UNIVERSITY OF KENTUCKY

COLLEGE OF AGRICULTURE

Extension Division

THOMAS P. COOPER, Dean and Director

CIRCULAR NO. 348

ANNUAL REPORT OF THE EXTENSION DIRECTOR

FOR THE

YEAR ENDED DECEMBER 31, 1939

This 4-H Club girl won the style revue contest with this costume which she made.

Lexington, Kentucky

May, 1940

Published in connection with the agricultural extension work carried on by co-operation of the College of Agriculture, University of Kentucky, with the U. S. Deparment of Agriculture and distributed in furtherance of the work provided for in the Act of Congress of May 8, 1914.

LETTERS OF TRANSMITTAL

Experiment Station
Lexington, Kentucky

President Frank L. McVey
University of Kentucky

My dear President McVey:

I have the honor to present the annual report of the Division of Agricultural Extension of the College of Agriculture, University of Kentucky, for the year ended December 31, 1939. In this report will be found a statement of the various activities of the past year, a list of publications and a financial statement of receipts and expenditures.

Respectfully,

THOMAS COOPER,
Dean and Director

Experiment Station
Lexington, Kentucky

Honorable Keen Johnson
Governor of Kentucky

Sir:

In accordance with an act of the Legislature of the State of Kentucky, approved March 15, 1916, I hereby submit the annual report of the Division of Agricultural Extension of the College of Agriculture, University of Kentucky, for the year ended December 31, 1939.

Respectfully,

FRANK L. MCVEY,
President

Circular No. 348

ANNUAL REPORT OF THE EXTENSION DIRECTOR FOR THE YEAR ENDED DECEMBER 31, 1939.

Prepared by T. R. BRYANT, Assistant Director

Development of leadership among farm people has always been emphasized by the Extension Service and the wisdom of that policy becomes more apparent each year. Leaders trained thru extension activities have been drafted in large numbers to carry specific assignments in connection with enterprises of comparatively recent origin. An accurate recital of activities under the Agricultural Adjustment Administration, the Rural Electrification development and others, would make it clear that their accomplishments were made possible by the efficient work of leaders trained in the extension school of experience.

The Extension Service has developed ideas and enterprises in great variety but the proposals have been placed before farm people for consideration and they have adopted, modified or rejected them as they saw fit. Plans to be subjected to scrutiny must be carefully made, and recommendations must be based upon sound premises. This has been kept in mind and the record of success of extension enterprises gives reason for a degree of pride. The rapid increase in the use of disease-resistant strains of Burley tobacco, the multiplying acreage of Korean lespedeza, the liberal use of limestone and phosphate and many other such evidences of the confidence of farm people in the recommendations of the Extension Service are excellent testimony.

The attitude and activities of farm women have evidenced a high degree of confidence in and reliance upon the extension program. Attendance upon the annual meeting of a county homemakers' association to hear a recital of their accomplishments during the year, provides convincing evidence of their enthusiasm and ability to make farm homes and communities better places for the development of good citizenship. Homes are improved and beautified inside and out and conveniences are provided at such small outlay of cash that the results can be attributed only to the re-

sourcefulness of the women, stimulated by the ideas and information provided thru extension work. A glimpse at the work of the several departments will serve, without going into detail, to show the trend of developments during the past year among farm people.

COUNTY AGENT WORK

County agents making the necessary adjustments in relation to other organizations and at the same time carrying on a strong educational extension program found some difficult supervisory problems. The plan of employing field agents and chief clerks to represent the State Agricultural Conservation Office in county offices to handle technical phases of the Agricultural Conservation Program relieved the county agents and district supervisors of many details. Even with that help, the A. C. Program required nearly a third of the agents' time.

Considerations which influenced the selection of major projects were as follows:

1. The demand for extensive seeding of soil conserving crops in connection with the A. C. Program.
2. The need for livestock to consume the ever increasing amount of forage crops resulting from the A. C. Program.
3. The extra demand for county agents' time which necessitated better-trained and more efficient extension clerks to relieve the agent of routine office work, particularly monthly reports.
4. Broad demand for specialists' services which necessitated close cooperation on the part of agents in the use of specialists in order to economize time and travel.

Maintaining proper relationships with numerous other agencies required constant attention. Some of the more important of these organizations were the Soil Conservation Service, Farm Bureau, Farm Security Administration, Farm Credit Administration, Rural Electrification Administration and Vocational Agriculture. Of the 120 counties of the State, 70 use the Farm Bureau as the County Extension Organization. In such counties an effort was made to have the Farm Bureau incorporate in its own program a number of extension projects. It is the policy of the Extension Service to encourage County A. C. committeemen to assume increas-

ing responsibility in the administration of the program, thus allowing the county agent to spend a greater amount of time on educational phases of the A. C. Program and other extension projects.

Twenty-four counties where county workers have been employed for 25 years or more held anniversary celebrations. These events focused attention on the work accomplished by the Extension Service in those counties.

In addition to program planning, the supervisors assisted the Land Use specialist and the county agents with Land Use work in the intensive Land Use Program. Four counties, Garrard, Grant, Hopkins and Pike, were selected in which the county planning project is being carried with the help of a special worker and under the direction of a state leader, in the hope that results obtained from this year's study will prove valuable in program building in the future.

The actual planning of county programs is done by voluntary committeemen or local leaders who are chosen by their neighbors to represent different sections of the county or community as well as different lines of work or enterprises, and the planning is done on either a community or commodity basis. A total of 867 community programs and 235 commodity programs were built, 22 counties using both programs.

A re-emphasis was put on demonstrations, particularly result demonstrations, and agents were assisted in preparing outlines for recording progress and results from this type of work. Every opportunity is used to help agents to train volunteer local leaders. The number of adult training meetings increased from 2,118 in 1938 to 2,409 in 1939.

The projects most generally engaged in were those that had to do with the use of soil amendments, with pasture improvement and with livestock development, particularly beef cattle and sheep. The extension teaching of many years, aided by payments of the Agricultural Conservation Program made larger development of the soil-building program possible.

Much of the credit for the success of the Agricultural Conservation program in Kentucky must be given the Extension Service,

particularly in connection with the soil-building activities of the program. In Bourbon County, for example, the county agent has been carrying on an aggressive campaign for increased use of lime since 1926. By 1939 a total of 212,336 tons of ground limestone had been spread, enough to have given an application of 1½ tons to each crop acre in the county. During 1939, 249 Bourbon County farmers used 15,195 tons of ground limestone. The county agent estimated that at least 95 percent of the farmers in Bourbon County have used agricultural limestone. In Adair County where, last year, very little phosphate was used on soil-conserving crops, this year under the direction of the county agent, assisted by a group of leaders, 495 tons of triple superphosphate were used on soil-conserving crops.

The Soil Conservation Service, the Farm Security Administration and the Farm Credit Administration have been given all possible cooperation. Community educational meetings were held on soil-building practices in practically every county. Five assistant county agents in soil conservation, employed by the Extension Service with funds provided by the Tennessee Valley Authority, were continued. Three additional men were engaged on the same basis on July 1, whose duties are education in land-use adjustment and farm relocation in the Kentucky Dam-Reservoir area of the Tennessee River.

HOME DEMONSTRATION WORK

There are at present 53 white, two negro and five assistant home demonstration agents serving 53 counties. Two counties were added during the year. In each of these 53 counties a county homemakers association made up of community homemakers clubs served as an effective agency for carrying on the home demonstration program. Six hundred and sixty-eight community homemakers clubs reported a membership of 14,157. Thru the influence of these members, 53,789 farm families reported changes in practices resulting from the home demonstration program. Forty-four of the counties mentioned above have an extension unit in each, consisting of county agent, home demonstration agent, an extension clerk and in most cases an assistant county agent.

The State is divided into three supervisory areas with 40 counties in each area or district, each served by a supervisory staff member. An effort is being made to add more counties in the more sparsely organized mountain district, but the difficulty lies in lack of funds in these counties. In no part of the State is the need for the home demonstration program greater.

Program planning is based on needs of local people as expressed by themselves. Over a period of years methods have been developed to enlist maximum participation of farm people in point of both quality of work and volume. Discussion has been encouraged and factual information has been compiled for study. Surveys have been made as an aid in building sounder programs. The supervisory staff did effective work in helping to develop these procedures and in helping homemakers more effectively to analyze their situation and set up programs best adapted to their needs.

The homemakers' organization, by delegation of responsibility, was effective in developing local leadership. Six thousand, four hundred homemakers, or about 45 percent of the membership, served as local leaders. Among these were officers of homemakers' clubs and project leaders of major, minor and special projects. Training schools for officers and project leaders of the major county homemaking project are held annually by the supervisory staff. About six times a year the specialist in charge of the project is present to assist. Leaders of minor and special projects are helped by the specialists concerned as the need arises. These are not leaders in name only, but leaders with work to be done, assuming their responsibility, attending training schools and taking the information to their community groups. Leaders served in many capacities, giving demonstrations, dispensing literature, supervising result demonstrations, making surveys, keeping records, gathering data, making reports, helping non-club members. From this service leaders have gained much in personal satisfaction and development and in actual information and skill.

Quite naturally, out of the expanding interest of homemakers from the home to the community to the county, a state organization has developed. The activities of the state committees in the field of public information, libraries, civic endeavor and speakers'

bureau gave evidence of the opportunity offered by the federation for broadening the homemakers' horizon and scope of influence. An annual state meeting was attended by over 800 homemakers and the six district meetings held in the spring were attended by 2,842 homemakers from 51 counties. Further evidence of the widening horizons of homemakers is shown by the membership of the Kentucky Federation of Homemakers in the National Home Demonstration Council, the Associated Country Women of the World and by the attendance of 23 Kentucky women at the International meeting of country women held in London, England, in June.

Such special projects and activities as reading in the home, establishment of club, community and county homemakers' libraries, studies in effective speech, promotion of community and county-wide social and recreational programs, initiation of a music project, development of choruses, participation in civic endeavor, welfare projects undertaken, relief work done, all give evidence of the expanding interest and effective leadership of homemakers.

Many cooperative activities developed within the counties. Cooperative enterprises were undertaken with the National Youth Administration, Farm Bureau, Health Units, Red Cross, civic clubs, women's clubs, Parent-Teachers' Association, business and professional groups, churches, banks, county boards of education, Y. M. C. A. and Y. W. C. A. Constant effort is being made to correlate more closely the programs of home demonstration agents with the Farm Security Administration, Rural Electrification Administration, Agricultural Adjustment Administration and the more closely related government agencies. Home Demonstration agents devoted a great deal of time to the educational phases of the Rural Electrification Administration program.

Over 53,000 farm families reported having adopted recommended practices. Many others were reached thru the medium of the press and neighbor-to-neighbor influence. It is estimated that homemakers saved $592,585 thru such productive home enterprizes as sewing, millinery, canning and home-made improvements. More important are such results as better fed, better housed, better clothed farm families. Important, too, are the attitudes gained, appreciations developed and the resulting satisfactions.

4-H CLUB WORK

This year for the first time a 4-H Club program was completed in each of the 120 counties of the State. A total of 42,180 farm boys and girls received training thru 4-H Club work. This was an increase of 1,093 over 1938. These club members carried on their work thru 1,923 community 4-H Clubs, under the direction of 4,344

Thru the 4-H Club Conservation Program, members learn a great deal about native birds. They study birds from both the economic and esthetic standpoints. They never destroy birds but build houses and provide feed for them.

volunteer local leaders, and 34,256 projects were completed. Following the custom of the last two years, a general study program was prepared for all 4-H Clubs. The subject for this year was "Birds of Kentucky" and each club member was provided with a printed program.

Three volunteer leader conferences were held with an attendance of 244 leaders representing 83 counties. Junior Week was attended by 744 members from 111 counties, the largest attendance on record. The theme was "Taking the University to the Farm." The object was to acquaint the young people with services avail-

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able at the University for farm people. Eight hundred and eighty-nine community and county demonstration teams were trained and 24 of the best gave demonstrations at Junior Week. A total of 1,515 girls took part in county style revues; 67 county champions were selected and participated in the revue at Junior Week. For

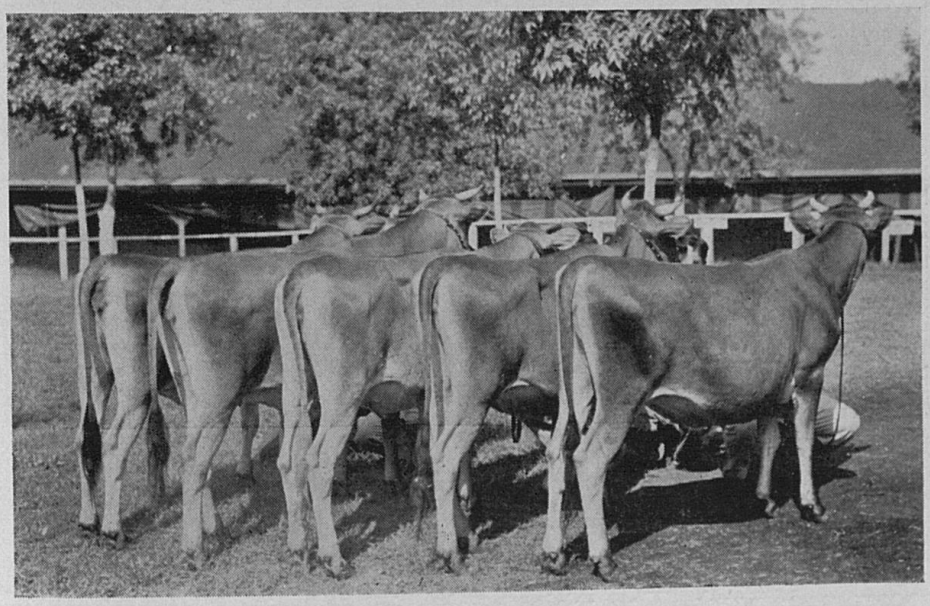
"Attractive and Convenient Closets," a Home Practice demonstration given by two Hopkins County girls during Junior Week. This attractive clothes closet was made and equipped by these girls at a small cost.

the first time all the Junior Week delegates attended a banquet together in the spacious hall of the new Student Union building.

Kentucky sent its usual four representatives to the National Club Camp in Washington, D. C. Thirteen district 4-H Club camps were held with an attendance of 2,217 club members, 338 local leaders and instructors and 6,795 visitors. All but nine counties of the State sent club members to camps. A State Conservation Camp was held again this year with delegates from 23 counties. Six one-day judging schools for training 4-H Club members in judging live-

stock were held, attended by 310 club members and seven local leaders. Forty-nine counties were represented. Instruction was given by members of the Animal Husbandry Department of the College of Agriculture.

More 4-H products were exhibited at county fairs than in any previous year. Practically every county fair reserves space for 4-H Club exhibits, and the Central District 4-H Club Fair rivals the Kentucky State Fair in the number of its exhibits. There were more dairy cattle at the Central District 4-H Club Fair than at the State Fair. Kentucky 4-H Club members took part in a Tri-State Show for lambs, hogs and beef cattle held at Evansville, Indiana, with exhibits from Ohio, Indiana and Kentucky. The State 4-H Baby Beef



A product of 4-H Club work. The cattle in the county from which these come have been greatly improved but the important development was in the boys and girls who raised them.

Show had the largest number of exhibits on record; 597 4-H Club members fed 1,270 calves and entered 1,086 in the State Show. Forty-seven counties had entries. Thirty-eight 4-H Club members attended the National Club Congress. They made entries in clothing, canning, room improvement and in the various judging contests.

Utopia Club work is becoming more popular as the young men

and young women become familiar with its program. Thirty counties have Utopia clubs with a membership of 1,021.

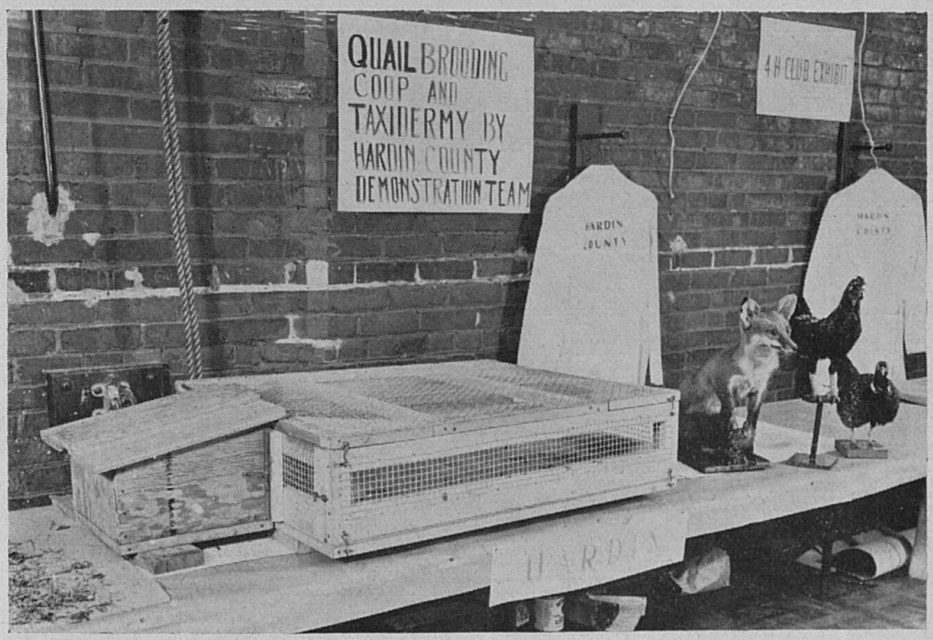
A special effort was made to increase the volume and quality of 4-H Club work among negro boys and girls. The 4-H Club staff assisted the six negro agents in organizing and developing a county

Many boys and girls take their school lunches from home. Some do not eat as much as they should at noon because their lunches are not attractive and appetizing. These 4-H girls have prepared charts showing an attractive school lunch for each day in the week. They also stress the importance of packing the lunch properly.

program of work. The white agents in counties where there is a large negro population also were encouraged to organize colored 4-H Clubs. As a result of this effort the enrollment of club members more than doubled. The colored agents increased their enrollment from 789 in 1938 to 1,133 in 1939. The white extension agents organized 24 clubs of colored boys and girls with 546 members, making a total enrollment of 1,679.

A program of recreation for certain mountain counties was undertaken to extend over a period of five months. A field worker was employed thru cooperation with Berea College and the Con-

ference of Southern Mountain workers. This work was well received and local leaders were sufficiently trained to enable them to carry on thruout the year. Centers were established mostly in connection with public schools, church-controlled schools and com-



This exhibit shows a quail brood coop which was used in the Agricultural demonstration team contest at Junior Week. This demonstration included the construction and use of the brood coop as it could be used on the average farm in Kentucky to increase the number of quail.

munity centers. Among these, two such centers for recreational programs were established in Lee County, two in Wolfe, four in Morgan, seven in Breathitt, three in Bell and one in Knott and tentative arrangements were made to establish centers in Leslie and Letcher Counties. In all this area little organized recreation has been available to the people except that afforded thru the 4-H Club program. Mountain ballads and folk dances were among the most popular features.

PUBLIC INFORMATION

Country newspapers, dailies, farm journals and other publications circulating in Kentucky were furnished a weekly informational service containing articles of interest for farm men and wo-

men and young people. This service included news of extension activities and the Agricultural Adjustment Administration and other Federal Government agencies. In addition, spot news and special articles were prepared for press services, daily newspapers and farm journals. Assistance also was given in the publication of special editions of newspapers over the State. The press gave liberal cooperation thruout the year. Another public information service was a weekly radiocast by the editor of informational material emanating from the activities of farm people.

RADIO AND EXHIBITS

Daily educational programs of special interest to farm people were radiocast thruout the year from the University Extension Studios of WHAS, one of the large commercial stations of this section, which gives coverage thruout the State. The usual daily programs were expanded on special occasions such as Junior Week, Farm and Home Convention and other events. The response of the public to these programs was gratifying, as indicated by correspondence and personal contacts of field men.

The College of Agriculture's educational exhibit filling an entire building at the State Fair in Louisville was visited by 32,433 persons. Visual education material such as films, film strips, slides and other equipment was furnished to specialists, supervisors and county workers.

FARM AND HOME CONVENTION

The Farm and Home Convention attracted 1,928 men and women from 99 counties. Those attending this 4-day mid-winter farm festival of educational and inspirational events are drawn largely from the leaders of thought and action in their communities. The program is such as to broaden the horizon of these leaders and to give them better opportunity to carry on as qualified leaders. A majority of the women are sent as delegates by their Homemakers Clubs and each woman is busy with her notebook preparing herself for a full report to her home club.

FARM FORESTRY

The basic program of farm forestry extension work is to advise and cooperate with land owners so that existing farm wood areas may be profitably managed and badly eroded soil areas allowed to

4-H Club members cultivating Black Locust tree seedlings in Butler County.

regain their former fertility by planting on them long-time cover crops of forest trees. Farm forestry is very closely allied to the practice of agriculture, for farm forestry concerns itself with growing a woods crop on farm land best adapted to that type of crop.

The forestry activity in Kentucky, at present, is largely a farmer problem.

Eighty-eight counties were visited to assist in planning county programs of forestry and to do reconnaissance work. Twenty-six planted areas were studied. Planting demonstrations and timber-stand improvement demonstrations were established. Under the direction of the Extension Service, 715,300 trees were planted, and 4-H Club members raised 250,000 black locust seedlings for planting on farms. The first 4-H Club Forestry manual of a planned

Pine trees planted on poor soil in Jessamine County.

series of four was issued. This guidance manual gives detailed advice for making forest tree plantations as club project work. Two 4-H Club district conference camps were held. Instruction was given to 33 Agricultural Conservation Program county committees. In 12 instances trips were made to nearby woods areas with the committee and the county agents. In cooperation with the Tennessee Valley Authority, demonstration plantings were made in the Tennessee River drainage area. Exhibits were made at the State Fair and at the Quicksand Fall Festival.

AGRONOMY

Despite the fact that arable acreage in Kentucky is smaller than that in neighboring states, Kentucky was second in the total

amount of lime materials used in 1938, and first in amount of lime materials per crop acre. Final reports for that year show that 916,000 tons were used. In 1939 the total tonnage was 920,000. Undoubtedly the Agricultural Conservation Program has been of great assistance in making lime available to Kentucky farmers. The teaching of the College of Agriculture has been effective in promoting the use of phosphate. This is shown by the fact that Kentucky farmers, in 1939, used 37,969 tons of 47-percent superphosphate, offered as a grant of aid by the A. C. Program, which is over one-third of the amount used in the east Central region composed of seven States. The College of Agriculture has for over 30 years advocated and demonstrated the value of using lime and phosphate on the land, and the benefits of those years of teaching are now being increasingly realized.

The cover crop campaign was an important feature. There was an increase in the cover crop acreage and a reduction in the acreage of row crops. Partly as a result of cover crop demonstrations conducted annually since 1937, there has been a steady increase in such cover crops as Italian ryegrass, improved varieties of barley, such as Ky. 1, Ky. 2 and Missouri Early Beardless, vetch and crimson clover. Italian ryegrass seedings increased from practically nothing in 1937 to 175,000 acres in 1939. The Kentucky improved strains of barley have proved particularly popular on account of their winter hardiness and high yield. The acreage planted was limited by the amount of seed available. Vetch is a valuable winter legume especially in the mountain valleys and on non-commercial wheat farms outside the central bluegrass area. In some counties the vetch acreage tripled over the preceding year. Balbo rye is growing popular as a cover crop and the acreage will increase in proportion to the supply of seed.

In all counties where farmers are conducting demonstrations with the use of lime and phosphate in cooperation with the College and the Tennessee Valley Authority, trial seedings of grasses not heretofore extensively used, were made a part of the program. Grasses used were Italian ryegrass, smooth bromegrass, tall oatsgrass, meadow fescue and Canada bluegrass, as well as the grasses commonly used on the farm. Altho severe drouth in the falls of

1938 and 1939 interfered with the stands, these tests demonstrated the hardiness of ryegrass under adverse conditions. Seven hundred demonstrations were conducted, in 24 counties.

These stacks of lespedeza hay were produced on thin land in the Kentucky hills that formerly yielded little if any support for livestock or the farm family.

Korean lespedeza introduced several years ago thru the extension service has become generally acclaimed as a "life saver." There were 6 million acres of Korean in Kentucky by 1938 and an additional million acres was seeded in 1939. The use of ryegrass in connection with Korean will make it of even greater value.

A Crossing Plot for Producing Corn Hybrids. The rows of light color have tassels and are the male rows. The other rows which have been detasseled are the female, or seed-producing rows.

Kentucky farmers planted 120,000 acres to hybrid corn in 1939. In 86 counties, 172 simple demonstration plots were planted. Commercial producers of seed in 27 counties cooperated with the College in conducting 28 test plots for the purpose of selecting hybrids best adapted to different parts of Kentucky. In all these tests it was well demonstrated that the white hybrids developed by the Kentucky Station are normally the highest producing in the State. A few yellow hybrids, including U. S. 13 and Ky. Y102, proved far superior to local yellow varieties. One hundred and ten commercial

A detasseling crew on a farm producing double cross hybrid seed corn. The men on horseback are foremen each supervising the work of several men on foot.

growers produced 500 acres of corn for seed. Fifty-nine apprentice growers each produced one-fourth acre. Four schools were held to instruct commercial and apprentice growers.

Tobacco work in 1939 embraced practically every county in the State. Program-planning meetings began in the winter, followed by distribution of improved seed, plant-bed treatment demonstrations with bordeaux, cuprocide and paradichlorobenzene, tours, curing meetings, soil field meetings, and sorting and grading demonstrations. Reports indicate that 50 to 75 percent of the Burley crop was produced from No. 16 tobacco seed in 1939. This acceptance of the new variety of root-rot resistant tobacco developed by the Experiment Station, expresses clearly the confidence of Kentucky

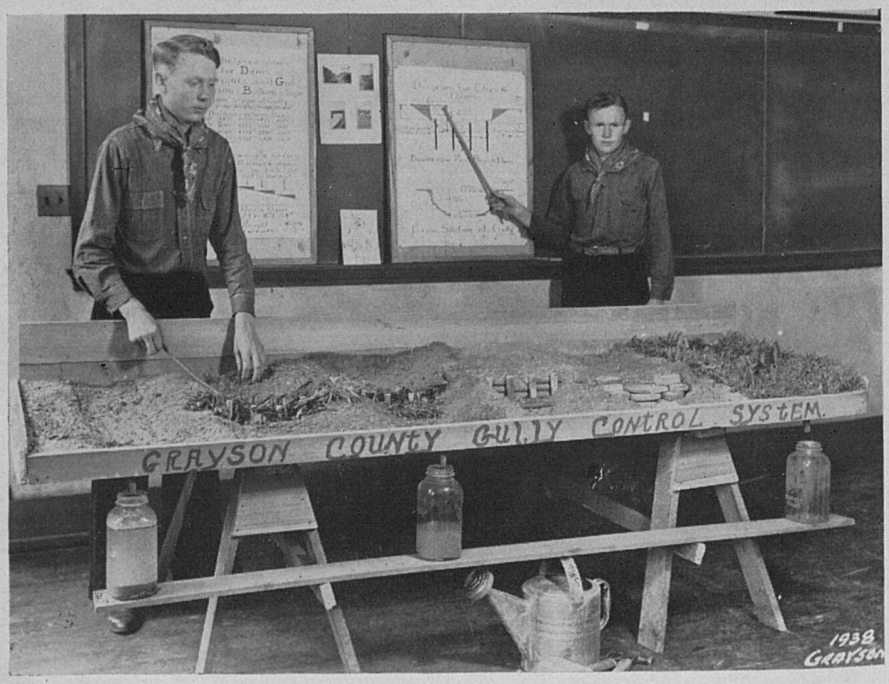
farmers in the work of the Experiment Station and Extension workers.

Excellent results were obtained in tobacco plant beds by using bordeaux to control angular leafspot and wildfire. As many as 90 percent of the beds in certain counties were treated. Farm tours attracted 3,000 farmers in 18 counties. In excess of 10,000 persons were reached in sorting and grading demonstrations with Burley tobacco, conducted cooperatively with the College of Agriculture and the U. S. Department of Agriculture.

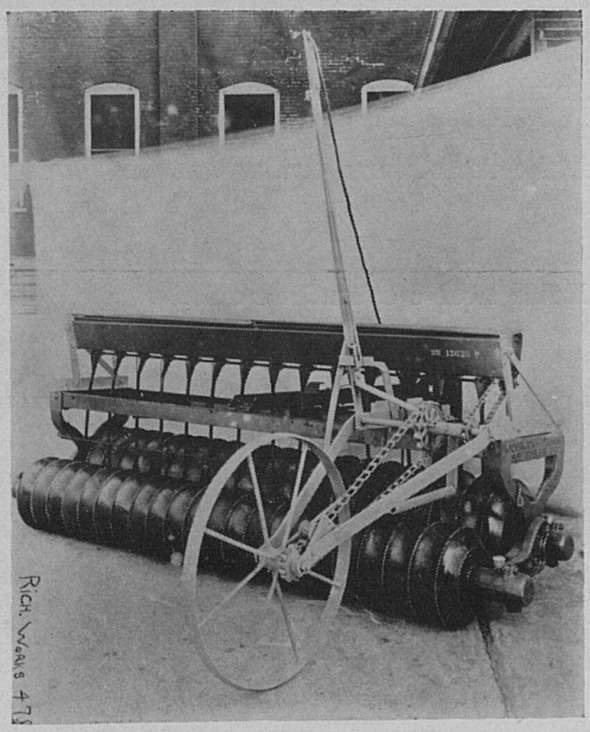
AGRICULTURAL ENGINEERING

This work embraced: 1, soil erosion control and water conservation; 2, rural electrification; 3, water supply and sewage disposal; 4, farm structures; 5, land drainage; 6, work thru 4-H and Utopia Clubs.

Erosion control and water conservation embraced contour furrowing, terracing, gully control, farm reservoirs and work with



These 4-H Club members have learned the importance of preventing soil erosion. They are showing the methods to use to control different types of gullies.



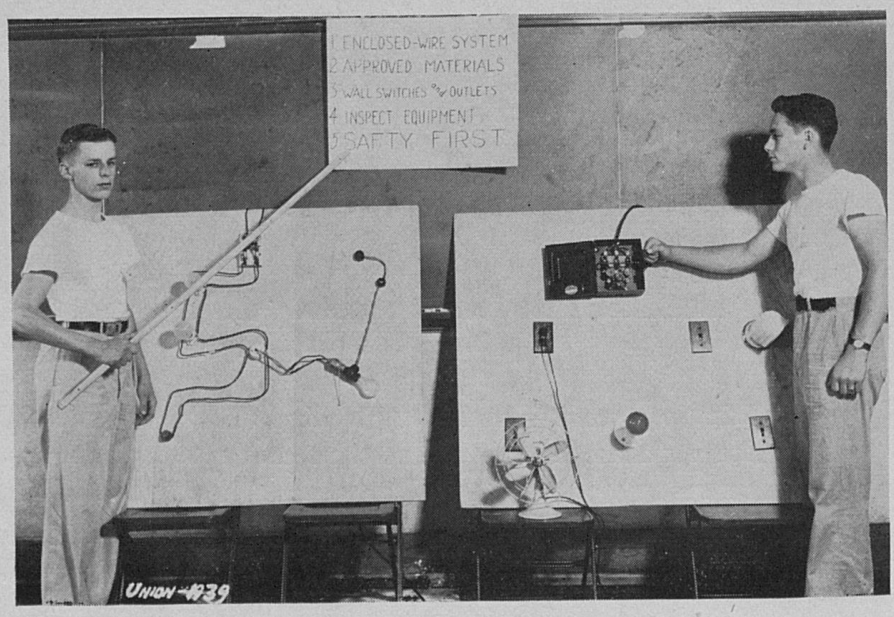
Cultipacker Seeder, a new device especially useful in seeding newly made terraces.

liming, fertilization, seeding and tree planting. The usual method is to advocate purchase of equipment thru county associations or to encourage custom operators. In the seven T. V. A. counties,

Boys from 18 counties who competed in the Agricultural Engineering terracing contest at the Junior Week exercises at the University.

1,416 acres were terraced as demonstrations, 70 reservoirs were constructed, 25,017 feet of ditch were dug and two miles of farm road graded, besides much other similar work. In addition to the 141 farms on which the use of power equipment in terracing was demonstrated, the use of farm equipment was demonstrated on 79 farms.

For 4-H Club terracing teams, 34 training schools were held. One hundred and twelve counties carried agricultural engineering 4-H Club projects or activities this year.



Farm boys learn thru their 4-H Club work the fundamental principles of wiring their homes and other buildings, and how to make repairs and replacements in electric systems.

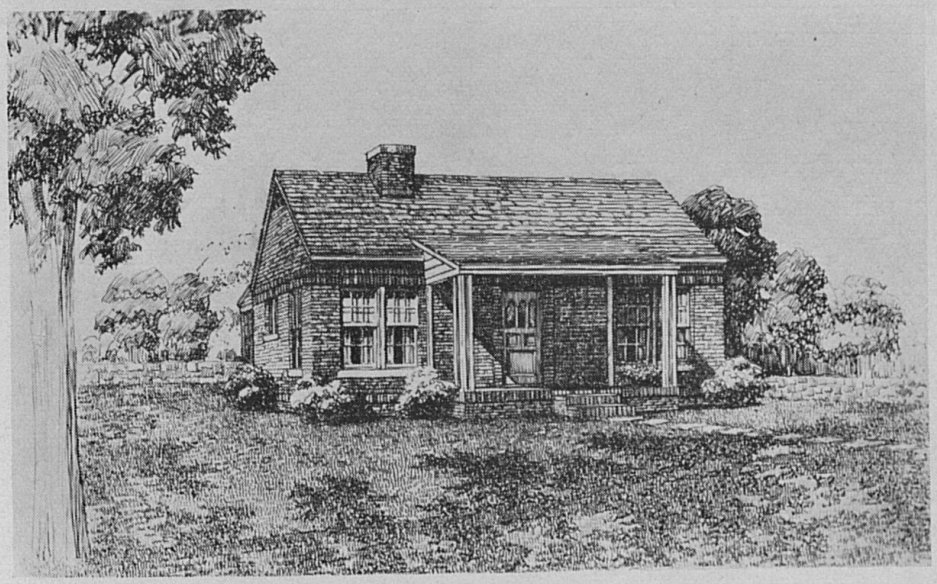
The new soil pulverizer and seeder is a development which farmers will likely use extensively in the future.

Farmers were encouraged to practice contour cultivation both with and without terracing. Both contour cultivation and terracing were used on 5,159 acres. Gully control measures were adopted for 31,892 acres, and 62,193 acres of row crops were planted on the contour plan.

Extension engineers, upon request, prepared special reports for

the use of the county committee in the four test counties doing intensive work in county planning.

Rural Electrification educational programs were conducted in 115 counties. There are now 23 cooperatives with allotments to build 8,000 miles of line to serve 30,000 members. From 1924 to 1936 rural electric customers increased at the rate of 465 per year and from 1936 to 1939 at the average rate of 6,000 per year. During



The Extension Service provides farmers with detailed plans and specifications for any type of farm structure.

the past four years cooperatives have established service to 17,500 rural customers and the utilities to not less than 10,000 customers. Rural Electrification has added impetus to the installation of water systems.

The greatest number of water systems reported by county agents in one year before work on Rural Electrification was started was 112 in 1935. Similar reports showed 1,030 in 1939. Educational work in electricity was given in 12 camps for 4-H and Utopia Club members. Thru demonstrations, correspondence, circulars, drawings and radio, farm families were provided with information on domestic water supply involving both hand-operated and electrically driven equipment, septic tanks, sewage disposal and adequate water-storage structures.

Special schools on farm structures were held in 20 counties, for carpenters and builders. Their cooperation has proved valuable. Assistance is given in building all kinds of structures. There were many requests for plans for storage structures, from the simplest to quite elaborate kinds, this in the interest of home provisioning. During 1939, 1,169 sets of blueprints for farm structures were sent to 109 counties in Kentucky and to 28 other States, and 7,503 farm buildings, on 6,360 farms, were built or remodeled according to plans furnished by the College.

Kentucky has nearly two million acres subject to overflow. In years past, nearly half a million acres have been provided with surface drainage by dredge ditches, many of which have not been properly maintained. The Extension Service has cooperated with CCC engineers and others in improving that situation and in other drainage projects. A number of open ditches and tile-drainage projects were started in mountain counties. This work has been done in 38 counties.

Club members from 18 counties where agricultural engineering teams had done best work, competed at Junior Week at the University. The presence of such teams in nearly every county, provides excellent engineering service to farmers.

ANIMAL HUSBANDRY

Beef Cattle. There are more purebred and high-grade beef herds in Kentucky at present than at any time since extension work started. Methods of feeding beef cattle have been very much improved. The unusually good pasture in 1939 is attributed mainly to the mixture of legumes with grasses. The best use of pastures and other forages in beef production has been and is being given considerable study.

The Better-Sire-Better-Stock program was promoted by replacing grade and scrub bulls with purebreds. Extension agencies aided in substituting 690 purebred beef bulls for grades and scrubs, and high-grade or purebred females were placed on 432 farms. All sections of the State made progress in the use of better breeding stock. The

Eastern Kentucky mountain counties were especially active in replacing grade and scrub bulls with purebreds.

Great improvement in feeding methods was made. Grain feeding to cattle on pasture is becoming a more common practice and cattle to be fattened on pasture are kept gaining thru the winter. All feeding demonstrators made a profit from their operations. The profits where the cow-and-calf plan was followed and the calves sold at the end of the first year ranged from $12 to $25 per head. Calves that were carried thru the winter on a good growing ration and were sold the following summer made more net profit per head than those sold at an earlier age. This was particularly true of those that were of good type and were fed grain on pasture.

Distillery slop feeding is an important industry in Kentucky. Various troubles encountered with such feeding were avoided, first by making ground limestone available to the animals, in a separate trough, and then by the supplemental feeding of roughage and carbohydrate feed. Under extension influence the slop feeding industry has been revolutionized. Losses from hemorrhagic septicemia have been reduced 75 percent among cattle shipped in, by following the directions of the College of Agriculture in care, feeding and management.

At field meetings held in all sections of the State, herds were visited and studies made of methods in feeding and management. Somtimes judging contests were held. The stock raiser on whose farm the cattle were located explained his methods of handling and gave figures on cost of production and on sales. The general cattle outlook was discussed and studies were made of the best use of pastures.

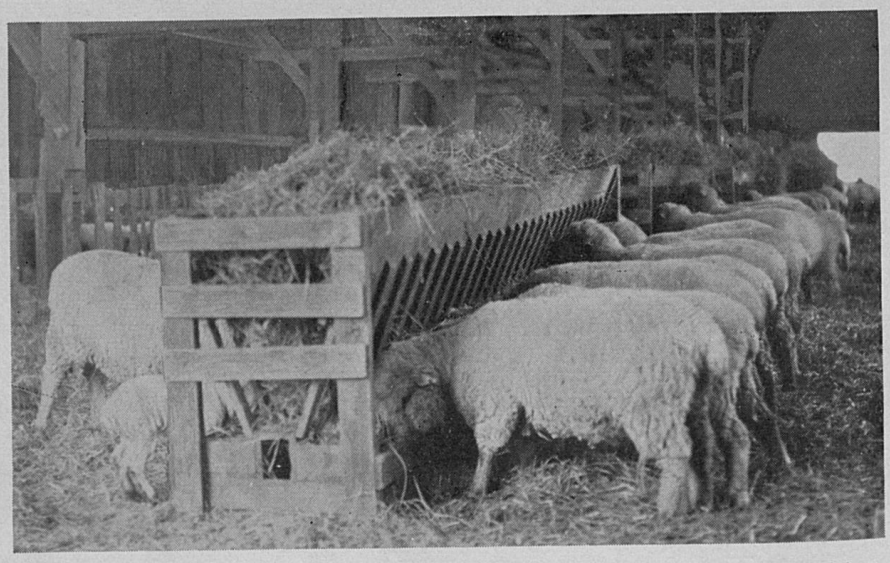
Sheep. The sheep program was prosecuted under the following main heads:

1, commercial ewes; 2, purebred rams; 3, control of parasites; 4, feeding, general management and better housing; 5, native and western lamb feeding; 6, "108 Club" and demonstration flocks; 7, schools for purebred breeders and commercial sheepmen.

Attention was given also to the goat project, especially milk goats.

Fairs and demonstrations intended to show the best type of ewe for use in Kentucky were so popular and the number and quality of ewes brought into the State was so impressive that the commercial-ewe project was the outstanding accomplishment. Approximately 200,000 western ewes, mainly of certain crossbred types of northwesterns, were brought into the State during the year. Most of these were yearlings tho about 20,000 were lambs. Most of the ewe lambs were purchased for breeding the next year. Certain types of western ewes have proved admirably suited to Kentucky conditions and far superior to ewes produced by saving native ewe lambs which are usually not the most desirable in the flock.

The chief endeavor in the ewe program this year was to help farmers get the right kind of ewes. A carefully organized cooperative plan made it possible for the producer who wanted only 10 to



This useful feed rack can be made by any farmer. It holds both grain and hay and is so constructed that the sheep cannot get their feet into the grain trough.

20 ewes, to get just as good ones and at no higher price than the one who wanted several hundred. Out of 60,000 ewes handled on this plan not a single carload was refused and, as far as information is available, there was not a single complaint. This plan was of inestimable value in furthering the program in sections of Western and Eastern Kentucky where sheep are not so numerous as in the

Central areas and where most of the sheep are handled as small farm flocks. Excellent progress was made in the mountain sections where sheep raising can become an important source of revenue.

Improved pasture is a part of the extension program because it is good for the land and produces feed at low cost. These ewes are on excellent pasture and it is not necessary to feed much grain to their lambs.

All suitable rams produced by Kentucky breeders found a ready market and approximately 1,100 additional rams were brought in from other states and Canada. The demand for rams shows the need for more good flocks of purebreds.

The "108 Project," a measuring stick for comparing various types of ewes and different systems of management, was very popular. This project provides an individual production record of each ewe and the results are invaluable in the improvement program.

Demonstrations were held for the purpose of exhibiting ewes of the type best adapted to Kentucky conditions. Over 19,000 persons attended these demonstrations.

Swine. The use of purebred hogs of proper type was extended to about 3,000 additional farms. The story of one county illustrates one method of accomplishing results. On a two-for-one-return pig plan, 41 bred sows were distributed. As a result of the project 20 additional farmers bought purebred sows. Two litters per sow resulted and about 700 pigs were raised. Sponsors of the project dis-

tributed 65 bred gilts to 65 additional farms on the same plan. Local men in numerous counties estimate that the swine improvement resulting from the extension program shows an increased income of as much as $25,000 in the county.

The proper instructions for feeding, sanitation and management are carried simultaneously and many of the 3,500 producers who adopted the program in part or in whole, assert that they save two bushels of corn per hog. These growers produce about 75,000 hogs per year. The ton-litter method of feeding has become common practice in some counties and all who adopt it are permanent converts. The county agents of 92 counties report that 8,771 farmers fed balanced rations in 1939 as a result of the extension program.

About 500 families were reached with instruction on the proper cutting and curing of meat. This part of the work fits in well with the live-at-home program. Estimates indicate that farm families using the methods advocated by the College of Agriculture in preparing pork and pork products enjoy an average improvement, per family, of $20.00 to $25.00 and a saving of much pork usually discarded because of its poor quality.

DAIRYING

The dairy herd improvement program was the most prominent feature of dairy extension work. Two new associations were organized. Three hundred herd demonstrations were completed and between 6,000 and 7,000 individual production records, including feed cost and income, were obtained. About 80 herds have been identified in the permanent identification and record-keeping project sponsored by the U. S. Department of Agriculture. Thirty sires have been proved. Records have now accumulated to the point where they are becoming highly useful as guides to a breeding program. Dairy feeding schools, leaders' training meetings and breeding schools were held in each section of the State.

Results from work with 4-H and Utopia Clubs were excellent. Schools and tours for these young people are very helpful. The district show at Mayfield brought out an array of Jersey cattle that would do credit to a state fair.

The cream improvement work made progress despite the dif-

ficulties that are set up by competitive conditions among cream buyers. The twice-a-week delivery plan which procures advanced prices for producers is doing much to improve cream and butter quality and provides incentive to producers of superior cream.

POULTRY

The immediate objective of the poultry program is to give poultry raisers a clearer understanding of what they as individuals can do to help in solving the problems that face the poultry industry. Methods of accomplishing these results included 54 leader training meetings, 50 community meetings, 115 poultry schools, 35 chicken field meetings or tours, 12 turkey tours, 1,526 visits to demonstration flocks and other farms, 39 visits to feed dealers, 126 visits to hatcheries, as well as radio talks and demonstrations in the selection of breeding stock. These various activities, exclusive of the radio and visits, reached a total of 13,308 people. The three principal features of the program are (1) replacement of hens with healthy pullets, (2) efficient production thru good management practices, and (3) effective marketing.

The replacement problem is brought about by three conditions, namely, mortality, culling, and the practice followed in many sections of selling most of the hens during April and May. The replacement or Grow-Healthy-Chicks Project, received more attention than any other practice since the success of the other work depends to a large extent upon the type of pullets produced. The record on 38 demonstrations in three counties is typical of the first phase of the Clean Chick Program, namely: chicks started, 9,867; chicks raised, 9,302; percent raised, 94.2.

The second requirement in the production of healthy pullets is that adequate and proper feed be provided. The clean-chick program has taught the value of a well-balanced feed for starting chicks. After the cockerels are sold as fryers many poultrymen discontinue the mash and the result is a group of poorly matured pullets in the fall. The Western Kentucky substation at Princeton showed that pullets fed self-service style developed well and laid well. Hopper feeding corn, wheat and meat scrap, with plenty of

green range, gave economical growth because it ensured proper nourishment during the critical growth period and required a minimum of feed.

The demonstration flock project ensures efficient production thru good management practices, as shown by the following summary: number of flocks, 73; number of hens, 8,966; eggs per hen 177; income per hen, $4.20; feed cost per hen, $1.99; income per hen over feed cost, $2.21. Records over a period of years show the flock owner whose practices are most economical for his own conditions. The value to the community lies in the spread of influence.

Owners of large flocks are able to find a good outlet for their eggs thru channels which pay for quality, since these producers are able to furnish a reasonably good volume. One hatchery has been marketing eggs of first quality for its flock owners in the fall, at a premium of 5 cents per dozen over local prices. A creamery operating in three counties has continued to pick up eggs on its cream routes, paying the producers two to three cents a dozen over local prices. This induced an increase in the local price of eggs.

During the past year turkey raising became more concentrated in certain sections, with larger flocks being the rule. Good management practices similar to those used in raising chickens, cause larger numbers to be produced. Flock owners are using great care in selecting breeding stock and are feeding to produce a superior market bird. One encouraging feature is that much better birds were available for the selection of breeding stock this year than last. This demonstrated the value of the breeder-selection methods used in 1938.

More hatcheries than ever before cooperated with the Extension Service, the Kentucky Poultry Improvement Association and the United States Department of Agriculture in the National Poultry Improvement Plan.

VETERINARY SCIENCE

Veterinary extension work deals primarily with teaching disease prevention but naturally concerns itself with many actual outbreaks. Poultry diseases received a major portion of attention. Increased interest in poultry culture and the readiness of producers

to cooperate combine to increase the usefulness of efforts to control parasites and diseases. Growers producing eggs for hatcheries receive premium prices, but their flocks must be treated for pullorum disease. When veterinary extension work first undertook to control the disease in 1927, only 20,000 were tested and of these 20 percent reacted. This year 330,000 tests were made and only three percent reacted. Many of the mountain counties are limited in their choice of profitable agricultural enterprises. Poultry culture can be carried on successfully in such counties as is illustrated by Elliott County. In that small county, 137 new laying houses and a like number of brooder houses were built in the past seven years, and the sale of eggs to hatcheries at advanced prices is one of the major sources of income.

Work with 4-H and Utopia Clubs was especially fruitful, because the young people put into immediate practice the things they learn and their parents observe and cooperate.

Hog cholera work was carried on in 12 counties, mostly in those having no trained veterinarians.

Sheep disease required much attention. The proper rotation of the flock to new pastures was advocated, because of the difficulty of parasite control thru medication. In teaching pasture rotation attention was called to the need for resting old pastures long enough for the parasites to die; otherwise the infestation continues.

Diseases such as Bangs disease, tuberculosis, glanders, coccidiosis, foot rot and others were included in the general program, with principal emphasis on sanitation and prevention.

HORTICULTURE

Landscape. Interest in this work continues to increase as rural people realize the possibilities of improving the appearance of their homes by means of plantings. The project serves all ages and groups; 4-H Club boys and girls, Utopia Club members, vocational agricultural students and adults of both the land-owning and tenant groups. In addition to the home improvement work, assistance was given in planning plantings for school grounds, rural churches, cemeteries, county courthouses, community houses and rural highways. Thirty-one leaders' training schools were held and seven

lessons were prepared for use during the seven months the work was carried on, with the result that 15,800 farms in 55 counties made improvements as outlined. In addition, 112 new result demonstrations were established in 19 counties. Planting plans were prepared for 25 school grounds, two rural churches and two county courthouses.

Two circulars were published: Hedges—Uses, Planting and Care; and Feeding Shade Trees.

Truck Crops. The work with home gardening was state-wide. Thirty-two weekly garden articles were released to the press and 35,200 service letters were sent to garden leaders and their co-

An improved bean-beetle sprayer.

operators. Eleven leaders' training meetings and 22 follow-up meetings were held. Total attendance was 2,356.

Meetings were held in 10 counties with potato growers and 3,000 service letters were sent to cooperators. Two carloads of Bliss Triumph and one carload of Chippewa, Warba and Earlaine seed potatoes were used in demonstration tests. A potato project in six mountain counties resulted in the production of 17,100 bushels which were valued at $16,530 because they were sold early in the

season. The use of certified seed potatoes compared with common seed, in 14 Eastern counties, was in the ratio of seven to two and was a direct result of extension demonstrations.

Nine meetings were held with the growers of canning crops and 1,500 service letters were furnished.

A Johnson County Leader's garden—an important part of the program for making the farm feed the family.

Assistance was continued to the farms of the state institutions and four county infirmaries, to aid in the production of vegetables for inmates, and several industrial firms were given assistance in arranging gardens for their employees.

Pomology. The past quarter of a century has seen the development of the strawberry industry, in the Jackson Purchase section, from 39 acres in 1914 to 8,000 acres in 1939. The Extension Service was active in this development. Fifty demonstrations were conducted on the use of Yellows-free-Blakemore strawberry plants. It

is estimated that these plants will increase the income in some cases as much as $75.00 per acre. As a result of the successful demonstrations of the control of the strawberry crown borer in 1938, and the follow-up of meetings with service letters in the strawberry sections in 1939, there is a marked reduction of borer infestation. In Marshall and Graves Counties 18 demonstrations of land preparation for strawberries and use of fertilizers received favorable comment and promise to show good results in the 1940 harvest.

The apple sections were divided into six districts comprising 28 counties. Seven meetings were held in each district, on the control of scab, codling moth, and bitter rot, in cooperation with and supplemental to the spray service division. Because of the low price just before harvest, extension agents stressed the importance of selling the crop before the bulk of northern apples was harvested, with the result that the value of the Kentucky crop was materially increased.

FARM ECONOMICS AND RURAL SOCIOLOGY

County Planning. In four counties selected for intensive work, four men devoted their entire time to organizing the work, holding meetings with community committees, sifting information, conducting tours, preparing maps and farm plans and preparing recommendations for the committees which are now drawing up a report including recommendations for each section. Less intensive work on county planning was conducted in 25 additional counties. Also under the general head of county planning is the work in the area to be flooded by Gilbertsville Dam. The relocation and adjustment of families now in that area was undertaken and two special agents were assigned to that work with offices in Benton and Murray.

Business Education. Individual analyses of their business were returned to over 400 selected farmers and 1,000 farm account books were placed in new hands. Mimeographed county analyses were distributed in 10 counties to make clear the facts and principles essential to success. The Kentucky Farm Account Book was greatly improved, particularly the summary sheet, and the group method of helping farmers to open and close their accounts proved more efficient and a great time saver.

Rural Sociology. Landlord-tenant Conferences. County and regional conferences were held in which tenants and landlords in 15 counties took part. At each of these conferences there was a frank discussion of landlord-tenant relations and of means for improving these relations so as to serve the best interests of both tenant and land owner. Particular study was given to cases in which tenants have been making good labor incomes and attaining comfortable standards of living, while at the same time securing satisfactory financial returns to the landlord, maintaining soil fertility and making progress toward farm ownership. At each conference a continuing committee was appointed to study the land-tenure question.

Community Leadership Training. An important phase of this work was the continuation of work with lay educational leaders, especially members of rural boards of education. A state-wide meeting of rural boards of education was held at which more than half of the counties of Kentucky were represented. There were also 10 regional and county meetings of a similar character in which the discussion centered around the principles and practices of leadership for community betterment. Another phase of the project was the 5-day state-wide institute, for training rural community improvement leaders, held at the College of Agriculture. Daily lectures on the principles of community leadership were given. There were also round-table discussions and demonstrations on rural life and agricultural topics which helped fit rural leaders who attended the institute to serve the people of their communities more effectively.

MARKETING

Farmers in large numbers tell of their need for economic information in planning their production and marketing programs. Requests for market information from various groups were so numerous that it was found impossible to finish all the work planned for the year. The long-time goal is that of educating farmers and if the number of calls for assistance may be used to judge the success of the program, this procedure may be considered a success.

The Agricultural Outlook project was carried on thruout the year. This was supplemented by a monthly news letter which keeps the outlook information up to date, and also by radio talks and timely special outlook reports. Livestock marketing received special emphasis. In cooperation with the various cooperative livestock marketing agencies, livestock marketing committees were established in the principal livestock-producing counties, which served as agencies for extending market information on prices and market practices. The same committees are used for extending information on wool marketing.

In order to develop a marketing program for poultry and eggs, a study was made in a heavy-producing area to determine the conditions surrounding the marketing in the area. This study gave much information which will be used in developing future marketing plans.

A major portion of the strawberry crop of the State is marketed by cooperative associations. In order to improve and standardize the quality of fruit marketed, encouragement was given to government grading. Assistance in improving marketing practices was requested by many of these marketing groups. In order to facilitate this type of work, a film strip on picking, grading, packing and selling strawberries was made.

Demonstrations of proper stripping and grading tobacco constitute a service actively demanded by farmers. These demonstrations were held in every important tobacco-producing county and the results in better-handled tobacco were gratifying.

The annual cooperative marketing conference developed by the College of Agriculture proved well worth while. This conference is held at Lexington at the time of the Farm and Home Convention. Interest and attendance at these meetings is growing steadily.

Assistance was given to numerous groups in meeting organization problems and in drawing up articles of incorporation and by-laws. This type of work always constitutes an important part of the program.

The outlook for extension work in marketing appears to be very satisfactory and future accomplishments depend largely upon facilities for carrying on the work.

PUBLICATIONS

The following publications were issued during the calendar year 1939:

Extension Circulars

Number.

54. Revised. Soils—an elementary treatise. P. E. Karraker.
82. Revised. Corn project for 4-H clubs. E. E. Fish and E. J. Kinney.
100. Revised. Potato project for 4-H club members. John S. Gardner.
152. Revised. Stomach worms in sheep. R. C. Miller.
157. Revised. Brooding chicks artificially. J. E. Humphrey and J. B. Kelley.
181. Revised. Canning project for 4-H clubs. Anita Burnam and Edith Lacy.
193. Revised. Pig projects for 4-H clubs. E. J. Wilford.
210. Revised. A manual for officers and members of homemakers' clubs. Zelma Monroe.
219. Revised. Good eggs for market. Stanley Caton.
222. Revised. Garden project for 4-H clubs. John S. Gardner.
230. Revised. The production of white burley tobacco. E. J. Kinney.
239. Revised. The family meal hour. Florence Imlay and Pearl J. Haak.
252. Reprinting. Clothing project for 4-H clubs. I. Edith Lacy and Anita Burnam.
265. Revised. Poultry parasites and sanitation. F. E. Hull.
266. Reprinting. Home storage structures and equipment. J. B. Kelley.
272. Revised. Soil Management for Kentucky. Geo. Roberts.
287. Revised. Feeding and management of laying hens. Stanley Caton.
289. Reprinting. Burley tobacco project for 4-H club members. E. J. Kinney.
293. Revised. Peach and plum spray schedule. A. J. Olney.
294. Revised. Apple spray schedule. A. J. Olney.
295. Revised. Commercial strawberry growing in Kentucky. W. W. Magill
298. Reprinting. Dairy project for 4-H clubs. Geo. Harris.
301. Reprinting. The breeding season for the farm flock of sheep. R. C. Miller.
308. Revised. Sweetpotato growing. John S. Gardner.
309. Reprinting. The vegetable garden. John S. Gardner.
313. Reprinting. Clothing project for 4-H clubs. II. Edith Lacy and Anita Burnam.
321. Revised. Food project for 4-H clubs. Unit I. Dorothy Threlkeld and Edith Lacy.
322. Reprinting. Food project for 4-H clubs. Unit II. Dorothy Threlkeld and Edith Lacy.
323. Reprinting. Food project for 4-H clubs. Unit III. Dorothy Threlkeld and Edith Lacy.
329. Blue mold of tobacco and its control.
330. Culling farm poultry. Stanley Caton.
331. Suggestions for the control of tobacco insects in 1939. W. A. Price.
332. Annual report of the Extension Director. T. R. Bryant.
333. Growing black locust trees. Wm. E. Jackson.
334. Forestry project for 4-H clubs. Wm. E. Jackson.
335. Ventilation of tobacco barns. Russell Hunt and Jesse Brooks.
336. Lessons on farm crops. E. J. Kinney.
337. Hedges—uses, planting and care. N. R. Elliott.
338. Wall treatment in the livable home. Ida C. Hagman and Vivian Curnutt.
339. Clothing project for 4-H clubs. Unit III. Edith Lacy and Anita Burnam.
340. Clothing project for 4-H clubs. Unit IV. Edith Lacy and Anita Burnam.
341. Feeding shade trees. N. R. Elliott.
342. Floor coverings in the livable home. Ida C. Hagman and Vivian Curnutt.

343. The garden, month by month. John S. Gardner.
344. Recreation for 4-H and Utopia Clubs. Carl W. Jones.
Food record book for 4-H club members.
4-H club girl's clothing account and budget book.
Livestock record book for 4-H club members.
Poultry Calendar. C. E. Harris.
4-H Club Program. Insects. E. E. Fish.

Leaflets

Recommendations for the control of leaf diseases of tobacco. W. D. Valleau and E. M. Johnson.
Hybrid corn in Kentucky. Wm. C. Johnstone.
Better corn culture to reduce soil and plant food losses. Wm. C. Johnstone.
Cutting, curing and storing hay. Ralph Kenney.
Field crop tests for need of lime and fertilizers. Geo. Roberts.
Recommendations for the control of wildfire and blackfire of dark tobacco. W. D. Valleau, E. M. Johnson and E. J. Kinney.
Care and management of purebred stallions and jacks. Animal Industry Group.
Care and management of purebred bulls, boars and rams. Animal Industry Group.
Striped cucumber beetle. W. A. Price.

EXTENSION WORKERS

(January 1st to December 31st, 1939)

ADMINISTRATION

Thomas P. Cooper, Dean and Director
T. R. Bryant, Assistant Director
D. H. Peak, Business Agent
S. K. Slaughter, Secretary
*O. M. Farrington
*W. L. Rouse

AGRONOMY

George Roberts, Head of Department
Ralph Kenney, Field Agent in Crops
S. C. Jones, Field Agent in Soils
William C. Johnstone, Field Agent in Soils
Russell Hunt, Field Agent in Tobacco

AGRICULTURAL ENGINEERING

J. B. Brooks, Field Agent
J. B. Kelley, Field Agent
Earl G. Welch, Field Agent

ANIMAL HUSBANDRY

E. S. Good, Head of Department
Wayland Rhoads, Field Agent, Beef Cattle
R. C. Miller, Field Agent, Sheep
Grady Sellards, Field Agent, Swine

**Employed cooperatively with A. A. A.*

CLOTHING

Iris Davenport, Field Agent in Clothing
Edith Lacy, Field Agent in Home Economics

DAIRYING

J. O. Barkman, Field Agent
George Harris, Field Agent
James B. Smathers, Field Agent

FARM MANAGEMENT

R. E. Proctor, Field Agent
Bruce Poundstone, Field Agent

FOODS

Florence Imlay, Field Agent
Pearl J. Haak, Field Agent

FORESTRY

W. E. Jackson, Field Agent

HOME MANAGEMENT

Ida Hagman, Field Agent
Vivian Curnutt, Field Agent

HORTICULTURE

W. W .Magill, Field Agent, Orcharding
J. S. Gardner, Field Agent, Truck Crops
N. R. Elliott, Field Agent, Landscape

4-H CLUBS

J. W. Whitehouse, State Leader
J. M. Feltner, Field Agent
M. S. Garside, Field Agent
Anita Burnam, Field Agent
G. J. McKenney, Field Agent
E. E. Fish, Field Agent
Carl W. Jones, Field Agent
Dorothy Threlkeld, Field Agent
H. C. Brown, Field Agent

MARKETS

L. A. Vennes, Field Agent
George P. Summers, Field Agent

PUBLIC INFORMATION

C. A. Lewis, Editor
L. C. Brewer, Assistant in Short Courses and Exhibits

POULTRY

J. E. Humphrey, Field Agent
C. E. Harris, Field Agent
Stanley Caton, Field Agent

RURAL SOCIOLOGY

W. D. Nicholls, Head of Department

VETERINARY SCIENCE

T. P. Polk, Field Agent

HOME DEMONSTRATION WORK

State Leader		
Weldon, Miss Myrtle	Experiment Station	Lexington
Assistant State Leaders		
Logan, Miss Lulie	Experiment Station	Lexington
Monroe, Miss Zelma	Experiment Station	Lexington
White, Mrs. Helen M.	Experiment Station	Lexington

HOME DEMONSTRATION AGENTS

Name	*Official Station*	*County*
Baird, Miss Bina	New Castle	Henry
Barnes, Miss Grace	Paintsville	Johnson
Bethea, Miss Hattie (Colored)	Hickman	Fulton-Hickman
Brock, Miss Bertha Frances	Glasgow	Barren
Byerly, Miss Zelma	Independence	Kenton
Carvill, Mrs. Camille H.	Dixon	Webster
Cash, Miss Ruth	Lawrenceburg	Anderson
Clark, Miss Eleanor	Stanford	Lincoln
Colley, Miss Sunshine	Pineville	Bell
Collis, Mrs. Eula C.	Richmond	Madison
Crafton, Miss Cornelia	Russellville	Logan
Collins, Miss Mary Eliazbeth	Paris	Bourbon
Davis, Miss Frances	Nicholasville	Jessamine
Davis, Miss Rachel (Colored)	Hopkinsville	Christian
Evans, Miss Anna	Lancaster	Garrard
*Ewing, Mrs. Vivian M.	Leitchfield	Grayson
Fleming, Mrs. Frances W.	Hopkinsville	Christian
Gillaspie, Miss Mary Hood	Burlington	Boone
Gillett, Miss Leone	Henderson	Henderson
*Grimes, Mrs. Mavourneen R.	Paris	Bourbon
Grubbs, Mrs. Jennie C.	Danville	Boyle
Harralson, Mrs. Ruth E.	Madisonville	Hopkins
Hart, Miss Mamie E.	Georgetown	Scott
Hatcher, Mrs. Elizabeth H.	Berea	S. Madison & Rockcastle
Hembree, Miss Lilah	LaGrange	Oldham
Henning, Miss Alda	Paducah	McCracken
Hicks, Miss Ruth	Greenup	Greenup

**Resigned*

Name	*Official Station*	*County*
Hunter, Miss Ruth	Alexandria	Campbell
Ireland, Miss Jeanne	Shelbyville	Shelby
Johnson, Mrs. Catherine T.	Louisville	Jefferson
Kelley, Mrs. Miriam J.	Bowling Green	Warren
Kendall, Miss Byrd	Bardstown	Nelson
*Kruempel, Mrs. Florence	Nicholasville	Jessamine
Latimer, Miss Ruth	Lexington	Fayette
Lovelady, Miss Venice	Owensboro	Daviess
Lytle, Miss Priscilla	Leitchfield	Grayson
Meador, Miss Mary E.	Elkton	Todd
Meshew, Miss Maria J.	Wickliffe	Ballard
*Money, Mrs. Sarah Brown	Russellville	Logan
Moore, Mrs. Alma	Greenville	Muhlenberg
Nance, Miss LaRue	Morganfield	Union
Odor, Miss Mary Jordan (Asst.)	Bowling Green	Warren
Perkins, Mrs. Roxie C.	Harlan	Harlan
Piedalue, Miss Irene	Winchester	Clark
*Pulliam, Mrs. Sadie Wilgus	Morganfield	Union
Roberts, Miss Mildred	Calhoun	McLean
Russell, Miss Katherine	Carrollton	Carroll
*Sanford, Mrs. Mary Lou J.	Wickliffe	Ballard
Scott, Miss Mary Louise	Jackson	Breathitt
Scrugham, Miss Nancy	Princeton	Caldwell
Sharp, Mrs. Lois Husebo	Catlettsburg	Boyd
*Sherman, Mrs. Helen Morgan	Lawrenceburg	Anderson
Skidmore, Miss Lucille (Asst.)	Pikeville	Pike
Steele, Miss Pearl J.	Franklin	Simpson
Stewart, Mrs. Marcy Davis	Hartford	Ohio
Thompson, Mrs. Catherine C.	Hickman	Fulton
Tompkins, Mrs. Jeanette H.	Frankfort	Franklin
Van Winkle, Miss Doris	Maysville	Mason
Vaughn, Miss Anne Elizabeth	Barbourville	Knox
Wheeler, Mrs. Dorris Kirkman	Pikeville	Pike
Whittinghill, Miss Eleanor	Cadiz	Trigg
Wilson, Miss Jessie	Clinton	Hickman
Word, Miss Elizabeth	Munfordville	Hart
Wyatt, Mrs. Loretta Markham	Mayfield	Graves

STATE AGENT

Mahan, C. A.	Experiment Station	Lexington

ASSISTANT STATE AGENTS

Graddy, Ivan C.	Experiment Station	Lexington
Kilpatrick, Elmer J.	Experiment Station	Lexington
Lickert, Raymond H.	Experiment Station	Lexington
Link, Harold F.	Experiment Station	Lexington
Wilson, William Clark	Experiment Station	Lexington

AGENT, CHARGE OF NEGRO WORK

Burnette, A. C.	179 Deweese Street	Lexington

* *Resigned*

COUNTY AGENTS

Name	*Official Station*	*County*
Acree, John C.	Calhoun	McLean
*Adair, Walter B.	Scottsville	Allen
Anderson, Shirley W.	Louisville	Jefferson
Atterbury, Harry B.	Hawesville	Hancock
Bach, John	Salyersville	Magoffin
Bell, Clarence S.	Lawrenceburg	Anderson
Blue, John. W. III	Eddyville	Lyon
Bohanan, Samuel C.	Wickliffe	Ballard
Boyd, Guy F.	Booneville	Owsley
Brabant, Kenneth	Hardinsburg	Breckinridge
Brabant, Stuart	Elkton	Todd
Brown, John C.	Danville	Boyle
Bryan, Charles V.	Campbellsville	Taylor
Burdine, Howard W.	Inez	Martin
Campbell, Wallace L.	Bedford	Trimble
Carter, Wilmot	Williamsburg	Whitley
Cochran, John T.	Murray	Calloway
Coffey, Wallace	Frenchburg	Menifee
Coleman, James V.	Greenville	Muhlenberg
*Collins, Jesse	Maysville	Mason
Collins, John R.	Versailles	Woodford
Collins, William B.	Maysville	Mason
Colson, Clay A.	Whitesburg	Letcher
Crace, Allington	Hazard	Perry
Craigmyle, Beach	LaGrange	Oldham
Cundiff, Ralph	Albany	Clinton
Day, Carl B.	Louisa	Lawrence
Dye, James G.	Mt. Olivet	Robertson
Ellis, Justus L.	Tompkinsville	Monroe
Elston, Charles B.	Bardstown	Nelson
Ewing, John H. Jr.	Greensburg	Green
Faulkner, Robert T.	Leitchfield	Grayson
Feltner, John C.	Jackson	Breathitt
Finch, John H. (Colored)	Bowling Green	Warren
Ford, Robert H.	Morganfield	Union
Forkner, Holly R.	Burlington	Boone
Fortenbery, Blumie W.	Lancaster	Garrard
Foy, Samuel V.	Hickman	Fulton
Gabbard, Charles E.	Campton	Wolfe
*Gayle, Hubbard K.	Morganfield	Union
Goebel, Nevin L.	Taylorsville	Spencer
Goff, Charles F.	Morehead	Rowan
Graham, John F.	Princeton	Caldwell
Griffin, Marshall C.	Whitley City	McCreary
Grimwood, Phillip G.	London	Laurel
Hafer, Fred C.	Brandenburg	Meade
*Harris, Andrew M.	Benton	Marshall
Hayes, Henry J.	Monticello	Wayne

* *Resigned*

Name	*Official Station*	*County*
Heath, Robert M.	Frankfort	Franklin
Henson, Hollis	Stanton	Powell
Holland, John W.	Shelbyville	Shelby
Hopper, Ray C.	Bowling Green	Warren
Horning, Jess O.	Glasgow	Barren
Howard, Joe M.	Brooksville	Bracken
Howell, William B.	New Castle	Henry
Hubbard, William O. (Assoc.)	Owensboro	Daviess
Hume, Robert C.	Williamstown	Grant
Hurt, Joe	Paducah	McCracken
Isbell, Samuel L.	Prestonsburg	Floyd
Jackson, Homer R.	Henderson	Henderson
Janes, Ernest L.	Owenton	Owen
Johnson, Raymond O.	Edmonton	Metcalfe
Jones, Thomas H.	Beattyville	Lee
Karnes, Gilbert H.	Lebanon	Marion
Kent, Samuel B.	Morgantown	Butler
Kidd, Jack S.	Somerset	Pulaski
Killinger, John R.	Stanford	Lincoln
King, Roscoe H.	Grayson	Carter
Kleiser, William D.	Greenup	Greenup
Kurtz, George M.	Brownsville	Edmonson
Laine, Henry A. (Colored)	Nicholasville	Jessamine
LaMaster, Orem	Flemingsburg	Fleming
Long, Henry S.	Winchester	Clark
McClure, John E.	Owensboro	Daviess
McCord, Joseph R.	Shepherdsville	Bullitt
McDaniel, Floyd	Mt. Sterling	Montgomery
*Matson, Ralph	Carlisle	Nicholas
Melton, Frank G.	Hodgenville	Larue
Michael, William J.	Hindman	Knott
Miller, J. Lester	Richmond	Madison
Moore, James F.	Barbourville	Knox
Morgan, Reuben	Hyden	Leslie
Morgan, Thomas W.	Cadiz	Trigg
Nichols, Mahlon P.	Carlisle	Nicholas
Northington, Leroy W.	Clinton	Hickman
Nute, Raymond E.	Vanceburg	Lewis
Park, Curtis F.	Harrodsburg	Mercer
Parker, J. Ed. Jr.	Lexington	Fayette
*Parsons, John E.	Campbellsville	Taylor
Pidcock, Justice L.	Paintsville	Johnson
Porter, Samuel A.	Alexandria	Campbell
Quisenberry, Henry A. (Assoc.)	Louisville	Jefferson
Rankin, Robert B.	Columbia	Adair
Reynolds, Walker R.	Tyner	Jackson
Rice, Edgar	Sandy Hook	Elliott
Ridley, Raymond D.	Hartford	Ohio
Routt, Grover C.	Nicholasville	Jessamine
Rothwell, Herman E.	Benton	Marshall
Rudolph, Robert L.	Smithland	Livingston

* *Resigned*

Name—	*Official Station—*	*County—*
Sasser, Marshall H.	Liberty	Casey
Shade, Cloide C.	Irvine	Estill
Shelby, Oakley M.	Marion	Crittenden
Sparks, Ervan R.	Manchester	Clay
Spence, Robert F.	Berea	Rockcastle
Story, Runyon (Colored)	Hopkinsville	Christian
Straw, William T.	Warsaw	Gallatin
Summers, John E.	Franklin	Simpson
Talbert, William D.	Hopkinsville	Christian
Thaxton, Andrew J.	Elizabethtown	Hardin
Thompson, Herbert H.	Cynthiana	Harrison
Thompson, Joe R.	Owingsville	Bath
Trosper, Raleigh V.	Pineville	Bell
*Travis, Ottie B.	Jamestown	Russell
Wade, Campbell M.	Georgetown	Scott
Walker, Fletcher C. ,	Burkesville	Cumberland
Watlington, John R.	Russellville	Logan
Watlington, Philip R.	Paris	Bourbon
Watts, Clyde	Carrollton	Carroll
Watts, John B.	Bardwell	Carlisle
Wheeler, Boyd E.	Pikeville	Pike
Wheeler, Jewel A.	Dixon	Webster
White, Robert W.	Falmouth	Pendleton
Whittenburg, Harry W.	Madisonville	Hopkins
Wicklund, Carl A.	Independence	Kenton
Wiedeburg, William E.	Munfordville	Hart
Wigginton, Robert	Catlettsburg	Boyd
Williams, Gray H.	Harlan	Harlan
Williams, J. B.	Scottsville	Allen
Williamson, Glynn E.	Mayfield	Graves
Winchester, Ralph D.	Jamestown	Russell
Wrather, Yandal	West Liberty	Morgan
Watson, John L. (Colored)	Elkton	Todd-Logan
Young, Troll	Springfield	Washington

ASSISTANT COUNTY AGENTS

Name	*Official Station*	*County*
Allen, Carl W.	Morganfield	Union
*Allen, Cyrus D.	Winchester	Clark
Binkley,Harold	New Castle	Henry
Brame, Forrest S.	Bowling Green	Warren
Coots, Woodrow	Madisonville	Hopkins
*Colville, David	Lawrenceburg	Anderson
Cornette, Dean C.	Paintsville	Johnson
Culton, Eugene, Jr.	Carrollotn	Carroll
*Crawford, Sam K.	Lexington	Fayette
Delong, Sidney	Glasgow	Barren
Dixon, Charlie	Lexington	Fayette
Drake, Herschel B.	Burlington	Boone
Drake, J. Maurice	Richmond	Madison

* *Resigned*

Name—	*Official Station—*	*County—*
Estes, Paul W.	Munfordville	Hart
Flannery, Clyde H.	Monticello	Wayne
Gibson, Harry B.	Hodgenville	Larue
Gilbert, Raymond H.	Shelbyville	Shelby
Hardin, William H.	Maysville	Mason
Henshaw, Morton	Hartford	Ohio
Hughes, Woodrow H.	Lawrenceburg	Anderson-Mercer
Hurst, Hugh	Williamsburg	Whitley
Irvine, John W.	Elkton	Todd
Isham, Albert L.	Madisonville	Hopkins
Klingner, Fred M.	Russellville	Logan
McMurtry, Gaven H.	Henderson	Henderson
Mills, Kermit	Berea	Rockcastle-So. Madison
Pope, Henry H. Jr.	Pikeville	Pike
Ray, William B.	Harrodsburg	Mercer
Redd, Obie B.	Lancaster	Garrard
Richardson, Clyde M.	Frankfort	Franklin
Routt, Wilson M.	Princeton	Caldwell
Sandefur, Richard M.	Williamstown	Grant
Scott, William Dale	Alexandria	Campbell
Stephens, James I.	Georgetown	Scott
Threlkeld, William F.	Leitchfield	Grayson
Tolbert, James D.	Paris	Bourbon
Venable, Keith S.	Hopkinsville	Christian
Williams, Maurice K.	Independence	Kenton
Winchester, Frank D.	Pikeville	Pike

RECEIPTS AND DISBURSEMENTS

For the Fiscal Year Ended June 30, 1939

RECEIPTS

Federal Smith-Lever, Supplementary and Bankhead-Jones	$566,752.21
Federal Capper-Ketcham	36,800.97
State Smith-Lever	120,000.00
TOTAL	$723,553.18

DISBURSEMENTS

	FEDERAL FUNDS		STATE FUNDS
	Smith-Lever Supplementary Bankhead-Jones	Capper-Ketcham	
Administration	$ 23,285.85	$	$
Publications	19,867.89		2,062.00
County Agent work	361,066.99	19,229.21	
Home demonstration work	100,841.31	17,571.76	
Clothing	1,897.04		5,800.00
Foods	1,625.97		5,700.00
Junior Clubs	13,349.88		30,188.00
Agronomy	6,087.28		16,562.00
Dairying	3,049.69		5,858.33
Animal Husbandry	4,485.21		11,840.00
Markets	2,200.53		5,904.34
Farm Management	1,499.58		5,639.99
Poultry	3,200.35		9,690.00
Horticulture	2,270.14		9,100.00
Veterinary Science	3,678.49		
Rural Engineering	5,172.62		4,855.34
Public Information	1,132.03		6,800.00
Farm and Home Week	788.69		
Home Management	7,546.04		
Rural Sociology	1,198.72		
Forestry	2,507.91		
TOTAL	$ 566,752.21	$ 36,800.97	$ 120,000.00