIOWA COUNTY, OKLA., there had existed a long-time need for growing more alfalfa, not as a commercial crop, but as an available source of home livestock feed. The use of retired acres under the cotton-control plan for home livestock feed production offered an opportunity for rapid development of the plan. It was advised that all farmers plant sufficient acreage to meet the needs of their particular farms. From observation it was ascertained that at least 125 farmers in the county have followed the suggestion. About 50 farmers in the county planted some aereage to cowpeas.

Autumn Days on the Farm



Results Speeded

EXTENSION workers teach cooperation among farmers. They know also that they must obtain cooperation before their work can be most successful.

An unusual example of whole-hearted and widespread cooperation, with resultant accomplishments which make a record for the time involved, is found in a report of home demonstration work in St. Lucie County, Fla. Bertha Hausman, who was appointed agent there, with headquarters in Fort Pierce, started work on September 1, 1934. Just 2 months later she said the following about generous assistance received.

"From the chairman of the board of county commissioners to the colored man on the garbage truck, everybody has cooperated in a vital way. The commissioners appointed one of their number as guardian angel of home demonstration work and gave him power of decision in matters pertaining to the work, thereby expediting the organization. The official family of the courthouse has given the home demonstration agent a hearty welcome. They have provided office space, equipment, information, prisoners to clear grounds and plant shrubs, transferred equipment from storage room to office, and evidenced a friendly interest (especially in sampling the foods prepared).

"A beautiful new four-unit electric range was given by the city for the demonstration kitchen. The firemen made curtain poles, brackets, and the easiestgoing tea cart you ever saw. The ice company leaves ice each morning. The merchants have given barrels and boxes for furniture and paint and brushes for craft work, A lumber company made signs for the house and office and gave asbestos samples for hot pads. A newspaper gave notebooks for each 4-H club girl. A dairy gave burlap bags. A church lent a sewing machine. A road superintendent from the Federal Emergency Relief Administration hauled the machine and other equipment. Civic clubs have invited the agent to be present at their meetings and given her an opportunity to speak. A former prosecuting attorney donated the use of a desk for the office. An insurance company provided blotters. A power company gave shrubs, and an automobile dealer gave inner tubes which will be used later in making toys. Women gave a typewriter table, pencils, patterns, chairs, and old clothes."

That all of this assistance enabled Miss Hausman to register a large number of accomplishments in the 2 months is attested by her report of work done.

"Eight home demonstration clubs have been organized, with 103 members, representing 99 homes. Thirteen meetings have been held with a total attendance of 174. Four 4-H clubs have been formed with 125 members, representing 103 homes. Eight meetings have been held with a total attendance of 225. Twenty miscellaneous meetings, including school and church groups, civic clubs, city and county commissioners, and the school board, have been attended. One hundred and forty-six farm and home visits have been made, also 99 calls on business men and 22 street calls. Two hundred and twenty-seven visitors have called at the office and 136 bulletins have been distributed. Thirty-one Federal Emergency Relief Administration clients have worked a total of 1,272 hours. One hundred and twenty-seven articles have been made for welfare and demonstration purposes, and a kitchen cupboard has been built. Eight hundred and forty-two miles have been traveled by car. Two thousand cabbage and collard plants have been distributed to relief clients. Five articles have been prepared for newspaper publication, as well as notices and accounts of each club meeting. Menus and market orders have been prepared for the Federal Emergency **Belief** Administration nursery.

"Developing home demonstration work in St. Lucie County has been, and will continue to be, interesting and beneficial to the entire county. Groups working, planning, and studying together, each for a common cause, will develop a spirit of helpful cooperation, which in turn will result in happier families and better homes, the ultimate goal of home demonstration work."

Negro 4-H Clubs Held State Meetings

Negro 4-H club members have turned out for their annual State camp or round-up in greater numbers than ever before and have had a greater enthusiasm and determination to get the most of their opportunity of a week or 10 days at the college. Alabama, Georgia, Louisiana, Mississippi, and Texas have held successful meetings during the past summer.

At the Alabama meeting of 4-H club members a complete physical examination was given to 233 boys and girls, representing 30 counties. Heretofore only the first day was used in giving the examination, but this year the complete 10-day period was used in giving a most complete examination. In addition, lessons in personal hygiene, health, and sanitation were given to create in these young people a greater pride in themselves and a deeper respect for others.

Four hundred and twenty-nine boys and girls attended the Mississippi annual short course, the largest ever held in the State. The meeting was held at the Alcorn Agricultural and Mechanical College, where a very worth-while course in character training was offered the young people.

The fifth annual short course for Negro club boys and girls was held at Southern University, Baton Rouge, La. There were 232 in attendance, the largest enrollment they have ever had. Busses were provided for carrying the boys and girls from their homes to the meeting.

Recreation, as well as instruction, was emphasized at each camp. A feature of the Negro 4-H club camp at the Georgia State College, Savannah, was a boat ride on the Atlantic Ocean, which 500 happy people enjoyed at the close of the conference. The program was well presented and planned. The members of the extension staff and the faculty of Georgia State College cooperated in making it an cutstanding activity.

"Round-up Time in Texas" lived up to its name. More than 1,500 Negro 4-H club members and their parents attended the meeting. The 3-program meeting, 1 for boys and girls, 1 for the parents, and 1 for the agents, was supervised and directed by the extension forces assisted by the faculty of Prairie View State Normal and Industrial College. The faculty of the school had been held over after the close of summer school to aid in this meeting.

THE home-maker's market basket will be efficiently filled through the efforts of the Kentucky extension workers in a food-purchasing program. Four points are considered in the planning and are emphasized in the demonstrations given for farm women. Buying canned goods, fresh vegetables and fruits, meats, and judging the value of homemade products are some of the factors the housewives have discussed.

"We spent only \$24.98 for food products during the year, and at the same time produced and consumed \$516.74 worth of food. It is also interesting to note that at the same time we sold \$62.31 worth of poultry and dairy products above our home needs. With a balance of \$37.53 we are more than living at home ", is the remark made by one cooperator.



W. R. Reynolds.

WENTY years is a long time, yet it seems to me but yesterday when I mounted my horse and started over the hills, up and down the creeks in Jackson County, carrying to the isolated farm home in the best manner I knew the story of a "new day" for rural homes. I knew then, as I do now, that I was pioneering with bright hopes for the future, telling farmers and their families of new and improved practices that I was sure would turn losses into profits and discouragement into hope.

In 1914 many people were guessing what a county agent was and more about what he could do to help the farmer. Even Uncle "Dude" Robinson, when I was telling him of the construction of a new silo at Annville, thought it a place for crazy people. Today many think a farmer without a silo or other farm conveniences is eligible for the asylum.

In 1914 but few farmers knew of seeded pastures or hay crops other than broomsedge, and seldom did I see fields seeded to any kind of leguminous crops. It was seldom that I found a home with a storage house or cellar for caring for winter foods, or with any kind of modern conveniences. Japan clover grew wild to some extent in old depleted fields and it was hated by the farmer as he would hate a rattlesnake because he said it caused his horse to slobber. Little hay of any kind was grown in the years before 1914, the farmer depending largely upon corn blades and corn fodder for his supply of roughage.

The problem of bringing a "new day" to the rural home was by no means a small one. Methods of building a program had to be worked out. The main idea was to secure cooperation among the farm homes and this looked like almost an impossibility to me. I decided to try to secure this cooperation in

Time Shows Value of Extension Work



Jackson, one of the mountain counties of Kentucky, has kept the same agent for more than 20 years. The 1930 census shows that there are 1,865 farms in the county, practically all cultivated by their white owners. About 59 percent of the total land area is in farms, 70 acres being the average size of the farm. The aims and accomplishments, as well as the enviable record of the extension service in this county, through 20 years of continuous effort are described by County Agent W. R. Reynolds.

large measure through the sons or the daughters of the farmers by organizing them into 4-H clubs. So I centered my first activities on the juniors. The first club was organized in November 1914, as the "Corner Oak Club" and my first county extension committee was selected in 1916.

Since then some progress has been made toward reaching our goals. I like to think that there are more than 3,000 acres seeded to Korean lespedeza where broomsedge and weeds grew before; that hundreds of acres of other clovers and permanent pastures have been established on gullied and depleted acres; that home conveniences are in a large number of homes; that improved livestock, up-to-date farm machinery, and storage buildings are now found on hundreds of farms in the county.

The first limestone club was organized in 1919. A lime crusher started crushing limestone rock that was hauled by horse-drawn wagons to more than 300 farms with a total acreage of more than 4,000 acres. Fields have been made to produce from 25 to 100 bushels of corn per acre where 10 to 12 bushels was formerly produced.

Instead of boys and girls leaving the county, seeking employment in the factories, they have through the 4-H clubs been given a new outlook upon life and have become partners with their parents, getting both work and pleasure which bring profits and contentment. The first 4-H fair was held in 1916, with 24 club members exhibiting. Now it is not unusual to have 400 boys and girls taking part with several hundred exhibits.

Adult community clubs have done much in bringing a spirit of cooperation. Roads have been constructed through community effort. One-room school buildings and log-cabin homes have been replaced by consolidated school buildings and modern homes. Cooperative buying and selling and other cooperative community projects have become a permanent fixture in the farm program.

Jackson County has never been a surplus producing county in farm produce, and the aim has been to have farmers feed themselves and live independently of the markets. But since hard-surfaced roads have been constructed and community roads improved, greatly improved soil practices and general farm practices adopted on many farms, the farmers are looking forward with new anticipation to producing some farm products which can be shipped and sold outside the county.

After 20 years of continuous service, I can see that though much headway has been made, I have in truth only been pioneering. New conditions coupled with droughts, depressions, and unrest among the populations of the world face us with new problems; problems that only the Extension Service can solve. I believe that a larger percentage of the rural people are now backing the extension

(Continued on page 172)

Meeting Pennsylvania Credit Needs

LOANS of \$195,000 to 480 farmers had been made up to September 13 by the Lancaster Production Credit Association in Pennsylvania. These loans consisted of \$125,000 for crop and general farming purposes and \$70,000 on feeder cattle. There were 280 farmers in the former group and 200 farmers in the feeder cattle loan group.

This association, which was incorporated December 1, 1933, and is organized on a cooperative basis, makes loans in Dauphin, Lancaster, and Lebanon Counties. The authorized capitalization is \$250,000. The association has \$150,000 in class A stock which is invested in Federal bonds. Each farmer receiving a loan must own one share of class B stock costing \$5 for each \$100 or fraction thereof borrowed. Stock may be purchased with money borrowed from the association. It gives the borrower the right to 1 vote at the annual meetings regardless of the size of his loan. The farmer need not buy stock each time he borrows, unless it has become impaired in value or he wishes a larger loan. Funds from the sale of class B stock also are invested in Government bonds. The bonds are pledged with the Intermediate Credit Bank of Baltimore to secure a line of credit for the paper the association wishes to discount.

This cooperative association of farmer borrowers makes loans at cost to its members. Security consists of a first lien on the crops or livestock to be financed and whatever additional personal property that may be required to adequately secure the loan. Loans are repaid when the crop or livestock financed is sold and usually do not exceed 12 months in length. Dairy loans may be made for a year, renewable for 12 months at a time for 2 additional years, and are usually paid by monthly installments.

Loans are made up to a reasonable percentage of the appraisal value on livestock and equipment, the actual percentage varying according to the many factors that go to make an efficient farming operation. Real estate is not ordinarily taken as security but where other security is insufficient may be used as secondary collateral.

When the applicant seeks a loan he must state on the application blank the purpose for which the loan is to be used. His property listed on the application is appraised by the association inspector and the value thereof is reported to the loan committee, which acts after considering this report, the standing of the farmer in his community, and the moral risks involved.

In many cases loans will be paid immediately out of a cash fund upon approval of the loan committee. These loans then are offered for discount with the intermediate credit bank. Some loans are acted on by the board of directors and passed on by the Intermediate Credit Bank of Baltimore before they are granted.

A cash-loan fund of \$10,000 for feeder cattle is on hand. These loans are usually made on conditional-sale contracts. They can be had in a short period of 2 or 3 days after farm and cattle inspection, and after being passed on by the loan committee.

Interest is charged at a fixed margin above the rediscount rate of the Intermediate Credit Bank of Baltimore. The present interest rate (September) is 5 percent, to farmers borrowing from the Production Credit Association.

Feeder loans must carry fire and storm insurance costing 67 cents per \$100 in insurance, which is paid by the borrower. Loans requiring a chattel mortgage must pay \$1.50 each for recording.

Time Shows Value of Extension Work

(Continued from page 171)

program in this county than ever before. Agricultural extension work in Jackson County has been the sole agency working with the rural people in helping them to help themselves, and I feel sure that this program has changed the status of living in this county during the score of years.

One principle that I have always kept in mind is that it is not the purebred pig, calf, lamb, or poultry that makes for efficiency but the boy and the girl who will bring about the change which will result in the "better day." No one can fully realize to what extent 4-H club work will reach the lives and character of boys and girls unless he has closely observed it working over a long period of years. In 1915 the first shipment of purebred pigs was delivered to some 30 club members. This group represents my first crop, and I have seen them grow up during these 19 years to hold positions of trust such as superintendent of schools, superintendent of the high Page 172

school, engineers, and farmers of the first class. I am not exaggerating when I say that 4–H club work in this county has influenced for the better the lives of some 4,000 boys and girls.

As I look around me and observe counties where county agent work has not been continuous or a definite long-time program has not been worked on continuously, I am made to believe that agricultural extension work will render its best service when the work can go on without interruptions. Such a program as extension offers to the rural people is sure to give results; and our county needs this service as much as, or more today than it did when I started work more than 20 years ago. I have reached goals which I doubted I could reach, but now new goals are up and the new adjustment in agriculture certainly offers the extension worker a broad field for service which no other agency can fill.

FARM women in Maine "know their groceries." Extension workers in the State, through the home demonstra-

tion agents, have been carrying on a series of demonstrations on low-cost meals and efficient buying. At the first meeting the home demonstration agent discussed meal planning and food preparation with the group. A low-cost meal was prepared and served to the group. During the afternoon the agent led a discussion of the points to remember in buying canned foods, emphasizing the idea of quality, grade, and condition of the contents.

At the second meeting the women discussed the events, such as the food and drug legislation, which would affect the buying habits of the women. There was also a discussion of the use of cheese in low-cost meals. The afternoon discussion centered about the points to be considered in purchasing a list of food requirements.

As an outcome of these meetings a merchant in one community set up a demonstration shelf of foods to be considered in low-cost meals. At later meetings the cooperators reported their results and reactions to the plan and as to its value.

New Approach to Seed Wheat Cleaning

A FTER wearing out all the age-old slogans, such as "As ye sow, so shall ye reap", and resorting to every known method of persuasion common to extension agronomists and county workers, a new approach to the seedwheat cleaning problem proved very successful in southwestern Indiana. The plan worked out by C. E. Skiver, of the agronomy department of Purdue University, consists of making available portable seed-cleaning equipment and having it moved to the seed wheat rather than having the seed brought into a central

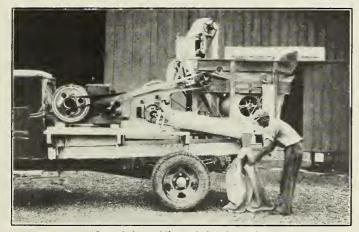
point. County agricultural agents have actively supported the development of the project and have arranged schedules for the units.

The units are set up with the best cleaning equipment available which consists of a large capacity fanning mill, a cockle separator, and a 3½-horsepower gasoline engine as a power unit. The elevators and conveyers are so installed that all operations are automatic. The seed grain is put in the receiving hopper on one side of the truck and taken off in the sacker on the other.

The equipment is mounted on an ordinary 1½-ton truck chassis. The machines will clean seed wheat at the rate of 35 to 50 bushels per hour, depending upon the amount of dirt in the grain.

The area in which this project is operating is a typical soft red winter wheat area of the Ohio Valley. The 783 farms serviced in Indiana in 1934 averaged 103 bushels of seed per farm. The weed seeds most difficult to separate are cockle and chess or cheat.

As the mutual benefactors from the operation of this equipment would be the millers and the growers, an attempt was made to so set up this project that the burden of expense would fall about equally upon both parties. The mills were asked to provide the equipment and a small toll was taken to cover actual operation expenses. The first year the toll was 3 cents per bushel, which was payable either in cash or grain. Making tolls payable in grain made it easy for the operators to collect and made payments easier. The first year of the operation of this equipment was 1932 when two improvised fanning-mill units were provided by a milling company of Evansville, Ind, This was the year when the price paid to the farmer for his wheat ranged from 37 cents to 42 cents per bushel, and farmer morale was considerably below that level. In spite of this, the two erude machines reached 209 farms and cleaned a total of 19,155 bushels of seed, which was 8 percent of the seed required in the area in which the machines were operating. While times were hard and



One of the mobile seed-cleaning units.

many toll collections were paid in grain, the machines proved very popular and they were able to reach only a small percentage of the growers requesting the service.

Improved Service

The next year the same millers were able to see the marked improvement and furnished three portable units. In addition cockle separators were added to the equipment and sufficient elevators and conveyors were installed to make all operations automatic. The machines this year were started immediately after threshing and operated until seeding time. This gave them 8 weeks in which to run. With the improved service and the doubling of the cost of the units, the fee was necessarily raised to 4 cents per bushel. During the second season, 1933, the 3 cleaners reached 468 farms and cleaned 53,420 bushels of seed wheat which was 22 percent of the area's requirement. The operators were unable to reach all the growers requesting their services.

In an attempt to extend this type of service to other field crops, one of the units was equipped to clean lespedeza seed and 60,000 pounds were cleaned after the wheat cleaning senson of 1933.

During the 1934 season 1 unit was added to the Indiana territory making 4 units available there, and the same commercial firm provided 2 additional units for adjoining counties in Illinois, making a total of 6 machines in operation altogether. The two machines worked in Illinois were operated under the direction of Prof. J. C. Hackleman

of the agronomy department of the University of Illinois, with the assistance of the county extension agents.

Treating Seed

As bunt or stinking smut had become very prevalent in this area, a smut treater was developed that would feed the proper amount of copper carbonate dust into the stream of wheat as it left the cleaner and properly mix it with the seed before discharging into the sacker. No additional charge was made for the dusting other than the cost

of the chemical. This made the project so popular that the requests for the services of the machines were again far in excess of their capacity.

The 6 portable cleaning units reached a total of 1,086 farms and cleaned 121,-085 bushels of seed wheat, which is 35.4 percent of the seed requirement of the area in which the project was conducted. In addition, the machines treated 43,947 bushels of seed for stinking smut. This is 12.8 percent of the area's seed requirement.

The success of the project can be attributed very largely to two factors: First, the excellent job which this improved equipment was able to do; and, second and most important, was the large volume of seed they were able to reach in the 7 or 8 weeks between the threshing and seeding seasons. It was this large volume that kept the cost exceptionally low for the quality of service rendered. This large volume was made possible through the efforts of the extension agents in this area, as it was

their duty to arrange the schedules of the machines. The most effective plan of scheduling these machines was conducted in Knox County, Ind. Here County Agent A. S. Benson sent out his publicity and named the township wheat committee chairman as the party who would receive requests for the services of the machine and route it while in his The cleaning unit simply township. moved from one township to the next and reported to the chairman. In this county 42.6 percent of the total seed requirement was reached through the efforts of the county agent and the cooperating township wheat committees.

Machines Kept Busy

A competent operator was in charge of each machine, as operator, manager, and purser. For his wages he received a sizable portion of the net receipts of the machine. Thus it was to his advantage to keep the machine busy and arrange a schedule to get the most volume. During the latter part of the 1934 season each operator employed an assistant and with the aid of lighting equipment operated the machines day and night. In this way each of the 6 units was able to average better than 20,000 bushels of seed. Even with these long hours of operation they were not able to meet all the requests for their services.

It is apparent from this experience thus far that the millers will get their investment back in a period of from 4 to 5 years and will have the improvement of the wheat in the area. The demand has been so heavy and the millers have been so well pleased with the results of this project that they propose to add 4 new units to the fleet next year, bringing the total operating units up to 10.

The processing or treating of the seed for a little over one-third of the acreage in this territory will be of material value to the growers and in addition will head off an infection of stinking smut that has broken out in the community in the last 2 years.

While the milling companies which provided the cleaning units are interested solely in wheat, the services of two units are being extended to the cleaning of soybeans this year. The extension of these units to other field crops will help relieve the overhead and will bring about as intensive and as rapid an improvement as it has in wheat production and quality.

Yakima County Adjusts Farm Debt

NE of the outstanding pieces of farm-debt adjustment work in the United States is being done in Yakima County, Wash. The committee dealt with 827 individual cases, involving debts of \$2,100,590, from October 23, 1933, to October 1, 1934, and secured adjustments in 478 cases. Loans on adjusted cases during this period total \$1,467,250, representing almost three-fourths of the indebtedness involved. Taxes and water assessments made available through the work of the committee total \$82,035 and \$65,278, respectively, and were not reported until the mortgages were filed with the Federal Land Bank, Spokane. The cases handled involved 9,048 interviews in carrying on negotiations between the debtors and creditors involved.

Yakima County has also the distinction of being one of the first counties in the United States to set up an organization for farm-debt adjustment work. The agricultural committee of the Yakima Chamber of Commerce opened an office for helping farmers to make out applications for land-bank loans in June 1933. The bank's requirement that all debts be consolidated for the loan started the committee into the farm-debt adjustment field, with all its ramifications. The actual work of adjusting debts was taken up by two prominent Yakima orchardists, J. L. Hughes and R. A. DeBuch. Mr. Hughes resigned in March this year and was replaced by T. S. Johnson, another representative of the orchard interests.

After official appointment of the farm debt adjustment committee by the Governor of the State, the committee of 13 representative farmers and professional men realized that the job would require the full time of at least two men. It also became apparent that formal meetings of the entire committee with parties interested in debt adjustment might add to the debtor's humiliation and lack the effectiveness of personal consultations. Consequently the actual work was turned over to the two men pioneering the work in the county, while the committee representing all parts of the county acted in an advisory capacity and referred cases in their communities to the two adjusters.

Cooperation with Bank

One of the most important factors in the success of the committee is the close cooperation with the Federal Land Bank of Spokane. The land bank not only referred 267 of the 827 cases handled directly to the committee but cooperated in every way in granting reappraisals, increased committments, extensions of time, and other courtesies where the cases seemed to justify such action. The contact appraiser has been especially helpful in overcoming many difficulties encountered in securing beneficial loans and in arriving at a fair basis for adjustments.

Frankness on the part of the two debt adjusters in dealing with both debtors and creditors and the advantage of personal and confidential conferences with those involved has resulted in the handling of hundreds of cases that would never reach the average committee. A large committee, made up of men donating part of their time to the work, labors under a distinct handicap in dealing with the average debtor and creditor in the opinion of the Yakima organization.

The unusual results obtained by the committee have been obtained by placing the actual work upon men who give their entire time to the many details involved in each individual case. The work is being financed by funds from the Washington Emergency Relief Association and Yakima County. These funds also permit the employment of a stenographer so that daily records are kept of all work done. Summaries are prepared showing the volume of funds brought in through the aid of the land bank and to what end they were used. A slip is attached to each case filed showing the entire history of its progress.

"The work being done by Mr. DeBuch and Mr. Johnson, of Yakima farm debt adjustment committee, is outstanding not only in the State but in the Nation" said E. M. Erhardt, president of the Federal land bank at Spokane. "The attitude of the numerous persons interested in the loan program toward the work of the committee is almost entirely favorable, and the work is to be highly commended. The aim of the farm debt adjustment program has been to lend aid to farmers who would then be able to help themselves. Of all the funds loaned to farmers in the Northwest, 89 percent have been used to refinance old debts. During the past 17 months loans amounting to \$13,989,220 have been made in the State of Washington, many of them through the cooperation of debt-adjustment committees, aiding 6,286 farmers to meet their obligations ", said Mr. Erhardt. The extension workers in Louisiana are working with the farmers and obtaining the cooperation of the cold-storage plants in promoting better curing of home-produced pork. Extremely low prices for live hogs, a comparatively small farm income, and the increased facilities offered by ice houses have been factors in producing an increased interest in home curing. The annual reports for the State indicate an additional 2,500,-000 pounds of pork cured by farmers in the State.

A part of the Louisiana program has been the cooperation obtained from the cold-storage plants in the State. Meetings were held to bring together the coldstorage managers and farmers, explaining the need for such storage in curing meat and to acquaint the farmers with the facilities of the plants. Training schools and demonstrations were held to afford opportunity for all to see the improved methods of cutting and curing, avoiding waste, and eliminating the chances of spoilage. Storage people, after an introduction to the plan, cooperate to the fullest extent, as this work comes at the time of their autumn activity. The average charge throughout the State has been about 2 cents per pound for the curable pork, and in one case 25 cents per 100 pounds of meat stored for 30 days.

In Avoyethes Parish 22 demonstrations were given with 563 farmers in attendance and 45,000 pounds of meat were cured in the local cold-storage plant. Over 60,000 pounds were cured in Rapides Parish following 13 demonstrations.

Women Find Rewards and Difficulties in Leadership

(Continued from page 162)

Examination of the difficulties and dissatisfactions in the job of leadership made evident that the difficulties are ones that may be overcome partially, at least, if extension workers will exercise more care in program planning, leadership training, methods of work, and election of leaders not too greatly handicapped by lack of time or facilities for travel to meetings.

One hundred and thirty-four women felt that club members had insufficient interest in work planned, and this might have been obviated by better program planning; 124 felt the lack of enough training or help to know exactly how to do the job; 119 reported lack of information as to what was expected; 61 complained of difficulty in getting reports; and 44 of not understanding how to make out reports. All of these difficulties could have been reduced by more careful training of these volunteers. Fifty-eight felt a lack of recognition of service given, and 27 felt that the work required too much time.

Choice of Leaders

The mistakes in choice of leaders involved 122 who were unable to drive a car and get to meetings regularly, 55 who bad young children, sick folks, or a very large family so that their home duties demanded an unusual amount of time, and 22 inexperienced or uninterested in the particular job of leadership for which they had been selected.

It is difficult and often impossible to do a successful piece of community work in an ill-willed community. Doubtless not all of the 147 who felt hindered by misunderstandings on the part of club members or people in the neighborhood or personal prejudices and the 58 who reported difficulties due to local factions and jealousies that divide the group, live in such communities. Even if they did, however, so that none of the conditions causing them to check these resulted from factors that could be controlled or prevented, the number of those difficulties and dissatisfactions which could have been avoided or at least decreased through better methods and more detailed training were four times those of factors over which an extension worker might have little control,

UNIQUE live-at-home project is being tried out in De Soto County, Miss., at the suggestion of County Agent G. C. Mingee in connection with the acreage retired from cotton production. On each of the 12 large plantations in the Delta a sufficient area of land best suited to truck growing will be planted to vegetable crops to meet the needs of tenants on the entire plantation. This is worked by such tenant or tenants as are skilled in trucking, and the vegetables grown are issued to the other cotton tenants, in the same way rations were formerly handled from the commissary.

THE roadside market in Tazewell County, Va., is only open 1 day each week, yet it has contributed to the income of the cooperative home makers. In some families this was the only cash income. Mrs. Tickle, the chief supporter of the market since it was established, earned \$163.95 during the summer of 1933.



Mr. and Mrs. Walter C. Porter.

He Demonstrated Better Farming in 1903

R. AND MRS. Walter C. Porter were among the first farm demonstrators. Back in the winter of 1902-3 Dr. Seaman A. Knapp held a meeting at Terrell, Tex., and presented his plans for agriculture. Mr. Porter volunteered to demonstrate the practices recommended. but so impressed were the town people that they raised a fund of \$1,500 to guarantee Mr. Porter against loss in following the new farm practices. Mr. Porter devoted 100 acres to his first demonstration; one-third to cotton, one-third to corn, and one-third to oats and speckled peas, testing the best varieties for the section and the value of certain fertilizer. These acres showed from \$6 to \$8 an acre profit above normal. He has been a successful farmer and has educated nine children. Six of the boys have attended Texas Agricultural and Mechanical College and one of the sons now manages his father's farm. Mr. and Mrs. Porter are still following extension teaching on the same farm.

Me industry and a roadside market were responsible for a welcome cash income on the dairy farm of George Brackett, of Greenland, N. H. Home-made ice cream was the product and special high-speed freezing equipment made it possible for Mr. Brackett to meet demands which ran as high as 100 gallons a day. The extreme cleanliness of the market building and the nearby dairy barn attracted customers from far and wide.

Education Aids Cotton Program

I F LOUISIANA farmers do not understand all phases of the cotton adjustment program it is not the fault of the county agents, county committeemen, nor of the teachers of vocational agriculture, and the daily and weekly press, for all of these agencies have cooperated with the Cotton Section of the Agricultural Adjustment Administration and the State Extension Service in presenting unbiased facts to growers.

Although the vocational teachers rendered good service in the plow-up campaign, no concerted program was adopted until April 1934, when C. A. Cobb, Chief of the Cotton Section, called a Southwide meeting in Washington of agricultural extension workers and vocational leaders, and decided upon the type of educational program which would be presented. Bentley B. Mackay, extension editor, attended the meeting, and Roy Davenport, professor of agricultural education, Louisiana State University, was later appointed collaborator.

Armed with charts and other data furnished by Washington officials, Dr. Davenport returned to Louisiana and conferred with J. W. Bateman, director of extension; J. G. Lee, dean of the College of Agriculture; Shelby Jackson, State supervisor of vocational agriculture; F. W. Spencer, field director of the cotton program; and others.

These leaders, together with E. D. White, Arkansas extension economist, acting as field representative of the Cotton Section, then called four district meetings which were attended by vocational teachers and county agents. At these meetings plans of procedure for each parish and community were outlined. Upon their return to the parishes the county agents and teachers called together the county and community committeemen and gave them a thorough course of training so that each man would be in position to answer intelligently any question that might be asked concerning the program. In some places the agents and teachers held parish-wide meetings which were well attended. At such gatherings the agent confined himself largely to the immediate procedures necessary to complete the program as rapidly as possible, while the vocational teacher discussed events leading up to such a program, the national and international situation with regard to cotton, and the like.

The next step was for the vocational teachers to hold community meetings in areas surrounding their schools and to hold themselves in readiness to carry the message to any other community when requested to do so by the county agent. According to reports received from the 90 teachers in 37 parishes there were 304 such meetings held in 35 parishes from May 15 to July 1, with a total attendance of 13,626.

Now that the rush has subsided special meetings are not being held, as a general rule, but every teacher has included cotton-production adjustment facts as a part of the adult evening classes. Charts and information furnished by the Cotton Section form the basis for all of the talks.

These discussions have proved invaluable agents, teachers and farmers say. Louisiana was the first State, with the exception of Florida, to complete the issuance of cotton certificates to growers under the provisions of the Bankhead Act. While due credit must be given to the State office force and to the excellent clerical help, one cannot deny that the educational campaign played an important part in putting over one of the most stupendous jobs ever undertaken by an agricultural group.

Meat Curing in Florida

Demonstrations on meat cutting and curing which were held in five communities of Jefferson County, Fla., have resulted in improving the quality of home meat supplies. Not only have they had this desirable effect but as each demonstration was opened by a discussion of the type animal which will produce the most economical cuts of meat, it is believed that there will be a general improvement of the type of swine produced in the county.

The 1930 census figures for the county show that nearly a million pounds of pork have been cured in the county each year. However, much of this production was of rather low quality, lacking in uniformity of cure, and a large quantity was lost through spoilage from improper handling. Waiting for cool weather had often resulted in loss of quality in the animal and in the cured meat.

Animals used in the demonstrations were killed and stored overnight in the local cold-storage plant. The advantages of this quick chilling and its importance in the prevention of spoilage were pointed out. The demonstration was completed with the application of the dry salt and sugar for curing meat. To illustrate methods for individual farm curing, a curing cold-storage box, using ice as a refrigerant, was demonstrated. Cured pork from these demonstrations won the \$300 award for the best home-cured pork at the State fair, and not a single piece of the meat was lost through spoilage.

Rural Rehabilitation in New Hampshire

Ten county rehabilitation agents have been appointed in New Hampshire to organize local community leadership in the State-wide effort to help rural-relief individuals of the State get back on the road to self-sufficiency. An experienced local person in each of the 10 counties was selected for this work.

Instead of following a program under which 50 to 200 people are selected for rehabilitation and started with loans of Government money, the New Hampshire Extension Service aims to provide educational guidance for helping 2,000 ruralrelief and near-relief individuals to get established on a subsistence basis without indebtedness. The State extension service will give all possible educational assistance and is responsible for putting the plan into effect. It is cooperating with the State Emergency Relief Administration and is administratively responsible in this work to that administration.

The actual responsibility for the rehabilitation will be placed with the communities concerned. Each local community will be called on for definite advice and direction, under the leadership of the county rehabilitation agents.

Labor-commodity exchanges will probably be one development in the program. These would be managed by the community advisory committees for the purpose of assisting those persons now on relief or near relief to exchange their labor for milk, fuel wood, and similar necessities and thus become less dependent.

The local community is also to be invited to assist by supplying such needs as cows or a few chickens, or even by arranging for loans through the local bank if these are considered a definite need.

J. C. Kendall, director of the New Hampshire Extension Service, has stated that he believes this plan to be a desirable one for his area because it does not place the individual now on relief under greater financial obligation than he is able to pay. Neither does it set up the relief recipient in better circumstances than the border-line person who has struggled successfully to stay off the relief rolls.



Farm Prospects Are Brighter

C. B. Smith Assistant Director, Extension Service

THE crop year of 1934 in the United States has been an unusual one. The worst drought in 50 years visited some sections of the Central West. In large portions of a number of these States not an ear of corn was produced, gardens were cut to the ground by blistering winds, streams and water holes dried up, wells failed, cattle and sheep had to be moved by thousands of trainloads to distant pastures. Over great areas, crops failed utterly.

Benefit Payments Helpful

AND yet, in these very areas, the majority of farm families have something for which to be thankful. Most of them had accepted the Federal Government's plan of production control and secured partial payments on adjustment of their normal volume of production of crops and livestock, even though no crops were produced. The destructive effects of the drought on the farms in drought areas have thus been eased in some degree by this Government crop insurance plan. In many cases, these benefit payments have constituted the farmer's only source of income. This is a Government activity never attempted before and came in the nick of time to help ameliorate a great regional tragedy. That is something for which to be thankful.

Increased Farm Income

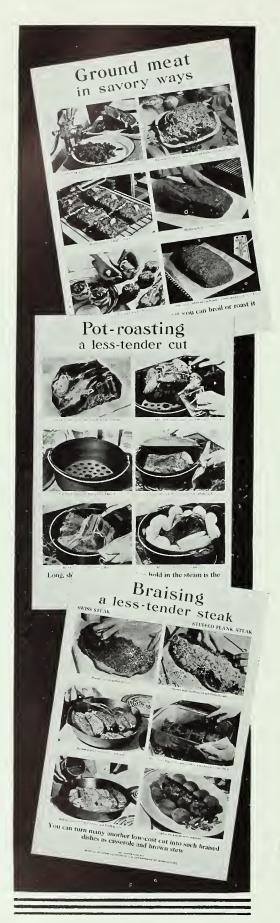
I^N sections of the country where normal or approximately normal crops have been produced, the farm family has seen substantial advances in prices of agricultural products. The year's farm income has been increased by nearly a billion dollars. The farmer is getting nearly a dollar a bushel for his wheat on the farm, 11 to 12 cents a pound for his cotton. Corn, barley, and oats are bringing good prices. Hogs have advanced in price substantially. The average income of these farm families for the sale of crops and livestock products in 1934 has increased approximately 19 percent over 1933. This increased income has reflected itself in more things for the home and family. That is also something for which to be thankful; but it is probably not the biggest thing for which the farm family may be thankful.

Constructive Work

O^{NE} of the biggest and most blessed things in the world is work—constructive, creative, worth-while work. Today, while 10,000,000 men and women sit or stand in idleness because industry lags, 32,000,000 farm folks have constructive work to do, work that gives them hope and keeps them sane, wholesome, and forward-looking. Besides that, practically all farm people have shelter, a place to live where rent is lower than anywhere else. Most of them have something to eat and wood or coal to keep them warm.

Times Are Improving

WE can be thankful today that we live in a country where it is the intent of the people so to order their Government that all shall have work to do, all have some income, and all some leisure—leisure in which to enjoy the fruits of their labor and have time to read, to study, to play, to be a neighbor, and to grow mentally and spiritually. TIMES are getting better. In our rejoicing may we not forget the man and woman without a job, the home without income, and may every one of us who has something, even though it be little, share that little with those who have less, and in the sharing remember it is not so much the gift as what lies in the heart of the giver that counts.



MEAT COOKING CHARTS



THE principles of meat cookery are illustrated in a series of seven charts, prepared by the Bureau of Home Economics, U. S. Department of Agriculture. Each chart is 20 by 30 inches and is printed on heavy paper. Copies are not available for free distribution. They may be purchased at 50 cents a set from the Superintendent of Documents, Government Printing Office, Washington, D. C. Sets cannot be broken to supply individual charts.

Titles of Meat Charts



DO YOU KNOW MEAT CUTS AND COOK ACCORDING TO THE CUT? ROASTING A TENDER CUT. STUFFING LOW-PRICED TENDER ROASTS. BROILING TENDER STEAKS AND CHOPS. POT-ROASTING A LESS TENDER CUT. BRAISING A LESS TENDER STEAK. GROUND MEAT IN SAVORY WAYS.

FILM STRIP [Series 314]



An illustrated lecture on COOKING MEAT ACCORDING TO THE CUT, film-strip series 314, is also available. This series, consisting of 51 frames, can be purchased for 45 cents from Dewey and Dewey, Kenosha, Wis., after obtaining authorization from the United States Department of Agriculture. Blanks for this purpose will be supplied upon request to the Division of Cooperative Extension.

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