

# UNIVERSITY OF KENTUCKY

COLLEGE OF AGRICULTURE

Extension Division

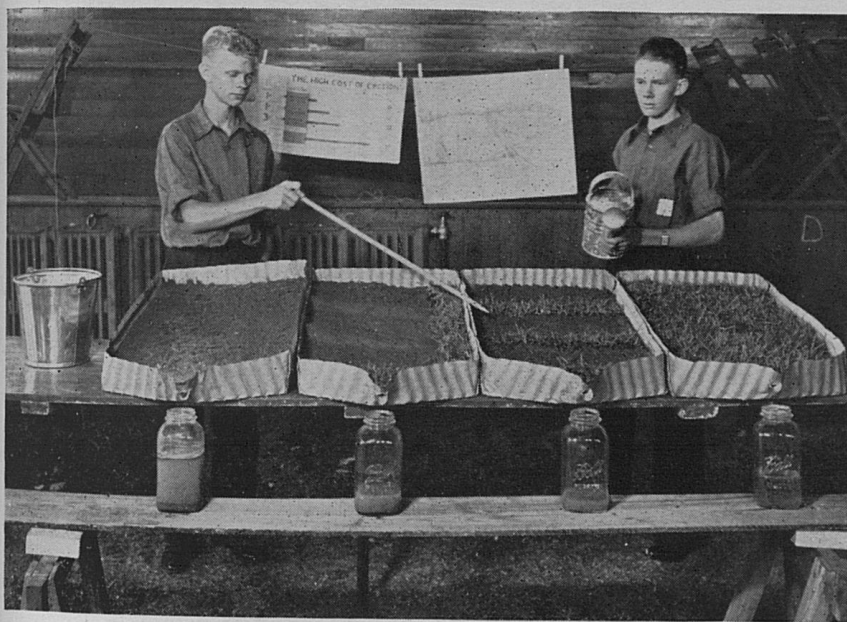
THOMAS P. COOPER, Dean and Director

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CIRCULAR NO. 310

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ANNUAL REPORT OF THE EXTENSION DIRECTOR  
FOR THE  
YEAR ENDED DECEMBER 31, 1937



A demonstration team of 4-H Club boys illustrating methods of reducing the leaching and erosion of soils.

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Lexington, Kentucky  
June, 1938

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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. Department of Agriculture, and distributed in furtherance of the work provided for in the Act of Congress of May 8, 1914.

LETTERS OF TRANSMITTAL

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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, 1937. 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.*

University of Kentucky  
Lexington, Kentucky

Honorable A. B. Chandler  
Governor of Kentucky

Sir:

In accordance with an act of the Legislature of the State of Kentucky, approved March 15, 1916, I herewith submit the annual report of the Division of Agricultural Extension of the College of Agriculture, University of Kentucky, for the year ended December 31, 1937.

Respectfully,

FRANK L. McVEY,  
*President.*

Circular No. 310

ANNUAL REPORT OF THE EXTENSION DIRECTOR,  
FOR 1937

Prepared By T. R. BRYANT, Assistant Director

More effective work in the various branches of extension was accomplished in 1937 than in previous years largely thru recruiting and training volunteer leaders, coupled with careful study of objectives and methods and close coordination of programs. Conferences of supervisors with extension specialists and leaders prevented duplication or overlapping of programs. County and regional planning meetings were held where the most effective approach to problems was studied and the ultimate objectives made clear. With these clearly in mind it was easier to plan for present work. Of great assistance in making plans was the dissemination of outlook information, including charts and illustrations, prepared by the Extension Service.

Tho the county agents' time was already fully occupied, this planning and training of local leaders made it possible for them to accomplish even more work. Fortunately, the approach and methods under the Agricultural Conservation Program could be made to coincide in many respects with extension projects in soils and crops, including pastures. This measure of coordination gave time for more work with 4-H clubs, livestock, poultry, horticulture and other enterprises. Demonstrations, meetings and other activities were carefully placed and the time schedule was made with care. Progress was made in further acquainting committeemen with the Agricultural Conservation Program so that they could carry on a larger percentage of the work, tho at times the burden on the county agent continued heavy.

The Agricultural Conservation Program provided for cash payments to farmers for soil-building practices. These soil conservation practices have been advocated by the Extension Service for many years, and much progress had been made by farmers who had kept in close touch with the extension workers. The payment offered for

these practices made it easier for the extension service to extend very widely the use of the advocated methods of soil building.

The College of Agriculture has for many years stressed the value of the use of limestone and phosphate on soils. The influence of that work was so effective that Kentucky stands in the first rank among the states in the use of those products. When the Agricultural Conservation Program was put into effect cash inducements were offered for proper use of limestone and high-grade phosphate. This made it possible for many farmers who understood their value but who had lacked the necessary money, to use these soil amendments. Under the favorable conditions provided by the offer, Kentucky increased its use of phosphate and its efforts for soil improvement.

The College made available to county agents the apparatus and chemicals necessary for making quick field tests for acidity and phosphorus in soil. Over 25,000 such tests were made. The service was of great value to farmers and the demand for the service increased steadily.

The Agricultural conservation work has greatly aided the county agents in their efforts to show farmers the advantage of greater efficiency of production over mere total production. Fertile soil not only produces more but at a much less cost per acre or per unit of production. It is now becoming clear, also, that soil must have the necessary mineral elements to produce a high-grade product. The demand today is for quality both in livestock and in farm grains and herbage. The price differential in favor of tobacco that is not only grown on fertile soil but properly cured, carefully stripped, and correctly graded is so great that growers now strive for quality rather than quantity. Another example is found in poultry and egg production. Much has been done and much remains to be done in getting more cooperation between producers and buyers. Buyers needing volume of poultry, eggs, cream and other products and being in a highly competitive position have rather slowly adopted the plan of establishing differentials between ordinary products and those of higher quality. The advantage of such differentials has now been sufficiently proved to establish the practice of offering better prices for quality production.

Advances were made in effecting a better and wider cooperation with agencies whose activities in whole or in part are parallel to that of the Extension Service, such as Agricultural Conservation, Farm Security, Farm Credit, Vocational Agriculture in schools, the press, business houses, boards of trade, civic clubs, banks, fair boards, and many other agencies, both public and private.

Thru cooperation with the public press it was possible to make the informational service of great benefit. Weekly releases are sent to reach the county weeklies the day before they go to press, thus making it possible for important agricultural news to reach the public in a very short time.

Thru active cooperation of milk distributors and dairy farms there was an increase of seven dairy-herd testing associations during the year. Tobacco and livestock shows, made possible thru the cooperation of dealers, buyers, commission houses and stockyards, have stimulated keen activity thruout the season on the part of producers, especially 4-H and Utopia club members.

The usual plan of cooperation has been thru a formal or informal understanding with cooperating agencies whereby their program and that of the Extension Service would be directed toward common ends. In certain instances cooperating agencies turned over funds to the College of Agriculture to employ men and prosecute the work as the college saw fit.

There was increased interest, in 1937, in spring-lamb production that kept the Extension Service engaged in advising and helping sheep breeders to obtain breeding ewes of the proper type for lambs and wool. The demand for high-class rams was great enough to entirely exhaust the supply and a number were brought into the state. The keen demand led to the establishment of a number of breeding flocks, mainly Southdowns, as Kentucky breeders prefer rams of this breed to sire the spring lambs.

Every change in economic or social conditions brings new problems to the Experiment Station and the Extension Service. For instance, the return of the distilleries to large-scale operation brought back slop-feeding of cattle and hogs. Over 30,000 cattle were known to have been fed on slop this year. The nature of slop makes the use of supplements necessary if good profits are to be made. The use of

molasses and ground limestone to supplement the slop ensured good gains to those using them while those not using such supplements did not get as good results. The possibility of profit from properly-fed beef cattle was a stimulus to better practices. As an indication of this increased interest there were 1,837 head of choice individuals on exhibit at the Annual State Cattle Show.

Extension activities in swine production were largely directed to demonstrate the advantage of preparing swine for market at an early age. This was largely accomplished by stressing the feeding methods used in producing ton litters. The ton-litter method of efficient feeding and sanitary practices can be applied to all swine production, and is being adopted by many farmers.

The increase in 4-H club enrollment from 33,316 to 37,512, with a percentage of finished projects of 80.7 as compared to 78.4 in 1936, was accomplished with the aid of more and better-trained local leaders who served gratuitously. Difficulty was found not so much in the matter of enrollment as in keeping the grade of instruction on a high plane. The enrollment in Utopia clubs was increased from 692 to 875 young men and women.

The number of home demonstration agents was increased to 51, including two negro women. The organization and work of the homemakers' association made it possible to enlarge not only the volume of work but also to further improve its quality. It has been shown that a voluntary association with no definite dues can accomplish a large amount of work of a high order. Careful planning, the recruiting and training of leaders, and permitting them to lead, seem to be the principal factors of success. Community groups, a county advisory council, and project committees were organized. Officers and project leaders were carefully instructed in their duties and were kept informed. The result was effective performance. A high percentage of attendance at Council and training meetings was maintained because home demonstration agents, supervisors and specialists were careful to have worthwhile plans and subject matter for presentation so that any who were absent felt a sense of loss. Leaders were equipped to lead and were supported in leading. Agents and specialists seldom do any of the leader's work for her but support her in improving her own technique. Project leaders

understand that it is their duty to attend county project meetings so that they may qualify themselves under the instruction of the specialists and be ready to repeat the lessons to their community project groups and that if they fail, their own community group is the loser. In addition to definite project work, homemakers often resolve themselves into study sessions, all for their profit and pleasure. It should be noted that the women who compose the homemakers' groups assume responsibility for extending the benefits of their studies and activities to non-members and that they sponsor groups of 4-H club girls. Their studies and activities included food and nutrition, clothing, home management, home furnishing, child care, exterior as well as interior beautification of homes, recreation, music, dramatics and other projects of interest and benefit to their homes and communities.

Progress was made in Rural Electrification, the work being carried on in 68 counties. Funds have been allotted for transmission lines in 31 counties, embracing 12 projects with 9,892 customers along 2,396 miles. Under the general plan, funds have been allotted to private companies for 51 miles, with 231 customers. Other private companies are constructing 300 miles, in seven counties, with 1,228 customers. Survey data from 19 other counties have been submitted, contemplating service of 2,776 miles, with 10,772 customers, while in six other counties surveys are being made covering 310 miles. The extension engineering service was active in encouraging the extension of electric lines and especially in aiding the farmer in properly locating the service lines and wiring his home and outbuildings, to give the home and barns the best service possible. The home economics workers aided rural families in locating, in the most suitable places, the outlets in the home, and in the purchase of the most suitable fixtures and appliances to meet the needs of the family.

The following publications were issued during the calendar year 1937:

CIRCULAR  
NUMBER

- 77. Revised. Management of tobacco plant beds.
- 82. Revised. Corn project for 4-H clubs.
- 125. Revised. Pitcher pump installation.
- 181. Revised. Canning projects for 4-H clubs. Units I, II, III and IV.
- 239. Revised. Family meal hour.

- 242. Revised. Practices in seeding meadow and pasture crops.
- 252. Reprinted. Clothing project for 4-H clubs. Unit I.
- 254. Revised. Clothing project for 4-H clubs. Unit III.
- 265. Revised. Poultry parasites and sanitation.
- 266. Revised. Home storage structure and equipment.
- 275. Revised. Profitable turkey management.
- 276. Revised. Hotbeds and cold frames.
- 284. Revised. Rabies.
- 288. Beekeeping in Kentucky.
- 289. Burley-tobacco project for 4-H clubs.
- 290. Dark-tobacco project for 4-H clubs.
- 291. Simple problems in land measurement.
- 292. Soybeans and cowpeas in Kentucky.
- 293. Peach and plum spray schedule.
- 294. Apple spray schedule.
- 295. Commercial strawberry growing in Kentucky.
- 296. Ewe and lamb project for 4-H clubs.
- 297. The lespedezas in Kentucky.
- 298. Dairy project for 4-H clubs.
- 299. Ventilation of tobacco barns.
- 300. Annual report of the Extension Division.
- 301. Breeding season for the farm flock of sheep.
- 302. Jellies, jams, preserves and marmalades.
- 303. Price and market suggestions for Kentucky stockmen.
- 304. Soil erosion and its control. (To replace No. 129.)
- 305. The cost of rural electric service.
- 306. Workstock.
- Leaflet. Ton litters in the making.
- Leaflet. Cover crops.
- Leaflet. Lime and phosphate for Kentucky soils.
- Leaflet. Recommendations for the control of leaf diseases of tobacco.
- Leaflet. Erosion control.
- Record book. Clothing record book for 4-H clubs.
- Record book. Crop record book for 4-H clubs.
- Record book. Dairy record book for 4-H clubs.
- Record book. Livestock record book for 4-H clubs.
- Record book. Record of meetings. Homemakers' Clubs.
- Calendar. Poultry calendar.
- Program. Trees—our heritage.

### COUNTY AGENT WORK

While county agents do not claim credit for all the improvement made in their counties, yet they are actively engaged in studying, organizing and leading in the many lines of rural improvement, and progress made is the direct or indirect result of the county agent's work. The most efficient county agent is the one who is able to so organize his work and develop his leaders as to result in the greatest accomplishment.

During the past year 39 assistant county agents were employed



and placed in counties that have both a county agent and a home demonstration agent. All but one serve without cost to the county. Each county agent was given an office clerk, on either a full-time or part-time basis. Each county with both county agent and home demonstration agent, and three without home demonstration agents but having 2,000 or more farmers in the Agricultural Conservation Program, were given full-time extension clerks. Other counties were given half-time clerks on extension funds. To increase office efficiency, additional and more suitable quarters were provided in twenty-two counties, while twenty-six offices were rearranged. Additional equipment was provided in practically all counties.

In order to assist county agents in deciding upon extension programs, a planning meeting was held in practically every county, at which ten to twenty farmers, with the county agent and specialists from the College of Agriculture, studies the problems of the county, and made recommendations for a long-time program.

In 1937, 969 community programs were built by the various communities assisted by the county agent or his assistant. The meetings were largely in the nature of discussion groups in which the conclusions were reported as the recommended community program and a local leader was placed in charge of each project. Such annual programs take into account the immediate and the long-time programs mentioned above. The use of local leaders is strongly recommended for every phase of the program. Every opportunity is taken to keep before the leaders the desirability of this activity.

About July 1, the Assistant State Agents were relieved of part of the detail work and from acting as specialists of the A. A. A. Since then more time has been available for tours and demonstrations and for promoting soil-building practices. In the old lines of extension work, local leaders were used extensively in the community programs; the introduction of the A. A. A. program with paid leaders has greatly increased the total number of effective leaders. There are now 7,580 unpaid leaders and 2,474 paid leaders, or a total of 10,054.

The A. A. A. program continues to use a major part of the county agents' time; however, they have been greatly relieved by the installation of A. A. A. clerks; also by placing heavier responsibility

upon the county committees. A total of 145,897 work sheets were filled out for Kentucky farmers, and the payments will amount to approximately \$11,000,000.

Thru county agents' efforts 28,215 boys and girls were enrolled in the 4-H clubs in 1937, and nearly 80 percent completed their projects. The following meetings were held: three District Conferences for 4-H club volunteer leaders; Junior Week at the University of Kentucky attended by 350 girls and 349 boys; thirteen district club camps attended by 2,203 club members and 239 volunteer leaders; and two Utopia camps attended by 78 members. Eighty-nine 4-H Club livestock judging teams attended the State Fair with their county agents; club members in the Beef Calf Project from 41 counties exhibited 1,199 calves at the Baby Beef Show in Louisville in the fall; nine district tobacco shows and sales were held for 4-H and Utopia club members, a total of 1,411,396 pounds of tobacco being shown and sold. Two hundred young men in the Utopia Clubs in 22 counties, in the hybrid seed corn project, produced crops showing an increase of 18.8 percent over the local seed corn crop.

In order to make instructions more effective, the moving picture machines, film strips and stereopticons are used thruout the State. About 50 counties are provided with some form of locally owned instruments for visual instruction. In addition, 66 counties borrowed such instruments from the central office during the year.

Tobacco being an important cash crop for Kentucky farmers, county agents in practically all counties are carrying on projects on this subject. Tobacco meetings were held in all counties having county agents. Forty-five of these counties called for additional help from tobacco specialists in holding meetings. Thirty-five counties held special meetings for the specialist, at which curing methods and barn ventilation were discussed. Field meetings were held in 12 counties; tours were conducted in 7 counties; tobacco sorting and grading demonstrations were held in 102 counties, attended by 12,000 farmers; 86 county agents reported that 1,520 ridge ventilators were constructed on old tobacco barns during 1937, and about the same number of new barns with approved ridge ventilators were constructed, making the total for the year approximately 3,000. The grand total now in use in Kentucky amounts to more than 10,-

000. Forty-five tobacco demonstrations carried on by county agents on 267 acres produced 31,000 pounds, which sold for an average of 19.8 cents per pound, or an average of \$231. per acre.

The proportion of legumes to cultivated acres has reached the high point of 1 to 3 or 4, due to the rapid spread and use of lespedeza clover, especially Korean lespedeza. Eighty-four county agents reported 81,000 men sowed 9,000,000 pounds of Korean seed. The total acres of Korean sowed in 1937 amounted to approximately 800,000 acres. Seventy-seven county agents reported 29,000 men harvested 255,000 tons of lespedeza hay. Ninety county agents reported 12,000 men harvesting 12,000,000 pounds of Korean seed; 78,400 men in 106 counties reported harvesting 1,000,000 tons of lespedeza hay in Kentucky. Most of this is the indirect result of county agent work.

More than 300,000 chickens were tested for pullorum disease and special meetings were held on the subject "Control of Parasites." One hundred and thirty-four meetings were held, with the extension veterinarian present, to discuss sanitation measures and disease prevention. About 15,000 people attended these meetings. Sixteen counties did special work on rabies. One county agent, in attempting to relieve a cow of what seemed a choking condition but which was caused by rabies, became infected and died.

At the end of 1937 there had been \$422,000 allotted to 12 approved rural electrification projects which were to supply current for 9,892 customers on 2,396 miles of line in 31 counties. Thirty other counties are in the process of developing Rural Electrification Administration projects involving over 3,500 miles of line.

### SUMMARY

	1936	1937
Counties with Agents .....	118	119
County Extension Organizations .....	101	107
Membership — Men .....	8,432	15,045
Communities that built extension programs .....	1,190	1,256
Community leaders in community-built programs .....	10,004	7,580
Leader-training meetings .....	2,215	1,830
Attendance of local leaders .....	30,453	23,583
Meetings held by local leaders, not participated in by county agents .....	4,929	5,515
Attendance .....	117,018	93,518
Number paid A. C. leaders in adjustment programs .....	2,975	2,474
Method and result demonstration meetings .....	2,710	3,200

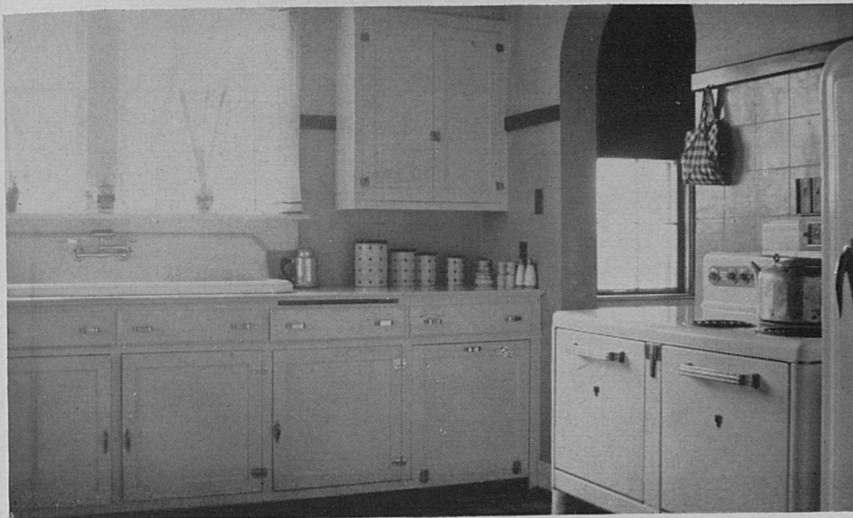
Attendance .....	49,914	60,315
Other extension meetings .....	11,817	13,634
Attendance .....	559,241	580,480
Farm visits made by county agents .....	50,992	71,326
Farms visited by county agents .....	27,040	38,271
Calls relative to work		
Office .....	858,085	873,632
Telephone .....	195,538	184,440
Individual letters written .....	283,164	242,682
Total all meetings held by county agents, including demonstrations, leader training meetings, etc. ....	16,471	17,703
Attendance .....	642,176	882,013
Animals in 4-H Club work completed		
Dairy .....	605	600
Poultry .....	129,355	128,492
Sheep .....	1,641	1,876
Swine .....	2,840	3,856
Beef .....	1,242	1,304

### HOME DEMONSTRATION

Home demonstration agents were employed in 49 counties, an addition of nine counties during 1937, and a negro home demonstration agent in Christian County, which has a large colored population. The county homemakers association, the organization through which home demonstration work is carried on, is a federation of community groups of rural homemakers interested in studying their homemaking and community problems under the leadership of the home demonstration agent who is assisted by a supervisor and by subject-matter specialists from the College of Agriculture. Besides the assistance rendered in organized counties, supervisors and specialists gave assistance to groups of women who requested help in their homemaking problems, in 41 counties not employing home demonstration agents. Assistance was given in 4-H Club homemaking projects in the 49 counties employing home demonstration agents and in 27 other counties.

*Program of Work.* The home demonstration program in each county is built by the women themselves. Thru the discussion method in both community and county groups, the needs and desires of the rural people in that county are determined and on those needs a county program is built, consisting of one or more major homemaking projects, a minor project in a related field, special and seasonal projects of particular interest to the group, recreational and civic activities, and cooperation with other organizations.

*Home Management.* The field of home management touches the vital interests of home life. It is concerned with the better management of time, energy and money, as well as with the development of fine attitudes toward better family relationships and community betterment.



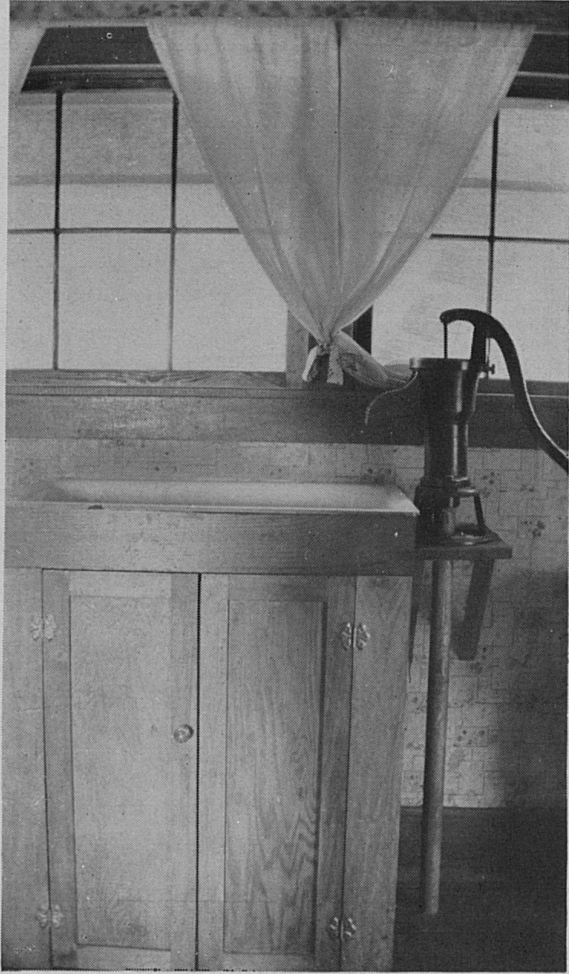
A 1937 "stream-lined" kitchen built by a Logan County homemaker with the help of the home demonstration agent.

Efficient housekeeping makes it possible for the homemaker and her family to have time and energy for some of the things that make for happier and fuller living. A conveniently arranged kitchen simplifies work and saves time and effort. This year, 849 kitchens were completely reorganized so as to make work areas compact, place equipment in a step-saving sequence, and supply storage facilities. Often improved equipment was added and attractive and easily cleaned finishes were applied. Work in 1,769 households has been lightened by the purchase of 3,251 and the making of 859 pieces of labor-saving equipment for the kitchen. Laundering, one of the hardest tasks of the household, has been lightened for 813 families by the use of better methods and the purchase of 763 pieces of equipment. In the care of the home, 1,757 women report improved methods of work with better equipment and more efficient supplies. Financial planning is the basis for happy family adjustments in

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many homes; and more careful buying made possible many more comforts in living than were enjoyed before. Improved health is a social and sanitation an economic asset made possible in countless homes by the extension program.



A pitcher pump and sink can be installed in almost any farm home at very little cost. Those who have them wonder how they got along without them.

*Clothing.* The clothing program is an aid to the homemaker with her clothing problems. During 1937 Better Buying of Clothing, Clothing Selection, Short Cuts in Sewing, and the Dress-Up Ensemble were major sub-projects in 12 counties. Style Trends was a minor sub-project in 31 counties in the fall and 33 counties in the

spring, helping homemakers to use to the best advantage the money available for clothing. Homemakers are realizing that good grooming is essential to health, appearance, position and poise. Information on good grooming, applicable to every member of the family, was brought to the homemakers in 12 counties. One of the purposes of the clothing program is to make the best use of what is on hand. Coupled with this is the knowledge that, while the purse of the average rural family had swelled a bit, not every family could purchase new clothing for all its members. Major subprojects on Renovation and Remodeling, in three counties, and the minor subprojects, Bringing Clothing and Millinery Up to Date, in 22 counties, taught the efficient use of clothing on hand and methods of remodeling to make it modish and becoming.

As a result of the clothing project, 20,795 individuals were instructed and 42,120 garments were made, having an estimated value of over 61,000 dollars. The interest in style and good grooming led to the renovation and remodeling of 8,093 hats and 11,604 garments, and the making of 795 new hats, all of which had a value of \$87,423.21; and dry cleaning done at home, according to instructions, had a value of \$6,000.

*Foods.* The need and desire for information about the general principles of food preparation were shown by the interest at training schools and the number of improved practices adopted. Improved practices in good preparation were adopted by 6,538 members of homemakers' clubs; in meal planning by 6,024 members, and in improving school lunches by 1,126 members. At each training school, a well-balanced lunch was prepared and served. During the demonstration, attention was called to the methods used to make the food easily digestible and to retain its food value, color and flavor. The same procedure was followed by leaders when giving the lesson at local club meetings during the succeeding month. Having well-planned, seasonable menus mimeographed for use at each meeting influenced leaders and club members to plan for a day's food supply instead of one meal at a time.

The total value of products canned by members of homemakers' clubs in counties with home demonstration agents was \$111,697.85. Great improvement was seen in the quality of products canned and

further evidence of improvement is shown by the fact that 455 steam-pressure cookers were bought during the year, to be used for canning non-acid vegetables and meat. One of the most noticeable improvements was in the variety of fruits, vegetables and meats canned. In the canning and storage budget, set up to meet the needs of the family, 19 varieties of fruits and vegetables are suggested but many homemakers canned a much greater variety. One homemaker said, "I canned 84 varieties so I would have some of everything I need for any type of meal I wish to plan." This variety included fruits, vegetables, meats, jellies, jams, preserves, pickles, relishes, etc.

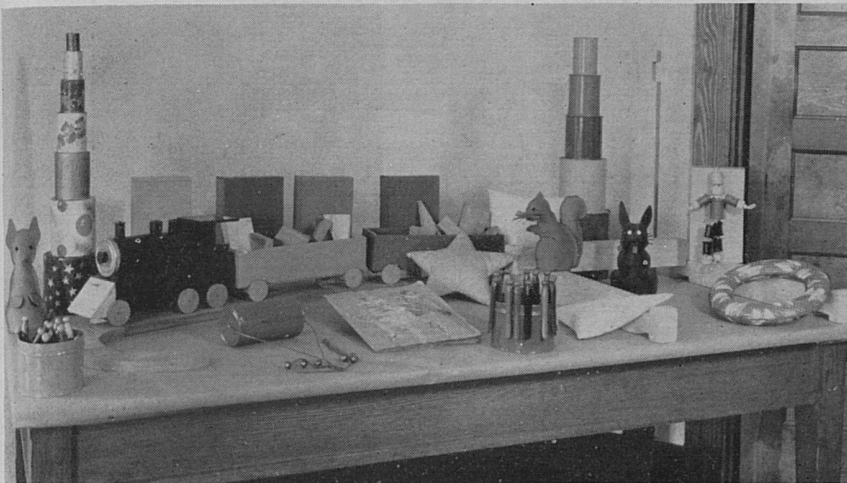
*Home Furnishings.* That the rural homemaker is developing a keen appreciation of the importance of making her home more attractive was indicated by the very fine interest shown each month when these homemakers met in groups with the home-furnishings specialist. During this series of group discussion and training meetings, the homemaker learns the best methods of making, remodeling, selecting, purchasing, and combining furnishings to produce harmonious surroundings in the home. She gains new interest in home furnishings, and new attitudes and self-confidence whereby she can express her own individuality in her home. Evidence of the need of and interest in this work are shown by the following: in 12,561 rooms the walls, woodwork and floors were refinished; 2,037 rugs were made by hand; 4,646 pictures were purchased, reframed, remodeled or rehung; 11,919 pieces of furniture were repaired, refinished or re-seated; 11,114 closets were made, remodeled, equipped or decorated; 14,172 window shades, curtains and drapes were made or reconditioned. This is only a part of the work being carried on in the home-furnishings program.

*Child Care and Training.* Special child training projects were conducted with groups of mothers of young children in 12 counties. Altho the groups have been necessarily limited in number, the influence of the project has been wide-spread as each member taking part in the discussions has carried information to others who could not attend.

Many mothers enrolled in this group, because they were confronted with problems of conduct and so-called "discipline." One of the most outstanding results of the project is the change in atti-



tude of the parent and the substitution of positive for negative methods of dealing with children. During the year 464 families reported adopting better adult habits with respect to the development of children; 280 families substituted positive for negative methods of discipline, and adjustments were made in home environment of 366 families for the physical care, recreation and comfort of children. Three hundred and twenty-five families used better judgment in selecting toys and play equipment, taking into consideration the age, sex, interests, abilities and development of the children; and over



Making toys in the home is a profitable and interesting study. Imagination and inventiveness are about the only limits.

400 families provided some recommended play equipment. One of the interesting results of this emphasis on better selected and constructed toys and play equipment was the preparation of an exhibit of toys (many of them home-made) and play equipment that interest, challenge and develop children, both mentally and physically. Such exhibits were displayed before Christmas, in several counties.

*Homemakers' Curb Markets.* The homemakers' markets in Kentucky are small but most of them have made a definite place for themselves in the towns in which they are located, Henderson, Hopkinsville, Bowling Green, Frankfort, and Pineville. The Henderson market has been in existence nine years, has an average of 12 saleswomen, and the sales for last year amounted to \$5,858.11. The total

amount taken in on all markets was \$11,325.72. These markets are open only on Saturday morning from 7:30 to 12:30, except the one at Henderson, which is open on Saturdays and Wednesdays during the summer and on Saturdays during the winter. The homemakers sell their surplus products or some superior quality of food product in the making of which they are adept. Income from these sales has enabled a number of homemakers to raise the standard of living for their families educationally, socially, and physically. The greatest problem of the markets is that of getting a permanent location, accessible to the public, and with adequate parking space.

*Recreation and Community Activities.* Recreation is a vital part of every well-rounded life, and farm people need to play together, to laugh, to sing and to enjoy organized recreation. In order to promote more and better recreation among rural people, the home demonstration service fostered a recreation program as a minor project in all home-demonstration counties and 445 clubs included recreation regularly at club meetings. It is sought to have a short recreational program at every regular club meeting and to have each organized club sponsor annually one or more recreational functions for the entire community. Club recreation includes games, competitions, folk games, stunts, pantomimes, dramatics, and music. For community functions, clubs usually sponsor one money-making event and one or more free socials. They have operettas, minstrels, home-talent plays, musical festivals, folk-game evenings, game evenings, fathers' banquets, mother-and-daughter parties, teas, picnics, tacky parties, pie and ice cream socials and various other events. During the year, 475 clubs held 736 social functions for entire communities.

As a further result of the recreational program, many families have become interested in better home recreation and have taught new games and provided game equipment for the entire family. Fourteen county or community choruses and six county dramatic clubs were developed. Sixty-three communities made recreational surveys and set definite recreation goals. Homemakers' clubs cooperated with 36 schools in providing playground equipment.

Four district camps and one county homemakers' vacation camp were held with an attendance of 498 campers. These camps

offer rural homemakers, at a very small expense, the opportunity for several days of social intercourse with homemakers from neighboring counties. The program includes music, handicraft, and such activities as discussion groups in the field of recreation and community life, folk games, camp fires, picnics, boat trips, water sports and games of all kinds.

Community activities of many kinds were sponsored by homemakers' clubs. Five community houses were built, 53 school or other community grounds were improved and 124 communities were assisted in providing library service.



The Henshaw Community House, Union County. Sponsored and financed by the Henshaw Homemakers Club.

*Kentucky Federation of Homemakers.* This association is composed of the county homemakers' organizations, and sponsors a program of interest and inspiration. State officers and directors are elected at the annual meeting of the organization which is held during the Farm and Home Convention at the University of Kentucky. The federation sponsors a series of district meetings to inform the women of the federation program and it also brings speakers of outstanding merit to the women in the counties. The Kentucky federation is a charter member of the National Home Demonstration Council, also of the Associated Country Women of the World. Mem-

bership in these organizations broadens the horizon of the women and keeps them in touch with matters of national and international interest to rural women.

*Reading in the Home.* This project of home reading is only three years old. Before the state-wide project was adopted some homemakers' clubs joined book-of-the-month clubs or had reading circles within their own groups, or subscribed to magazines which were passed around to the members or at intervals book reviews were given. Libraries are available to very few communities. The State Library Commission has cooperated by making it possible for communities or counties to have the use of selected books for three months or longer by paying express charges one way. There were 176 traveling libraries used by those counties which carried the reading project and which had no access to permanent libraries; and 318 homemakers made reading a hobby for the first time.

The second and third year of the Reading in the Home project—Know Your State Thru Books, and Know Your Country Thru Books—led 146 homemakers, in small groups, to visit points of historical interest, such as state or national shrines and parks which made real to them those things that had caught their interest in reading.

One county established its own library rather ingeniously. Each club in the county had a pay entertainment to raise the money for the library. The local Farm Bureau cooperated with the county association of homemakers to build the library shelves which were placed in the office of the home agent. A committee selects and approves all books bought or donated. The library has over 300 volumes including biography, travel, poetry, history, modern fiction, and the old classics, to suit the tastes of the readers. Fines for keeping books longer than the specified period are applied to the purchase of new books. A card system is used. The home agent distributes and collects books at club meetings or they may be obtained at her office.

*Junior Home Economics.* Clothing, Foods, Canning and Home Improvement are the home economics projects for the 4-H girls.

4-H CLOTHING. Rural girls are learning thru their 4-H club work to make individual, appropriate and economical costumes for themselves and other members of their families. They plan, select

materials for, and make costumes for specific occasions, as for home, school, camp, afternoon, party, street or travel. They wear and exhibit these outfits at county and state style dress revues and at fairs. As a part of their project work, girls are taught standards thru judging garments and outfits. There were 14,324 girls enrolled in a clothing project.

**4-H FOODS.** Foods work is gaining in popularity not only with girls but also with boys. This year, of the 3,400 enrolled in 4-H food projects, about 100 were boys. Food selection, meal planning, food preparation, table service and table etiquette are stressed in each project. The groups have breakfast, supper, luncheon, dinner, or baking as their project. Besides attending eight or ten demonstration and discussion meetings, the girls are required to try out at home, recipes and other improved practices learned at the meetings. Many girls are happier, healthier and make more cooperative and helpful members of their families as a result.

**4-H CANNING.** This year, 2,759 girls canned fruits, tomatoes, vegetables, meats, jellies and relishes, using the most improved methods. Girls begin their canning work by putting up such products as fruits and tomatoes the first year and work up to the products most difficult to can, and to the family food budget in the fourth year. At meetings, demonstrations are followed by discussion of well-balanced meals, canning for the winter, the emergency shelf, and other subjects.

**4-H ROOM IMPROVEMENT.** During the year, 155 girls improved their rooms. The improvements consisted in adopting a color scheme, rearranging furniture, reconditioning used furniture, and making simple accessories or other improvements which cost little money. At least ten improvements were made by each girl. This project may be extended over two years. Often from the improvement of the girl's own room she has been inspired to improve other rooms or, in some instances, the whole home.

Thru the 11,712 members of homemakers clubs, about one-third of whom served as leaders in some capacity, 37,299 farm and village families in 597 communities reported definite changes in practices due to the home demonstration program. These changes were reported by 9,675 girls between the ages of 10 and 18, enrolled in 4-H

homemaking groups. Leaders for both adult and 4-H homemaking projects were trained by specialists from the University in 833 training schools, with a total attendance of 2,940 leaders. In carrying on the home-demonstration program, 26,221 meetings were held with an attendance of 470,809 people. Home demonstration agents made 12,032 personal visits to farm homes, distributed 170,909 bulletins, showed educational exhibits at 368 different events, published 8,071 news articles and conducted 98 tours in which 3,108 people participated.

#### 4-H CLUB WORK

Enrollment was increased from 33,316 in 1936 to 37,512 in 1937, an increase of 4,196. Completions were 2.3 percent larger than last year being 80.7 percent. The growth of the 4-H program was due to:

1. More time given club work by county agents.
2. Increased number of home demonstration agents.
3. More efficient service rendered by assistant county agents.
4. Larger number of better-trained local leaders.
5. Increased interest in 4-H club work among all people of the state.

All but one of the 120 counties in the state had 4-H programs. The 4-H work was directed and supervised by 119 county agents, 46 home demonstration agents, 37 assistant county agents, four colored agents, and 4,562 local leaders.

*Local Leaders.* There were 4,562 local leaders, an increase of 432 over 1936. Of the adult leaders, 1,067 were men and 2,501 were women. Among the junior leaders, 379 were boys and 615 girls. From two to four general leader-training conferences per county were held in most of the counties. At these conferences, programs of work were built and general information was given by members of the State 4-H Club Staff and the county and home demonstration agents on methods and procedure. Training conference for project leaders in home economics were held in all but a few counties, under the direction of the women of the State 4-H Club Staff. Some counties were prevented from holding their early conferences because of the flood.

Three district conferences for volunteer leaders were held in

early summer, one in eastern, one in central, and one in western Kentucky, with a total of 334 leaders from 84 counties attending.

The 4-H club department presented certificates and pins to leaders in recognition of their services.

*Junior Week.* Junior Week was held on the campus of the University of Kentucky in Lexington, June 7 to 12, with 350 girls and 349 boys from 107 counties in attendance. This is the largest number ever attending Junior Week, an increase of 137 over 1936, with 12 more counties represented.

The theme of the Junior Week Program was "Know Kentucky." An attempt was made to bring before the delegates some information about Kentucky literature, music, industries, schools, old customs, parks, fish and game, etc., and club members showed a keen interest in the program.

There were 140 county champion demonstration teams entered in the state contest; 71 demonstrated in the Home Economics section and 69 in the Agricultural section. Each county held an elimination contest in selecting the team to represent the county in the state contest. Sixteen teams were entered in the State Terracing Team Contest.

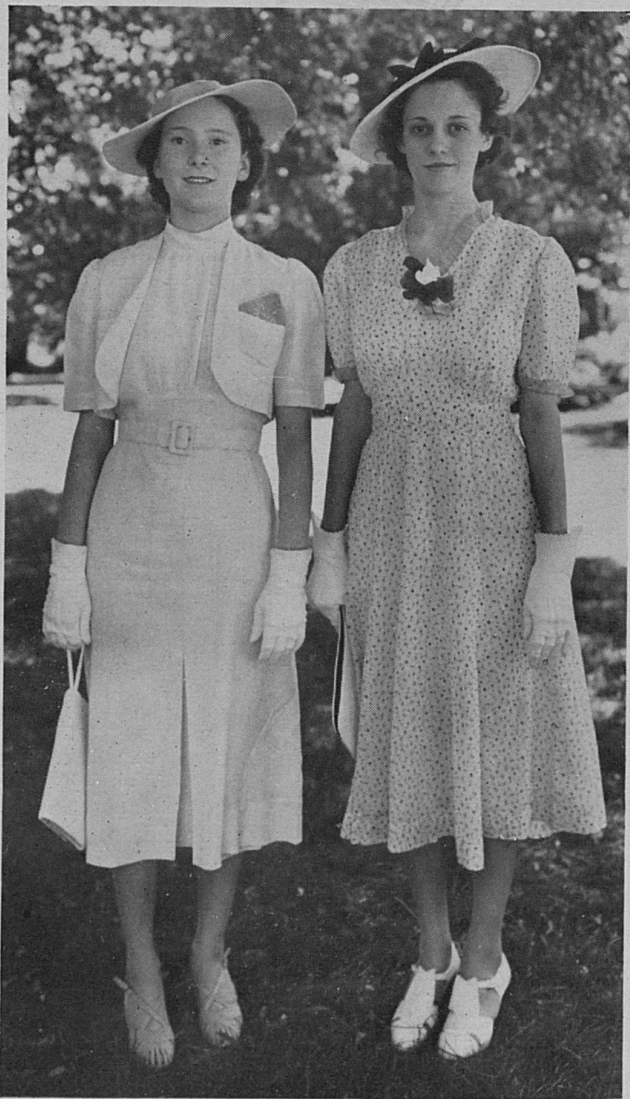
The State Health Contest created a great deal of interest in health improvement among 4-H club members. This year 61 boys and 61 girls entered the state contest, the largest number ever entered. The champions, Neil Wallis and Georgia Poynter, represented Kentucky in the National 4-H Health Contest held in Chicago, and Georgia placed in the "Blue Ribbon" group.

Sixty-three county champion girls in the clothing project entered their costumes in the State 4-H Club Style Dress Revue. This is the largest number ever entered, and the judges reported that the quality of the work had improved along with the quantity. Ollie Wilson, of Madison County, was selected champion and was awarded a trip to the National Club Congress in Chicago. She placed in the "Blue Ribbon" group in the National Contest.

Eighty-three girls participated in baking, canning, clothing and home furnishings judging contests at Junior Week; twenty-one entrants in the baking judging contest, fourteen in the canning judging contest, forty-two in the clothing judging contest and six in the

home furnishings judging contest. The home furnishings contest was held for the first time this year. Greater interest is shown in the development of these contests from year to year.

The 4-H Club delegates, leaders and agents (866 in number) had a tour in school buses to the State Capitol at Frankfort. They were welcomed by the Governor who invited them to visit the reception room in the Governor's Mansion.



4-H club girls wearing costumes that they made as a part of their club training.



*National 4-H Club Camp.* Kentucky sent four delegates to the National 4-H Club Camp at Washington, D. C. again this year.

*4-H Club Camps.* Thirteen District 4-H Club Camps were attended by 2,203 club members, 239 local leaders, and 7,450 visitors. Club members from 102 counties attended.

*Conservation Camp.* In addition to the regular District 4-H Club Camps, a Conservation Camp was held for the second time this year. This camp was held at the Boy Scout Grounds in Oldham County and was attended by 35 club boys from 22 counties. The program was intended to create interest in wild life and conservation.

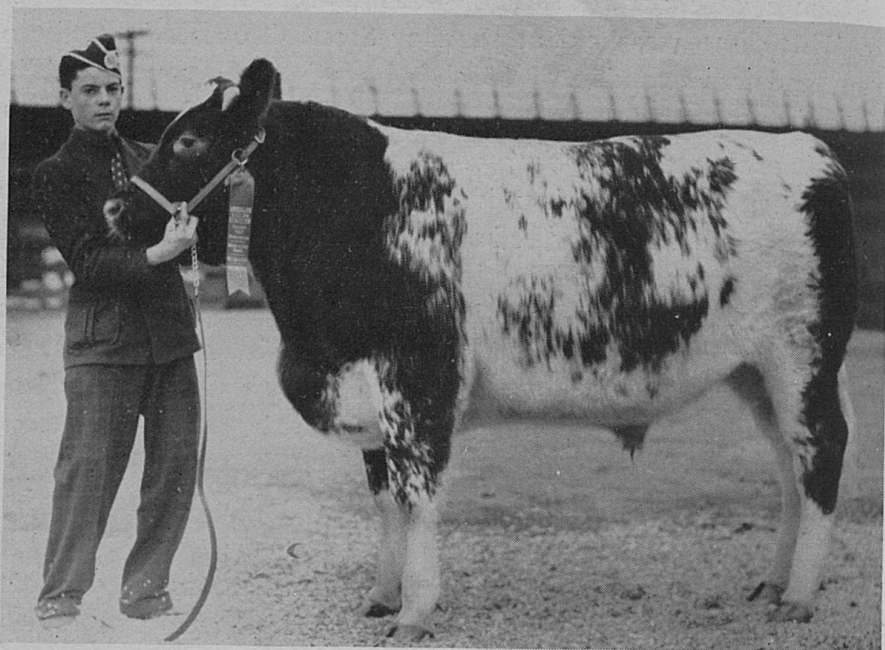
*Judging Schools.* In July, one-day schools were held for training 4-H club members in judging livestock. This was a new feature in the 4-H program. Schools were held at Mayfield, Morganfield, Bowling Green, Princeton, and Lexington, and were attended by 239 members representing 45 counties. Members of the Animal Husbandry Department gave the instruction. The purpose of the schools was to create interest among the 4-H boys in livestock judging and to begin their training for membership in the county champion team to enter the contest at the State Fair. The records of points made by teams in the State Contest this year were slightly higher than last year.

*State Fair.* The 4-H club department was maintained at the Kentucky State Fair on about the same basis as last year. There was an increase in the number of exhibits in clothing, canning, and swine, the canning exhibit being the largest on record. The three judging contests which have been part of the program at the State Fair for a number of years were a part of the program this year. Eighty-nine county champion teams participated in these judging contests: 47 Fat Stock Judging Teams, 17 Dairy Cattle Judging Teams and 25 Poultry Judging Teams. The State Champion Team in Dairy Cattle Judging was from Simpson County. This team represented Kentucky in the Dairy Cattle Judging Contest held at the National Dairy Show in Columbus, Ohio. The State Champion Team in Fat Stock Judging was from Bourbon County. This team represented the state in the Non-Collegiate Livestock Judging Contest in Chicago.

*Tri-State Lamb Show.* A Tri-State Lamb Show was held at the

Stock Yards in Evansville in May, and the lambs from Kentucky entered in this show won their share of premiums offered.

*Tri-State 4-H Club Swine Show.* A number of hogs from Kentucky were entered in the Tri-State 4-H Swine Show held in Evansville in August. Exhibits from Union, Henderson, and Daviess counties won a large percentage of premiums.



Kendall Keller, Bourbon County, and his champion Shorthorn calf shown at the State Fat Stock Show in 1937.

*State 4-H Club Baby Beef Show and Sale.* Last spring, 4-H club members in 41 counties put on feed 1,199 baby beeves. A total of 1,021 calves were shown and sold in the State Show and Sale held in November. The grand champion carload sold for \$19.50 per hundred and the champion individual, weighing 910 pounds, brought 35 cents per pound. The 4-H boys again won the state championship on car lot exhibit in competition with the best adult feeders in Kentucky and Tennessee. The premiums awarded 4-H club members in this show, including prize trips, totaled \$4,150.00.

The baby beef project is interesting many boys, not only in keeping and maintaining a high standard of beef cattle, but also in

raising their own calves for the show from purebred dams and sires. Ninety-four club boys this year raised their calves which were entered in the State Baby Beef Show and Sale. To encourage the production of calves by 4-H club boys, a breeders' ring is provided.



Grand Champion Carlot of Cattle from Garrard County at the Fat Stock Show in 1937.

*National Club Congress.* Twenty-six 4-H club members attended the National 4-H Club Congress, November 27-December 3. Kentucky had entries in the Style Dress Revue, clothing, room improvement, canning exhibit, the Non-Collegiate Livestock Judging Contest, and two entries in the National Health Contest. Miss Ollie Wilson of Madison County received the "Blue Ribbon" in the Style Dress Revue; Miss Georgia Poynter of Rockcastle County, was one of the four "Blue Ribbon" girls in the Health Contest; Miss Margaret Guley of Garrard County and Miss Doriselwood Lemons of Harrison County, were awarded "Blue Ribbons" in clothing exhibits and Miss Nora Frances Cecil of Morgan County was among the "Blue Ribbon" winners in canning exhibit. Red ribbons were awarded to Misses Frances Morgerson of Fayette County in canning, Annabel Bracey of Crittenden County in clothing, Ruth Lowry Lewis of Oldham County and Betsy Korfhage of Jefferson County in room improvement.

*District 4-H Club Tobacco Shows and Sales.* Nine District 4-H Club Tobacco Shows and Sales were held for 4-H and Utopia club members this year. In all, 1,411,396 pounds of tobacco were exhib-

ited and sold in these shows and sales, and the price was quite satisfactory.

*Radio.* The State Achievement Radio Program was broadcast on November 6 with a large number of counties holding their county achievement days at the same time. According to reports 42,272 club members, leaders and friends of 4-H club members in 104 counties listened to the achievement program.

*Utopia Club Work.* Utopia Club Work is serving older youth in a very practical way. The young men and women in a community meet together and with the help and guidance of the county and home demonstration agents and the State Field Agent, formulate a program that meets their needs economically and socially. Each member selects some Agricultural or Home Economics project in which he or she is individually interested and reports results at the close of the year. Tours are made to the projects so that each member may see what the others are doing. The growth of Utopia Club Work has not been rapid because of lack of time to press the work on the part of county extension agents. A decided increase in interest was shown, however, and more requests for help came to the College than could be given.

A social, educational program is absolutely necessary for this group, but experience has shown that there must be an economic phase as well. Groups that take an active interest in agricultural and home economics projects enjoy the work and are benefited by it. Groups not participating in such programs lose interest and fail to be benefited.

#### EXHIBITS AND RADIO PROGRAMS

A comprehensive educational exhibit made at the State Fair filled an entire building and was visited by 25,683 persons during the week. Regular educational radio programs on agriculture and home economics were broadcast thruout the year thru the facilities of Radio Station WHAS of Louisville, from studios on the University of Kentucky campus. These programs consisted of talks by staff members covering every phase of agriculture and home economics, answering questions from farmers and homemakers, and news comments on the doings of Kentucky farm folk. Visual educational

material including motion pictures, film strips, slides, charts, etc., was furnished to 66 counties. The annual Farm and Home Convention was cancelled because of the devastating flood.

### PUBLIC INFORMATION

The Department of Public Information furnishes a nine to eleven page weekly service of agricultural information to 200 newspapers in Kentucky and to many daily and farm papers published in other states but having wide circulation in Kentucky. "Spot" news was furnished to newspapers, and announcements and news items concerning the Agricultural Conservation Program were disseminated. Special articles were sent to county agents, and newspapers were given information on the State Fair, fat cattle show, Junior Week, Farm and Home Convention events, field meetings, et cetera. Each Wednesday a 15-minute review of "Doings of Kentucky Farm Folk" was presented over radio station WHAS. A consolidation was made of the bulletin and circular publishing section of this department, thereby centralizing and expediting the editorial work.

### AGRONOMY

*Lime Materials Used.* In 1936 Kentucky ranked third among the states in the amount of lime materials used by farmers, and first in the amount used per acre of cropped land. The figures for 1937 approximated very closely those of 1936. The results for the year were as follows:

31,018 men in 118 counties used	734,411 tons of ground limestone
2,052 men in 53 counties used	76,170 tons of marl
1,226 men in 39 counties used	8,851 tons of burned lime
<hr/> 34,296 men used a total of	<hr/> 819,432 tons of lime materials

These reports show that 51,795 tons less ground limestone, 612 tons more marl, and 1,397 tons more burned lime were used in 1937 than in 1936, and 49,786 tons less total lime materials.

In 1937, 256 portable crushers were operated, in 63 counties, and 86 stationary crushers, in 54 counties. Probably two-thirds or more of the ground limestone produced by the stationary crushers was delivered to farmers by truck. Some truckmen in both eastern and

western coal fields are now using their trucks for taking back ground limestone to farmers in these coal fields, on returning from delivering coal.

*Marl.* Farmers used 612 tons more marl than in 1936 which was the largest previous year. Marl was handled in a commercial or cooperative way in twelve counties; that is, men who owned or leased marl beds opened them and loaded marl for farmers or for truckmen who delivered it to farmers in adjacent neighborhoods at very reasonable prices.

From one commercial marl bed five miles south of Lancaster, more than 600 truck loads were distributed to nearby farmers. The bed is several acres in area, 25 to 35 feet thick and covers practically the whole top of a hill. All that is necessary to get this marl is to plow it up and load it into the trucks. The marl was made available to farmers at \$1.00 per truckload, and the trucks averaged about 6 tons per load.

*Burned Lime.* The use of burned lime increased 1,397 tons over the tonnage used in 1936. In 28 counties, 247 lime kilns were burned, an increase of 47 kilns over 1936.

*Phosphate.* An outstanding accomplishment was the use by farmers cooperating with the Agricultural Conservation Program, of 18,588 tons of 43 percent triple superphosphate. Farmers sent orders to the Tennessee Valley Authority for 25,000 tons, 6,000 tons of which were not delivered because of a shortage. This material was offered to Kentucky, Tennessee, North Carolina, and Virginia in the east central region. The total deliveries to all four states amounted to 24,636 tons. The total sales of all commercial fertilizers in Kentucky increased from approximately 70,000 tons in 1936 to approximately 108,000 tons in 1937. This is an indication of the effect of experimental work and Extension teaching during the past quarter century.

*Soil Testing.* Because of the increased interest in the use of lime and phosphate, an Extension project on testing soil for lime and phosphate requirement was started and, in cooperation with the soils laboratory, testing solutions were furnished to all county agents. More than 90 percent of the agents used these materials. Seventeen counties were represented at Junior Week by demonstra-

tion teams showing the proper procedure for testing soils. These tests are especially valuable in the Bluegrass counties where the soils differ so much in their lime and phosphate content.

*Cover Crops.* Cover crops are the best protection against erosion and leaching on fields tilled during the summer. Approximately 82 percent of cleaned tilled land in Kentucky is left unprotected during the winter. In an intensive drive to increase the use of winter cover crops, 24 cooperative demonstrations were started, in 12 counties; fifty thousand leaflets entitled "Cover Crops" were distributed; a cover-crop exhibit was made at the State Fair, and two radio talks were given on that subject. A large increase in cover crops resulted. Almost 50,000 acres of crimson clover were seeded in 1937 by 7,000 growers. The acreage of barley increased rapidly because of the introduction in recent years, of two cold-resistant varieties, one a Kentucky development, designated Kentucky No. 1, the other from Missouri, Missouri Early Beardless. The increasing acreage of barley may replace a part of the present corn acreage. A small acreage of Kentucky No. 1 and Missouri Early Beardless barley is being grown for certification in 1938.

*Hybrid Corn.* Approximately 6,225 acres of corn were grown by 750 farmers, from hybrid seed. The acreage is limited by the supply of seed of adapted hybrids. During the summer of 1937, 48 acres were used to produce double cross hybrid seed from which over 1,500 bushels of seed will be available for planting in 1938, enough to plant 12,000 acres. Hybrid seed corn was produced by nine commercial growers and 24 Utopia Clubs. Of outstanding value in hybrid corn work were the ten cooperative demonstration tests conducted in as many counties by interested farmers who planted hybrids from Kentucky and adjoining states. In every case the Kentucky hybrids gave the highest yields, averaging about 17.5 percent above local varieties. Not only was the yield higher, but also the quality was better. The use of hybrids, on account of their larger yields, earlier maturity and more erect stalks, is expected to aid in the program of a smaller corn acreage and more cover crops.

*Locust-Seed Planting.* This activity, tho of minor importance at present, proved popular. One hundred pounds of seed were furnished by the State Forestry Department to be distributed to 4-H

Clubs. Seed was sent to 25 counties and it is estimated that over 350,000 seedlings were produced, tho several of the nurseries were damaged or destroyed by dry weather.

*Lespedeza.* Approximately one million tons of lespedeza hay were harvested for home use in 1937. Too much of this crop is No. 2 or No. 3 hay. Meetings were held in 15 counties to discuss the proper stage of maturity at which cutting should be done in order to produce the best quality of hay. At the same time, methods of curing and storing the hay to preserve its quality were discussed. By cutting at the right time and handling properly it is possible to make lespedeza hay of No. 1 grade or a No. 1 extra leafy grade. This would add one to three dollars per ton to the feeding value of the hay, either for home use or for sale. Such improvement in quality naturally would result in a more ready sale for the hay in favorable years, when there is a surplus.

*Seed Improvement.* The work of the Kentucky Seed Improvement Association was continued. It comprised the certification of seven wheat crops, two crops of hybrid corn, four of open-pollinated corn, three of Korean lespedeza, one of *Sericea lespedeza*, one of soybeans and 17 of root-rot-resistant white burley tobacco seed. Part of the tobacco seed was strain Number 5 and the remainder strain Number 16, developed by the Kentucky Experiment Station.

*Pasture Improvement.* The attention being paid to meadow and pasture improvement is shown by the number of farmers practicing improved methods.

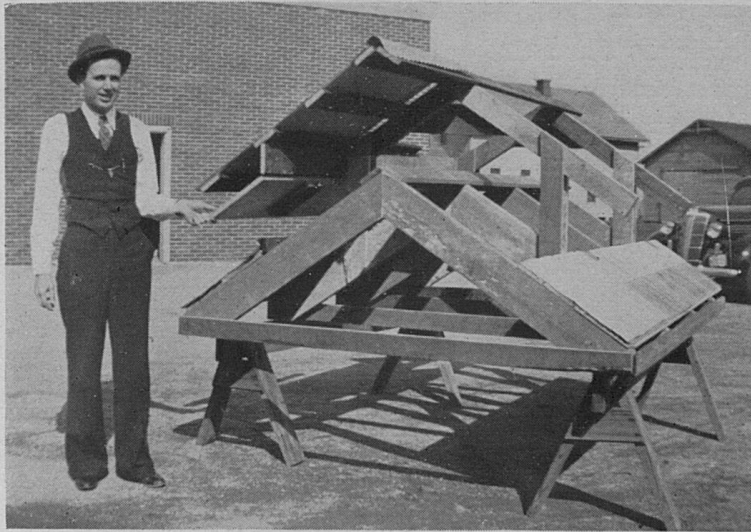
There were 12,292 growers who harvested 12,000,000 pounds of Korean lespedeza seed, 78,886 who harvested hay, and 87,533 who sowed 8,314,940 pounds of Korean lespedeza seed. A considerable amount of Kobe and of common lespedeza was grown and used, and 25,186 growers sowed lespedeza on new or on old Bluegrass pastures to reinforce them. In 104 counties, 32,685 acres of fall-sown alfalfa were sown by 5,704 growers.

*Tobacco.* The tobacco program was divided into five parts: soil improvement; introduction of new varieties; barn improvement; curing; and sorting demonstrations. One of the outstanding successes was the introduction of Number 16 White Burley thruout Kentucky. Seed was sent to approximately 75 counties and, from



sales reports, this was a high-yielding variety of quality equal to the older, established varieties. Returns were equal to those of any other variety with which it was compared, or better. Yields of 1,500 pounds or more were frequently reported.

The barn improvement program was state-wide. More than 1,400 old barns were remodeled with full ridge ventilators, and 1,740



This illustrates the proper way to make a ridge ventilator which adds so greatly to the quality of tobacco cured in barns equipped with proper ventilators.

new barns were built according to plans furnished by the College of Agriculture. One county reports 50 barns built or repaired, and 49 being ventilated according to plans furnished by the College of Agriculture.

The curing program expanded materially in 1937. During the curing season—from early August thru September, in the Burley Belt—more than 1,000 tons of coke were burned daily in tobacco barns, and the total amount used was in excess of 90,000 tons.

There was keen interest in sorting demonstrations in the fall of 1937. In Burley tobacco, thru the cooperation of the United States Department of Agriculture, federal graders were used with workers from the Extension Service to give 322 sorting demonstrations, in 93 counties, before approximately 10,617 growers. Every important Burley county was reached with this work. In the dark-tobacco

counties, in both fire-cured and air-cured tobacco, about 150 demonstrations were given, in 17 counties, reaching more than 4,000 growers.

#### AGRICULTURAL ENGINEERING

Emphasis was placed on Land Drainage, Erosion Control, Rural Electrification, Water Supply, Sewage Disposal, Farm Buildings, and 4-H Club Work.

*Drainage.* Thru the organization of drainage districts which have constructed dredge ditches, 275,000 acres of Kentucky bottom land were provided with surface drainage. These ditches have not been maintained and, unless a system of maintenance is established within the near future, the investment in them will be largely wasted. Dredge ditches can be economically maintained when an efficient organization is responsible for the expenditure of funds. Eight counties in Western Kentucky served by CCC Camps have been directed towards establishing a practice of dredge-ditch maintenance which, in most counties, has been sadly neglected.

In the early spring, in cooperation with the Bureau of Agricultural Engineering officials, a drainage school for drainage-camp technicians was held at the University, designed to give drainage engineers a working knowledge of the best soil maintenance practices. County agents of the eight counties served by the camps assisted project superintendents with the selection and organization of drainage projects.

The average cost of redredging established organized projects was \$2.65 per acre to the Bureau. This included man labor of CCC enrollees and equipment charges. The commercial value of the work was estimated at \$3.70 per acre. The 21 projects covered 49,780 acres.

Tile drainage demonstrations were established under supervision of the College, in Eastern Kentucky counties, in which demonstrators kept records of the cost of the work and results obtained. In many cases this year, as in past years, the first year's increase in yield paid for the total cost of the drainage work.

Counties participating .....	39
Acres benefited .....	12,884
Number of farms .....	559
Value of service or saving .....	\$76,855

*Erosion Control.* By far the greatest soil losses occur when land is used for cultivated crops and since practically the entire surface of Kentucky is rolling or hilly and 3,400,000 acres are cultivated in corn, tobacco and miscellaneous crops which do not protect the soil from erosion thruout the growing season, there is great need for engineering practices which aid in controlling erosion during this period, and in the establishment of grasses and winter cover crops.

Power terracing equipment purchased in 1935 and 1936, in 10 counties, by Soil Improvement Associations, for cooperation with Soil Conservation Service CCC Camps, was not only effective in es-



In Kentucky 10,226 acres of land were terraced and 129 farm reservoirs were constructed. This terracing unit was designed specially for Kentucky conditions.

establishing the practice of terracing but was also of service to farmers in constructing open ditches, building reservoirs for stock water and grading farm roads. In ten counties, \$37,702.01 worth of equipment was purchased, of which amount only \$7,330.72 remains unpaid. The equipment in five counties has been paid for in full.

The Shelby County Association employed a graduate engineer to supply engineering service as well as equipment service. Eighty per-

cent of the income after expenses have been paid goes to the engineer for his services and 20 percent to cover depreciation. The charge for the complete service has been increased from \$3.00 to \$4.00 per hour and another increase to possibly \$5.00 per hour is being considered for reservoir work, since farmers and the association are of the opinion there is still too wide a margin between cost of association service and that of regular contractors. Outlets for terracing work are not a problem, since natural draws are already sodded with bluegrass, or sods can be established easily after terraces have been constructed.

The terracing work in counties outside those owning power equipment was done with horse or farm tractor power and home-made or light commercial terracers. Engineering service was provided by farmers themselves with or without the assistance of county agents or by 4-H boys who have received training in the 4-H terracing contests. During the year, 10,226 acres of land were terraced on 424 farms in 35 counties. All fields terraced were limed and treated with phosphate where needed and a rotation was established which includes legumes and grasses.

The following is a summary of the terracing work in TVA counties, with power terracing units:

County	Total cost Farmers' bill	Linear feet terraced	Acres benefited	Cost per 100 ft.	Cost per acre
Calloway .....	\$1,290.04	191,115	853	\$0.675	\$1.51
Graves .....	2,432.61	256,080	1,011	0.950	2.46
McCracken .....	405.15	65,000	240	0.620	1.69

The following is a progress report of terracing done in TVA counties, with equipment owned by individual farmers:

Counties	Linear feet terraced	Acres benefited
Graves .....	34,120	66
Livingston .....	14,000	10
Lyon .....	2,250	5
Marshall .....	1,550	5
Trigg .....	Not reported	40

McCracken County this year used their tractor for other work and purchased a 3-disk plow and a disk. The following is a summary of other work:

Kind of work	No. jobs	Acres	Hours	Cost	Total cost farmers' bill
Disking .....	13	450.5		\$0.75 acre	\$337.87
Plowing .....	8	157.5		2.00 acre	315.00
Road grading .....	5		21	2.25 Hr.	47.25
Ditching .....	1		8	2.00 Hr.	16.00

*Contour Cultivation.* Maintenance demonstrations were held in TVA counties demonstrating the proper method of plowing terraced fields to maintain the height of terrace ridges and keep the terrace channels open. Following the demonstrations, instructions were given for planting row crops with the contour or terraces to aid in the control of erosion. Where lands too steep for terracing must be broken for crops, planting on the contour is recommended as an aid in the control of erosion.

*Contour Furrows.* Contour furrowing is recommended on permanent pasture land too steep (above 12 percent slope) or too irregular for terracing, particularly on land that is to be reforested.

*Farm Reservoirs.* On many farms, providing an adequate water supply is a critical problem. This is especially true in Western Kentucky where shallow wells are inadequate and deep wells are too expensive to drill. For these reasons, farmers have resorted to the practice of building farm ponds. Until recent years the most common type was the excavated pond with little drainage area, depending on direct rainfall or fill by rise of ground water level during the rainy season when built in impervious soil. Ponds dependent on such sources of supply are usually small and do not hold enough water to carry thru long dry periods.

The most satisfactory method of constructing reservoirs or ponds is by building an earth dam across a narrow draw between two hills where a natural ridge forms a part of the dam when properly located and designed. If such structures are to be successful they must be planned and constructed with considerable care in order that water may not seep under the dam from the reservoir and an adequate

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Cost per acre
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spillway must be provided to take care of excess water. The agricultural engineers assisted in a water-conservation program by constructing a considerable number of farm reservoirs with equipment purchased by Soil Improvement Associations for terracing work. The following equipment has been used for constructing ponds:

A No. 2 terracer and 40 horsepower Diesel caterpillar tractor,

A  $\frac{3}{4}$  yard drag line,

A  $1\frac{1}{4}$  yard rotary scraper and 40 horsepower caterpillar tractor.

Preliminary figures indicate the cost of moving earth into a fill in Shelby County, with a No. 2 terracer and 40 horsepower Diesel tractor operated at a charge of \$3.50 per hour, was \$0.104 per cubic yard. The cost of moving earth for farm reservoirs, with a drag line for which farmers paid an hourly charge of \$5.00, approximately \$0.06 per cubic yard. The cost of moving earth into a fill, with a 40 horsepower Diesel caterpillar tractor and rotary scraper, in Graves County, was approximately \$0.104 per cubic yard, with a charge of \$3.00 per hour plus moving charge.

Graves County developed the largest farm-reservoir program in the Valley Counties this year, constructing seventeen reservoirs on fifteen farms.

*Rural Electrification.* The work of the Rural Electrification Administration in promoting the organization of cooperative projects in Kentucky created a demand on the part of organizations and individuals in 68 counties for information on procedures for providing service, and the utilization of electricity after the service was established. The spread of interest in the work from one county to another resulted in requests that procedure for the organization of projects be explained in public meetings. At the beginning of 1937 about 10,000 farms were served from power lines. The recent approved projects of the REA and utility companies will serve 11,950 customers in 43 counties, and involve the building of 2,859 miles of line at a cost of approximately three million dollars. Surveys have been made in 25 other counties for the purpose of planning for electrical service for 12,495 customers on approximately 3,086 miles of line.

*Farm Buildings.* That the interest of rural people in more adequate farm buildings continues to increase is indicated by the large

number of requests for assistance. Farmers were given information on farm buildings, thru personal interviews, demonstrations, radio talks, correspondence, and the distribution of circulars and blue prints of plans. Some 1,252 sets of building plans were sent upon request. The extension service gave assistance in the erection and remodeling of approximately 6,000 buildings.

Demonstrations of the construction of tobacco-barn ventilation systems were held on farms in three counties. Over 1,300 ridge ventilators and 1,740 new tobacco barns were built. Leader-training meetings on home storage structures and equipment were held in five counties and 125 leaders attended.

*4-H and Utopia Clubs.* Approximately 92 boys attended training schools conducted by extension engineers for 4-H Club members who desired to participate in county terracing contests. Eleven counties were represented in the state terracing contest held during Junior Week. The boys of the winning team, from Grayson County, reported that they had actually terraced 25 acres on their home farms. The team from Fulton County also surveyed a number of acres of land to be terraced in that county. Utopians in Barren County completed a farm water and sewage-disposal survey of 24 farms. Two pitcher pumps and several sinks were installed as a result of their work.

#### ANIMAL INDUSTRY

*Swine.* In 108 counties reports indicate an aggregate saving of \$170,327 by 6,697 hog raisers who fed properly balanced rations as a result they cooperated in the extension program. A continuously increasing number of hogs are being finished for market during periods of peak prices, a point long stressed in projects dealing with management and feeding. The purpose of ton-litter feeding is to finish hogs in the shortest possible time consistent with economical production. Reports on 17 of the more than 50 litters fed in the ton-litter contest show an average selling price of \$11.50 per hundredweight, considerably more than would have been received had the hogs been marketed in October or November. This is an average income per litter of \$76.99 above the value of feed, pasture, and labor. In many of the communities where ton-litters were produced, tours were made and demonstration meetings were held.

During the Fall and early Spring, meetings were held in twenty counties for the purpose of discussing with producers the importance of providing year-round pasturage for their hogs. Much Dwarf Essex Rape was sown as a result of this effort, and in one major hog-producing county, more rape was sown than in any previous year.

Assistance was given in about fifteen counties in instructing 4-H pig-club members how to feed their pigs for market. Many of these boys and girls showed pigs in the Tri-State Hog Show at Evansville, Indiana. Of the 639 hogs shown, more than 500 were from Kentucky.

In 108 counties the total number of farmers practicing swine sanitation is estimated at 2,247, and the total number of hogs raised by them at 44,131. The saving in corn per hog raised to marketable weight was found to be as much as two bushels as compared with those fed on unsanitary premises badly infested with parasites. In these counties, 1,952 purebred breeding sows and 792 breeding boars were bought by farmers in 1937 for use as breeding animals. In one county in the Purchase district, 87 purebred animals are the offspring of six breeding animals bought early in the spring.

The Packer-Type Special classes at the State Fair, open only to Kentuckians, has in four years done much to assist in making hog raisers and breeders type conscious, with the result that hogs of desirable type for breeding are increasing in number.

Pork-cutting-and-curing demonstration work was continued with fifteen demonstrations given by the field agent. The total attendance at these demonstrations was 416. Aside from demonstrating the preparation of desirable cuts for curing, information was given on curing and storing meats, and the preparation of sausage and other pork products. Also, suggestions were given on the preparation and storage of lard. The agents of 108 counties report that 5,870 farm families cure home pork according to those recommendations.

*Beef Cattle.* The year was one of the most profitable that the beef cattle producers of Kentucky have ever had. Cattle feeders in every section of the State had the opportunity to attend meetings where cattle-feeding problems were discussed. Forty of these meetings were held, eight of them field meetings, each attended by cattle-



men from several counties. Feeding, management and market-outlook questions were discussed. The Director of Research of the National Livestock Marketing Association attended and spoke at six of these meetings. Where men used proper methods in feeding and management and also utilized marketing information they made excellent profits. In some cases the net profit per steer was over \$80.



Marketing good pastures thru the medium of well-bred cattle that top the market is a profitable enterprise. It is a farming system that makes the land better instead of letting erosion do its devastating work.

The Ohio River flooded 61½ million bushels of corn in cribs. A quick educational campaign was carried on for salvaging this flooded corn. Plans were made whereby this corn was taken out of the large cribs and placed in small wire pens or rail cribs that were well ventilated. The corn in these cribs was not more than two feet away from the air in any part of the crib, thus allowing it to dry at a low temperature without heating, sprouting, molding or rotting; consequently nearly all of it was saved.

About 30,000 cattle were fed on distillery slop. Demonstrations in the proper balancing of rations with distillery slop in cattle feeding had been carried on for two years. In 1937 practically all the

cattle on distillery slop were fed supplements to balance the ration. Distillery slop has a relatively high percentage of protein in proportion to the carbohydrates or fattening nutrients. It is also low in calcium content. Practically all cattle that were fed distillery slop had this feed balanced with roughage and in many cases some carbohydrate feeds. All cattle of which the College had record also had free access to ground limestone. This enabled the cattle to make much better gains than they would have made otherwise.

The 16th Annual Louisville Fat Cattle Show was one of the best and most satisfactory ever held. A total of 1,837 head of cattle were shown in the different divisions, the average weight being 859 pounds. They sold at an average price of \$11.20 bringing a total of \$175,619.

Many new beef herds were established in the State. More beef cattle are being fed as baby beeves, and beef herds headed by purebred bulls are increasing in the State. Extension agents aided in placing purebred beef sires on 487 farms and purebred or high grade females were placed on 336 farms.

Five beef demonstrations were given, with an attendance of 162. Increasing interest is being manifested in beef for the farm family and considerable beef is being canned and preserved by curing.

*Sheep.* Special efforts were directed to bring in an improved type of breeding ewe for Kentucky and to the control of internal parasites, particularly stomach worms. Over a period of years it has been demonstrated that certain types of cross-bred range ewes are more profitable than ewes developed by saving ewe lambs, especially the late ones. Producers who save ewe lambs invariably save those that cannot be sold at a good price during the regular marketing season. These late and inferior lambs do not develop into profitable breeding ewes. Records of numerous flocks have shown conclusively that highest production records come from crossbred ewes bred to purebred rams of the popular mutton breeds, especially the South-down and Hampshire. At first there was prejudice against these range ewes and progress was slow. Now there are several hundred thousand of them in the State, more than 100,000 of which were brought in this year. There were some undesirable ewes among them, but the extension program, thru demonstrations, field meet-

ings, tours, circulars, radio talks and news articles familiarized sheep raisers with the various types of ewe so that dealers found it very difficult to sell ewes that were unsuited to Kentucky conditions.

The campaign for improved breeding ewes for Kentucky was very successful. Several thousand farmers attended a series of meetings held on farms of sheep raisers during the summer. Different types of ewe were shown and their relative value for lamb and wool production was explained, and thousands of ewes were placed in



Blonded stock find ideal conditions in Kentucky bluegrass pastures. These are yearling Southdown ewes in Scott County.

counties that had heretofore had very poor types of native ewe. The results of this work became so well known that more than 400 sheep raisers from other states made tours of sheep raising sections of Kentucky to study production methods.

In connection with the campaign for improved breeding ewes and the elimination of the late, parasite-infested ewe lambs as breeding ewes, an intensified parasite-control campaign was carried on, showing how to develop in the fall and early winter, lambs that were not in condition to market during the usual summer marketing season. A study previously begun to find the best methods of develop-

ing these lambs was continued and this information will be published together with that obtained in regard to feeding western lambs.

As in past years the number of rams placed with farmers was limited only by the supply of rams of those breeds which the College has shown to be most profitable under Kentucky conditions. Approximately 400 Southdown rams were brought from Canada and northern states. The purebred sheep industry has been more than trebled (as the result of extension activities) and the quality has been greatly improved. The work during the year on this phase of the program consisted of demonstrations to show the results of using desirable types of rams and also to show which kinds of rams were most profitable on various types of ewes. Tours were arranged for groups of farmers interested in obtaining rams and advice was given on the kind to select. Many county groups bought their rams in connection with these tours. These demonstrations, together with a new circular, "Rams for Commercial Flocks," timely radio talks and press articles did much to enable farmers to avoid buying inferior rams or sheep of any kind that would carry foot trouble or other disease to their farms.

Farmers were assisted in starting twenty-one new flocks of purebred sheep from which rams can be obtained in the future. Experience has demonstrated that one of the best ways to ensure the increased use of purebred rams in any section is to interest a group of successful sheepmen in building purebred flocks of the breed or breeds suited to local conditions. Without such direction and help it has been observed that farmers often start with the wrong type of purebred sheep with the result that they find the enterprise unprofitable and soon become discouraged and disperse their flocks.

The series of useful extension circulars on topics of importance to sheepmen has been enlarged. The circulars published during 1936, "Rams for Commercial Flocks," and "Ewes for Commercial Flocks," have had wide distribution and are being revised.

#### DAIRYING

At the close of 1936, seven dairy-herd improvement associations were in active operation. In 1937, these were reorganized and four additional associations were started, three of them in the area that supplies the Louisville market. Directors of the Falls City Coopera-

the Milk Producers Association have felt for some time that something should be done in the Louisville area to help the dairymen to help themselves. This group decided that the wise thing to do would be to cooperate with the University in promoting the dairy-herd improvement association program. They subsidized the newly organized associations in that area and it is anticipated that within a very short time four more associations will be organized besides the three that are already established.

The dairy-herd improvement project finished 175 demonstrations and obtained between 3,000 and 3,500 individual cow records of milk and butterfat production, feed costs, and income. The dairy herd improvement association project provides the basis of the extension program of work in dairy production.

The permanent identification and record-keeping project received considerable attention during the latter part of the year. This project is sponsored by the Bureau of Dairy Industry and is designed primarily to make the records kept by the dairy-herd improvement association supervisors more complete for the individual dairyman. The testers were instructed in methods of obtaining this type of information; and records of identification and production have been coming in from each of the associations to the state office where they are checked before being sent to Washington to be permanently recorded in the Bureau's files. This is a very important addition to the program and when in full operation the records made available will be of untold benefit to the cooperating dairymen.

*Proved Sires.* The proved-sire phase of the dairy-herd improvement program received considerable stimulus in Kentucky as a result of the adoption of the permanent identification and record keeping system. More sires were proved in Kentucky during the past year than in any other year. Forty herds in Kentucky are cooperating in the permanent identification and record-keeping project and, as a result, dam-and-daughter records are accumulating in Washington where bulls will be proved automatically and outstanding brood cows will be identified. Complete data for analyzing herds in order to identify the improved lines of breeding are also accumulating.

*Dairy Feeding Schools.* Dairy feeding schools have met with favor. Those schools were held during the winter in selected areas where sufficient interest was evident. Attendance was good at these

meetings and much good has resulted therefrom. Dairy leaders' training meetings have been held in several localities.

*Dairy Demonstration Herds.* This project is designed to reach small dairymen or dairymen in areas not reached by dairy-herd improvement associations. Records are summarized and Smith-Hughes teachers, county agents and dairy leaders are supplied with the necessary record forms.

*Dairy 4-H Club Work.* A greater portion of the Extension Dairyman's time was devoted to dairy 4-H Club work. The Extension Dairyman assisted (1) in the location of satisfactory calves; (2) in holding dairy 4-H Club tours and fitting and showing demonstrations; and (3) in the judging of dairy 4-H Club classes at local, county, district and state fairs.

#### POULTRY

The poultry program was handicapped by the unfavorable ratio which existed between the prices of feed and the price of eggs. The Ohio River flood also retarded the program for a time. The effects of the flood on the poultry program in regions adjacent to the Ohio River and its tributaries were noticeable also later in the year because many of the owners lost their entire flocks as well as equipment.

There were 190 meetings with an attendance of 4,800 people; seven radio talks were given over WHAS; forty-one breeding pens were selected; eighteen poultry shows were judged; seventy-six visits were made to hatcheries, 59 to produce and feed dealers, and 1,359 to demonstration and other farms.

Regular poultry schools, result demonstration meetings, culling demonstrations, leader meetings, meetings on egg quality, farm visits and supply flock work with hatcherymen were the methods used in putting the program into effect. Much of the flock-improvement work centered around hatcheries work with the Kentucky Poultry Improvement Association and cooperating with the National Poultry Improvement Plan. Approximately 2,200,000 egg incubation capacity was signed under this Plan during the year. Hatchery cooperation was not limited to the hatcheries operating under the National Plan, however. Work thru hatcheries is important because about 2,500 flock owners were reached. Hatcherymen as a

whole want better flocks raised under better conditions, and they offer to flock owners a direct premium for quality eggs. The demonstration flocks made good profits despite the high prices of feed. Owners of 99 flocks kept records. There were 12,362 hens in these flocks which produced an average of 160 eggs per hen, and the net profit (income less feed and miscellaneous expenses) was \$1.54 per hen.

There are two major production problems which poultry raisers in Kentucky must solve. They are (1) increasing the production per unit and (2) replacing with good pullets those hens that have died or have been culled. A three-year demonstration flock summary for the years 1934 to 1936 shows the importance of increased production per unit.

Flocks	Hens	Production Per Hen	Labor Income Per Hen
24	1,723	120 or less	\$0.62
44	7,616	121 - 140	0.98
63	7,610	141 - 160	1.60
87	10,310	161 or over	2.04

Continued emphasis was placed on the "Grow Healthy Chick" program. Some typical results are given in the combined figures of Grayson, Edmonson and Gallatin Counties.

Flocks	Chicks Started	Chicks Raised	Percent Raised
54	19,249	18,440	95.8

Nine typical pullet-cost records from various sections of the State indicate the average cost of pullets in 1937.

Chicks Started	Pullets Raised	Chicks Started Per Pullet Raised	Average Net Cost Per Pullet
3,052	1,064	2.9	\$0.435

Three phases of marketing were studied. They were (1) selling eggs for hatching to out-of-state hatcheries, (2) marketing eggs locally on a grade basis, and (3) live-turkey marketing. In studying the possibilities of graded-egg selling a trip to Indiana was made and useful information obtained. A trial shipment of eggs from Grayson County to New York proved that high-quality eggs are being produced in Kentucky. The local market price on the day of shipment was 15 cents per dozen, and the shipment brought a gross price of 25½ cents per dozen in New York. This study may lead to

methods that will help to bring a better price for summer eggs of high quality produced in Kentucky. Local prices of turkeys were low compared to other markets. A study of the system used in Tennessee was made. Indications are that the same plan of pool shipment might be used to advantage in this State.

An excellent reputation is being established for the State as a source of high-quality eggs for hatching. This affords a market for eggs not needed for hatching in Kentucky.

In addition to the regular extension projects, cooperation was given at the Annual Poultry Short Course, Turkey Festival and Field Day, Baby Chick Show, Junior Week and 4-H Club and Future Farmers of America contests at the State Fair.

The Poultry Short Course serves as a training school for those who wish to do flock-improvement work under the National Plan. Last year 139 persons registered from 44 counties, besides others from Indiana, Tennessee, Illinois and Missouri.

*Outlook for 1938.* Increased interest in poultry due to a more favorable egg-feed ratio and the favorable poultry-meat situation should result in more effective work in 1938.

#### VETERINARY SCIENCE

The field of extension work in veterinary medicine necessarily occupies a position between the routine practice of veterinary medicine on one side and regulatory work on the other. Prevention of disease and the ravages of parasites is one of the main objectives of this educational work relative to disease and disorders among animals. The workers undertake to disseminate an understanding among farm people, of the cause of disease and proper methods for protecting domestic animals. In seeking these objectives the cooperation of veterinarians, county agents, agricultural teachers, regulatory officers, the press and other agencies is sought and has been obtained in a very satisfactory way. Attention is given to diseases and parasitic infestations in all classes of livestock, including poultry.

One of the most gratifying accomplishments has been the great reduction in the prevalence of bacillary white diarrhea in poultry. This work is an excellent illustration of cooperation, with the veterinarians, hatcherymen and others concerned. Over 300,000



birds were tested. In connection with the work with all classes of livestock, 96 counties were visited, and 134 meetings were held, many of them being demonstrations. These meetings were attended by 15,476 persons.

#### HORTICULTURE

*Pomology.* An intensive program designed to control the troublesome crown borer was carried on in all commercial strawberry centers. Meetings were held with all the cooperative associations and all growers were advised in regard to the necessary precautions to be taken in setting new fields. Five strawberry-plant nurseries were organized and supervised to assure growers a source of plants free from the pest. In three counties 23 soil-building demonstrations were begun in preparation for strawberries. In all strawberry shipping centers meetings were held to demonstrate proper handling and packing so that the fruit would meet inspection requirements.

In 1936 the infestation of apple scab was very heavy and to avoid consequences from a heavy carry-over of the disease, meetings were held before and during the scab season in all commercial apple-growing counties. Timely spray information was disseminated thru all local newspapers. On this problem considerable assistance was given by the Federal Fruit Disease Laboratory at Vincennes, Indiana.

As the codling moth season came on, special spray meetings were held and timely information was made available to growers. During June and July orchard tours and field meetings were held in eight counties. On account of the large apple crop the construction of storage houses was encouraged and seven new houses were built under the supervision of the College.

The large peach crop necessitated the organization of marketing agencies, and government inspection was obtained thru the efforts of the College and resulted in fair market prices.

The use of poisoned bait to control field mice was demonstrated in 44 orchards following recommendations of the U. S. Biological survey.

#### TRUCK CROPS

*Potatoes.* Seed-treatment demonstrations were presented in five meetings, and five tours were made for the purpose of visiting successful demonstrations in areas of commercial production. In four

counties 29 variety demonstrations were conducted, and in eight mountain counties 14 meetings were held to discuss the important subject of producing the home supply of potatoes. The French variety which had been so successful in past seasons was further introduced and 6,500 leaflets were distributed to individual farmers. Under the supervision of the College 35 acres of certified seed potatoes were grown in Jefferson County.

*Sweetpotatoes.* The treating of seed to prevent disease was demonstrated in seven meetings held in four different counties and supervision was given in the construction of large storage houses in two localities.

*Canning Crops.* The fertilizer demonstrations with tomatoes resulted in an average increase of 43 bushels per acre over unfertilized fields. In Ohio County five meetings were held in furtherance of the establishment of cooperative canneries. Five service letters were distributed to all leaders and cooperators who had to do with the production of crops intended for commercial canning.

*Home Gardens.* This has always been a popular project as it concerns practically every farm home. In the mountain counties 14 meetings were held and 41 project leaders attended a leaders' training meeting. Eleven demonstration gardens were grown. In five western counties 71 garden-project leaders were enlisted. Garden literature was distributed to 680 homemakers' clubs many of whom made the home garden a major project. The daily as well as the county newspapers were used in this work and 30 weekly news articles concerning home gardens were published. In two localities special projects were carried on in negro communities and three meetings were held with Utopia Clubs to organize potato projects among the older boys and girls.

*Commercial Gardens.* In seven counties 29 meetings were held with commercial truck growers. Frequent meetings were necessary on account of the different problems confronting commercial producers at different times during the season. Cooperation was given to public institutions that have garden enterprises and 17 visits were made to places of that kind.

*Landscape.* People in rural communities have been found to be intensely interested in work having to do with improving the ap-

pearance not only of the home grounds but also of school grounds, church yards and cemeteries and other public or semi-public places. This work was carried on largely thru homemakers' clubs. In the prosecution of this work 40 demonstrations for home improvement of home grounds were started in 19 counties and 53 plans were made for the improvement of school grounds in 21 counties. This entailed supervision of the initial plantings. Nine demonstrations in beautifying the grounds about country churches and six in rural cemeteries were supervised. In addition 12 such demonstrations were arranged for public institutions.

Leaders' training schools were held in 14 counties and general meetings in seven. Thru instructions provided by the College, 62,579 different landscape improvement projects were made during the year.

#### FARM ECONOMICS

Efforts were made to help farmers adjust their plans to changing conditions. The goal of the County Agricultural Planning project was to teach and induce farmers to develop long-time plans for their individual farms, their communities and their counties. As means to that end local committees of farmers were assisted in the interpretation of basic facts regarding the land resources and other resources of the communities and counties in which they were operating. The chief accomplishments in the County Agricultural Planning project were as follows:

1. Seventy-two county planning meetings were held in 68 counties, with a total attendance of 1,337.
2. A regional conference on agricultural planning was held at Elkton for type-of-farming area No. 5, at which the attendance was approximately 100.
3. Special planning work was carried on in Grant, Todd, and Green counties in addition to work in Washington County which was already under way.
4. Two field tours were made to the Princeton Substation and the Greenville experiment farm, one a tour for farmers in type-of-farming area No. 5, the other for those in type-of-farming area No. 6.
5. The attendance on these tours was 174.
6. A report of the county planning project based upon work in

90 counties was prepared and submitted to the U. S. D. A. Program Planning Section.

6. Individual county reports were submitted for 60 counties, for the use of the regional director of the east-central states in the Agricultural Conservation Program.

7. For the use of county agents and county committees a summary of county planning meetings was sent to the 90 counties where meetings had been held.

In connection with farm business education, five leader-training meetings were held, with 50 farmers in attendance, and 52 general farm meetings with 1,128 in attendance. Five sets of Farm Management Notes were prepared, 43,000 of which were sent to farmers. Twelve area reports were prepared presenting the analysis of the records of groups of farmers, the data being tabulated in detail to show the factors of business efficiency for each of the areas. Farm management field agents visited 372 farmers and the factors of farm management efficiency were discussed with them. The discussion was based upon the analysis of the operator's own detailed accounts which he had kept during the preceding year. Five hundred farm account books were started in 1937, about half the farmers being given instruction in group meetings regarding the procedure to be followed in keeping the accounts.

A set of nine blueprint charts each was distributed to 100 counties, for use of county agents. An erosion leaflet was printed and 80,000 copies were distributed. A. A. A. Account Books were distributed in counties where requested, starting schools were held, monthly reminder cards were sent to all cooperators, and other assistance was given as requested, including the closing of 1936 books.

#### RURAL SOCIOLOGY

Rural people have come to realize that certain of their problems cannot be solved individually but call for group action. Successful group action requires effective leaders. A major objective, therefore, is to encourage and train community leaders. An important part of the work of developing community leaders in different parts of the state was that done with county lay educational leaders, especially members of rural boards of education. A state-wide conference of members of boards of education was held at Louisville,

to which 40 counties sent 70 representatives. As a result of this conference significant and practical ideas were developed for the promotion of better community life. Later, regional meetings were held. A definite increase in the work being done in this project was demonstrated. In August, 1936, 38 members of 10 rural county boards of education came with their superintendents of schools to an all-day regional conference at Owensboro. In August, 1937, a year later, 60 members of 14 boards came with their superintendents to a similar meeting at the same place and spent a full day in conference. During the year more than 900 lay educational leaders in every section of the state were reached by the field agent in Rural Sociology and several thousand other community leaders were reached thru public meetings and in other ways.

Work was done toward bringing about a better community life thru cooperation with pastors and lay religious leaders. Rural ministers and lay leaders, without regard to denomination, have solicited the cooperation of the College in assisting with programs by which they can more effectively serve their communities. The third annual short course for rural pastors and lay leaders was held at the University. A growing interest in this project was demonstrated. More than 200 pastors representing all denominations and every section of the State were in attendance. The College of Agriculture furnished the services of its agricultural specialists and the facilities of its class rooms, laboratories, and experimental plots and the instruction received by the pastors should be the means of making their work in behalf of the people of their congregations and communities more effective.

During the fall a two-days' regional conference for rural pastors was held at Princeton, which was attended by about 60 pastors and lay leaders.

The College responded to the requests of various agencies for counsel and assistance. Among these agencies were the Resettlement Administration, the Division of Land Use Planning, the State Planning Board, and the Tennessee Valley Authority. Special work was done for the Welfare Division of Kentucky in connection with an improvement program undertaken by the Welfare Division at the Kentucky Houses of Reform.

## MARKETS

*Market Information.* Farmers asked for more market information in 1937 than in any previous year, probably because of the wide change in prices which occurred. To give the information called for, this department prepared an agricultural outlook report for 1937 which was distributed and discussed thruout the State early in the year. During the summer, meetings were held to give livestock producers information regarding the market situation for livestock. In November, in connection with the preliminary work for the 1938 Agricultural Conservation Program, an outlook statement for 1938 was prepared and presented at twenty district meetings. Following these meetings county agents and community leaders presented the information to farmers at local meetings. The outlook reports were supplemented by monthly statements, both published and radiocast, so as to give farmers current information when needed.

Marketing schools were held in Daviess, Henderson, Union, Hopkins, and Caldwell counties, where groups of farmers met for a series of discussions on prices and price making factors, factors affecting the marketing and price of cattle, factors affecting the marketing and price of hogs and lambs, the farmer's interest in International trade, and the agricultural situation and market outlook for 1937.

The special contribution during 1937 toward giving farmers a better understanding of economic factors influencing the market situation for livestock was Extension Circular No. 303, Price and Market Suggestions for Kentucky Stockmen. This circular sets forth the trend of prices of cattle, calves, hogs, and lambs in an ordinary year and then the variations which follow years of large or small crops. Twenty-five charts supplement the discussion and help present a clear picture of the market situation. The circular proved very useful this year when so many price changes were occurring.

*Marketing Organization.* As in recent years, farmers' organizations made numerous calls on the College for help in improving their efficiency so they could be of greater service to their members. To this end they were assisted with such matters as reorganization, preparing reports to members, giving instructions in proper grading or marketing practices, finding markets, or formulating operating

policy. Directors and managers were assisted in analyzing business operations and were instructed in cooperative fundamentals. Conferences were conducted also where directors and managers met to exchange ideas on operation of cooperatives and to receive instruction from capable and energetic leaders.

To help farmers improve marketing facilities a wide range of services were required. The College was called upon to help analyze a number of different situations and to determine what methods offered the best solution. This type of work included 28 surveys in marketing, purchasing or service projects contemplated by farmers.

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### EXTENSION WORKERS

(January 1st to December 31st, 1937)

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#### ADMINISTRATION

Thomas P. Cooper, Dean and Director  
T. R. Bryant, Assistant Director  
D. H. Peak, Business Agent  
S. K. Slaughter, Secretary

#### 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

#### CLOTHING

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

## DAIRYING

J. O. Barkman, Field Agent  
George Harris, Field Agent

## FARM MANAGEMENT

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

## FOODS

Florence Imlay, Field Agent  
Pearl Haak, 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  
Edwin A. Johnstone, Field Agent

## PUBLIC INFORMATION

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

## POULTRY

J. Holmes Martin, Field Agent  
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

State  
Weld

Assis  
Loga  
Mon  
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And

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Benn  
Beth  
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Evan  
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Irela  
Jack

John  
Kell

Lat  
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Love  
Marl

Mo  
Morg

Perk  
Pied

Rice  
Rob



HOME DEMONSTRATION WORK

State Leader—

Weldon, Miss Myrtle	Experiment Station	Lexington
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Assistant State Leaders—

Logan, Miss Lulie	Experiment Station	Lexington
Monroe, Miss Zelma	Experiment Station	Lexington
White, Mrs. Helen M.	Experiment Station	Lexington

COUNTY HOME DEMONSTRATION AGENTS

<i>Name—</i>	<i>Official Station—</i>	<i>County—</i>
Andrews, Miss Mable	Georgetown	Scott
Barnes, Miss Grace	Painsville	Johnson
Bennett, Mrs. Florence C.	Mayfield	Graves
Bethea, Miss Hattie (Colored)	1210 Moscow Ave., Hickman	Fulton-Hickman
Brown, Miss Sarah	Russellville	Logan
Byerly, Miss Zelma	Independence	Kenton
Clark, Miss Eleanor	Stanford	Lincoln
Colley, Miss Sunshine	Pineville	Bell
Collis, Mrs. Eula C.	Postoffice, Richmond	Madison
Davis, Miss Marcy K.	Hartford	Ohio
Davis, Miss Rachel (Colored)	113 Liberty St., Hopkinsville	Christian
Evans, Miss Anna	Carrollton	Carroll
Ewing, Mrs. Vivian Muster	Leitchfield	Grayson
Fisher, Miss Gladys (Asst.)	Mayfield	Graves
Fleming, Mrs. Frances W.	Hopkinsville	Christian
Gillaspie, Miss Mary Hord	Burlington	Boone
Graham, Miss Carolyn	Elkton	Todd
Grubbs, Mrs. Jennie C.	Junction City	Boyle
Harralson, Mrs. Ruth E.	Farm Bureau, Madisonville	Hopkins
Hedges, Miss Camille (Asst.)	Hopkinsville	Christian
Hembree, Miss Lilah	LaGrange	Oldham
Henning, Miss Alda	Courthouse, Paducah	McCracken
Hutchison, Miss May	Lancaster	Garrard
Hunter, Miss Ruth	Alexandria	Campbell
Ireland, Miss Jeanne (Asst.)	Courthouse, Paducah	McCracken
Jackson, Miss Mary Lou	Wickliffe	Ballard
Johnson, Mrs. Catherine T.	Room 8, Fed. Bldg., Louisville	Jefferson
Kelley, Mrs. Miriam J.	Bowling Green	Warren
Latimer, Miss Ruth	Room 408, Fed. Bldg., Lexington	Fayette
Leachman, Mrs. Alice Penn	Franklin	Simpson
Lovelady, Miss Venice	Owensboro	Daviess
Markham, Miss Loretta	Benton	Marshall
Moore, Mrs. Alma	Greenville	Muhlenburg
Morgan, Miss Helen	Lawrenceburg	Anderson
Perkins, Mrs. Roxie C.	Harlan	Harlan
Piedalue, Miss Irene	Winchester	Clark
Rice, Miss Mavourneen	Paris	Bourbon
Roberts, Miss Mildred	Calhoun	McLean

## COUNTY HOME DEMONSTRATION AGENTS—Continued

<i>Name—</i>	<i>Official Station—</i>	<i>County—</i>
Sauerbry, Miss Florence	Nicholasville	Jessamine
Scott, Miss Mary Louise	Robinson Substation, Quicksand	Breathitt
Scrugham, Miss Nancy	Princeton	Caldwell
Sharp, Mrs. Lois Husebo	Courthouse, Catlettsburg	Boyd
Taylor, Miss Ruth	Henderson	Henderson
Tompkins, Mrs. Jeannette H.	Frankfort	Franklin
Trumbo, Miss Sarah	Berea	S. Madison-R'kcastle
Thompson, Mrs. Catherine C.	Hickman	Fulton
VanWinkle, Miss Doris	Maysville	Mason
Vaughn, Miss Elizabeth	Barbourville	Knox
Wheeler, Mrs. Dorris Kirkman	Pikeville	Pike
Whittinghill, Miss Eleanor	Cadiz	Trigg
Wilgus, Miss Sadie	Farm Bureau, Morganfield	Union
Wilson, Miss Jessie	Clinton	Hickman
Word, Miss Elizabeth	Munfordville	Hart
Young, Mrs. Sue Betterworth	Dixon	Webster

## COUNTY AGENT WORK

<i>State Agent—</i> Mahan, C. A.	Experiment Station	Lexington
<i>Assistant State Agents—</i> 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
<i>Agent, Charge of Negro Work—</i> Burnette, A. C.	179 Deweese Street	Lexington
<i>County Agent—</i>	<i>Official Station—</i>	<i>County—</i>
Acree, John C.	Calhoun	McLean
Adair, Walter B.	Brownsville	Edmonson
Anderson, Shirley W.	Louisville, Room 8, Fed. Bldg.	Jefferson
Bach, John	Salersville	Magoffin
Bell, Clarence S.	Scottsville	Allen
Blue, John W., III	Eddyville	Lyon
Bohanon, Samuel C.	Wickliffe	Ballard
Bondurant, Charles O.	Owenton	Owen
Brabant, Stuart	Elkton	Todd
Brown, John C.	Danville	Boyle
Bryan, Charles V.	Campbellsville	Taylor
Cochran, John T.	Murray	Calloway
Collins, Jesse L.	Maysville	Mason
Collins, John R.	Versailles	Woodford
Collins, William B.	Brooksville	Bracken
Crace, Allington	Hazard	Perry
Craigmyle, Beach	Bedford	Trimble
Day, Carl B.	Louisa	Lawrence
Dickerson, Henry H.	Greensburg	Green

COUNTY AGENT WORK—Continued

<i>Name—</i>	<i>Official Station—</i>	<i>County—</i>
Ellis, Justus L.	Tompkinsville	Monroe
Elston, Charles B.	Bardstown	Nelson
Ewen, Florian C.	Whitley City	McCreary
Faulkner, Robert T.	Leitchfield	Grayson
Feltner, John C.	Jackson	Breathitt
Finch, John H. (Colored)	Bowling Green, 7th College St.	Warren
Flege, John B.	Columbia	Adair
Forkner, Holly R.	Burlington	Boone
Fortenbery, Blumie W.	Lancaster	Garrard
Gabbard, Charles E.	Campton	Wolfe
Gayle, Hubbard K.	Morganfield	Union
Gibson, Harry B.	Hawesville	Hancock
Gilbert, Raymond H.	Hartford	Ohio
Goebel, Nevin L.	Taylorsville	Spencer
Goff, Charles L.	Morehead	Rowan
Graham, John F.	Princeton	Caldwell
Grimwood, Phillip G.	Booneville	Owsley
Henson, Hollis	Stanton	Powell
Hafer, Fred C.	Brandenburg	Meade
Harris, Andrew M.	Bardwell	Carlisle
Hayes, Henry J.	Monticello	Wayne
Heath, Robert M.	Frankfort	Franklin
Hill, Charles L.	Russellville	Logan
Holland, John W.	Shelbyville	Shelby
Hopper, Ray C.	Bowling Green	Warren
Horning, Jess O.	Glasgow	Barren
Howard, Joe M.	Mt. Olivet	Robertson
Howell, William B.	LaGrange	Oldham
Hume, Robert C.	Williamstown	Grant
Hurt, Joe	Paducah	McCracken
Insko, George F.	Lawrenceburg	Anderson
Isbell, Samuel L.	Prestonsburg	Floyd
Jackson, Homer R.	Henderson	Henderson
Jones, Thomas H.	Beattyville	Lee
Karnes, Gilbert H.	Lebanon	Marion
Karnes, Jacob L.	Frenchburg	Menifee
Kent, Samuel B.	Morgantown	Butler
Kidd, Jack S.	Albany	Clinton
Killinger, John R.	Stanford	Lincoln
King, Roscoe H.	Grayson	Carter
Kleiser, William D.	Greenup	Greenup
Laine, Henry A. (Colored)	Nicholasville	Jessamine
LaMaster, Orem	Flemingsburg	Fleming
Long, Henry S.	Winchester	Clark
McClure, John E.	Owensboro, Court House	Daviess
McCord, Joseph, R.	Shepherdsville	Bullitt
McDaniel, Floyd	Mt. Sterling	Montgomery
Matson, Ralph J.	Carlisle	Nicholas
Mayo, George F.	London	Laurel
Melton, Frank G.	Hodgenville	Larue

## COUNTY AGENT WORK—Continued

<i>Name—</i>	<i>Official Station—</i>	<i>County—</i>
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.	Greenville	Muhlenberg
Northington, Leroy W.	Clinton	Hickman
Park, Curtis F.	Harrodsburg	Mercer
Parker, J. Ed., Jr.	Lexington, 408 Fed. Bldg.	Fayette
Parsons, John E.	Williamsburg	Whitley
Pidcock, Justice L.	Paintsville	Johnson
Porter, Samuel A.	Alexandria	Campbell
Quisenberry, Henry A.	Vanceburg	Lewis
Rankin, Robert B.	Edmonton	Metcalf
Ray, William B.	Hardinsburg	Breckinridge
Reed, Robert S.	Benton	Marshall
Reynolds, Walker R.	Tyner	Jackson
Rice, Edgar	Sandy Hook	Elliott
Rice, Harry D.	New Castle	Henry
Ridley, Raymond D.	Dixon	Webster
Routt, Grover C.	Nicholasville	Jessamine
Rudolph, Robert L.	Smithland	Livingston
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, 408½ S. Main	Christian
Straw, William T.	Warsaw	Gallatin
Summers, John E.	Franklin	Simpson
Talbert, William D.	Munfordville	Hart
Thaxton, Andrew J.	Elizabethtown	Hardin
Thompson, Herbert H.	Cynthiana	Harrison
Thompson, Joe R.	Owingsville	Bath
Travis, Ottie B.	Jamestown	Russell
Trosper, Raleigh V.	Pineville	Bell
Wade, Campbell M.	Georgetown	Scott
Walker, Fletcher C.	Burkesville	Cumberland
Watlington, Philip R.	Paris	Bourbon
Watts, Clyde	Carrollton	Carroll
Wheeler, Boyd E.	Whitesburg	Letcher
White, Robert W.	Falmouth	Pendleton
Whittenburg, Harry W.	Madisonville	Hopkins
Wicklund, Carl A.	Independence	Kenton
Wiedeburg, William E.	Hopkinsville	Christian
Wigginton, Robert	Catlettsburg	Boyd
Williams, Gray H.	Harlan	Harlan
Williams, J. B.	Hickman	Fulton
Williamson, Glynn E.	Mayfield	Graves
Wrather, Yandal	West Liberty	Morgan
Young, Troll	Springfield	Washington

ASSISTANT COUNTY AGENTS

<i>Name—</i>	<i>Official Station—</i>	<i>County—</i>
Atterbury, Harry B.	Richmond	Madison
Brabant, Kenneth A.	Cadiz	Trigg
Brame, Forest S.	Munfordville	Hart
Burdine, Howard W.	Pikeville	Pike
Claghorn, Barney B.	Lawrenceburg	Anderson
Coffey, Wallace	Lexington	Fayette
Coleman, James V.	Owensboro	Daviess
Colson, Clay A.	Whitesburg	Letcher
Colville, David E.	Burlington	Boone
Coots, Woodrow	Princeton	Caldwell
Crawford, Sam K.	Scottsville	Allen
Cromwell, Kelly M.	Murray	Calloway
Culton, Eugene, Jr.	Paris	Bourbon
Dye, James G.	Georgetown	Scott
Ellis, L. Holmes	Paducah	McCracken
Ewing, John H., Jr.	Leitchfield	Grayson
Ford, Robert H.	Danville	Boyle
Foy, Samuel V.	Hickman	Fulton
Griffin, Marshall C.	Liberty	Casey
Hoover, Wilson R.	Mayfield	Graves
Irvine, John W.	Bowling Green	Warren
Janes, Ernest L.	Louisville, Room 8, Fed. Bldg.	Jefferson
Johnson, Raymond O.	Glasgow	Barren
Klingner, Fred M.	Elkton	Todd
Kurtz, George McW.	Winchester	Clark
McMurtry, Gaven H.	Henderson	Henderson
Pirtle, Thomas L.	Smithland	Livingston-Lyon
Redd, Obie B.	Bardstown	Nelson
Richardson, Clyde M.	Frankfort	Franklin
Rothwell, Herman E.	Benton	Marshall
Sandefur, Richard M.	Alexandria	Campbell
Simmons, James W.	Springfield	Washington
Stephens, James I.	Carrollton	Carroll
Venable, Keith S.	Hopkinsville	Christian
Watlington, John R.	Russellville	Logan
Wheeler, Jewell A.	Morganfield	Union

## RECEIPTS AND DISBURSEMENTS

For the Fiscal Year Ended June 30, 1937

## RECEIPTS

Federal Smith-Lever, Supplementary, and Bankhead-Jones .....	\$516,417.35
Capper-Ketcham .....	36,800.97
Additional Cooperative .....	12,500.00
State Smith-Lever .....	120,000.00
TOTAL .....	\$685,718.32

## DISBURSEMENTS

PROJECTS	Federal Funds		State Funds	
	Smith-Lever Supplementary Bankhead-Jones	Capper- Ketcham	Add'l. Co- operative	State Smith- Lever
Administration .....	\$ 11,238.25	\$	\$	\$ 13,296.66
Publications .....	8,408.35			732.00
County Agent Work .....	366,306.47	14,313.02	12,400.00	
Home Demonstrations Work .....	77,796.77	22,487.95	100.00	2,033.32
Clothing .....	2,237.77			5,600.00
Foods .....	1,953.31			5,600.00
Movable Schools .....	1,159.87			3,545.81
Junior Clubs .....	11,710.49			29,693.00
Agronomy .....	4,281.84			12,341.65
Dairying .....	1,879.10			4,325.00
Animal Husbandry .....	4,738.69			9,546.42
Markets .....	3,907.74			2,848.49
Farm Management .....	1,844.72			5,447.78
Poultry .....	2,568.52			7,680.00
Horticulture .....	9,641.51			1,738.87
Veterinary Science .....	2,907.15			800.00
Rural Engineering .....	1,644.58			6,812.00
Public Information .....	286.33			4,259.00
Farm and Home Week .....	99.31			
Home Management .....	1,219.62			2,800.00
Rural Sociology .....	586.08			900.00
TOTAL .....	\$516,416.47	\$ 36,800.97	\$ 12,500.00	\$120,000.00