

UNIVERSITY OF KENTUCKY

COLLEGE OF AGRICULTURE

Extension Division

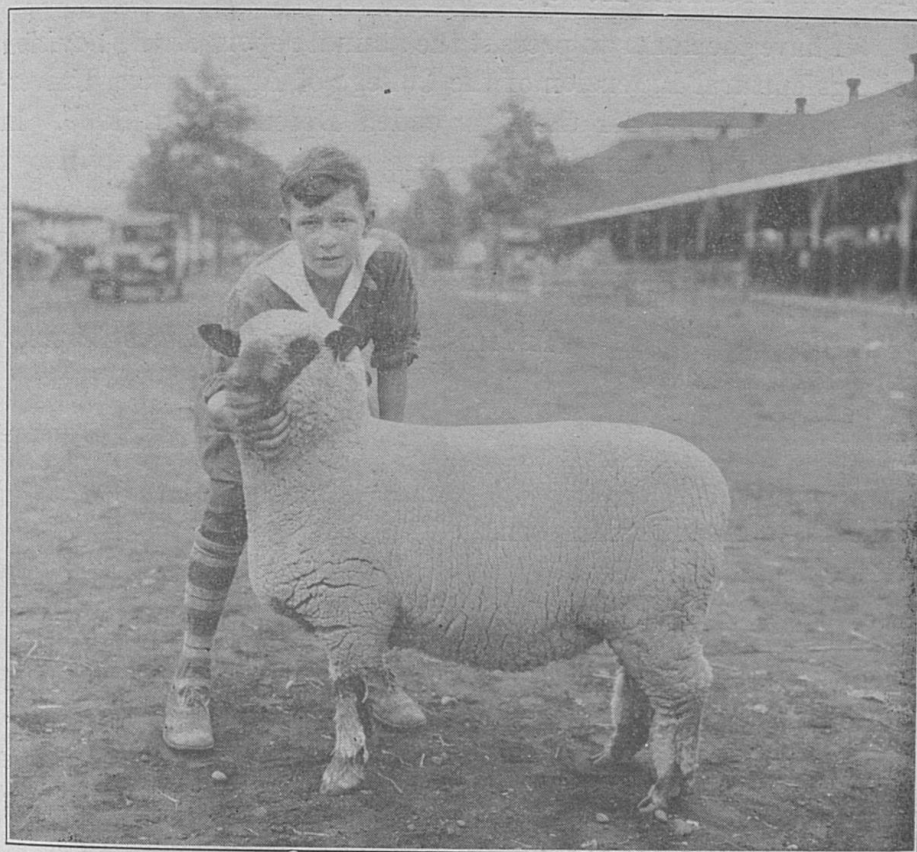
THOMAS P. COOPER, Dean and Director

CIRCULAR NO. 245

ANNUAL REPORT

FOR THE

YEAR ENDED DECEMBER 31, 1930



A 4-H Club boy and his champion sheep.

Lexington, Ky.

Published in connection with the agricultural extension work carried on by cooperation 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

Lexington, Kentucky
January 3, 1931.

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, 1930. 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 P. COOPER, *Dean and Director*

Lexington, Kentucky
January 10, 1931.

Honorable Flem D. Sampson,
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, 1930.

Respectfully,

FRANK L. McVEY, *President*

CIRCULAR NO. 245

Annual Report of the Extension Division for 1930

T. R. BRYANT, Assistant Director

The drouth of 1930 was more severe and extended than any that the Weather Bureau had ever recorded in Kentucky and in nearby States. There was a deficiency in rainfall during the year of 18½ inches. The lack of rain caused much distress. So little was raised in some sections that starvation threatened the families in many communities. At the same time the world-wide business depression produced much unemployment in the industrial centers of the nation decreasing the effective demand for farm products. The farmers of Kentucky were faced with the double misfortune of short crops and low prices.

The conditions described affected the extension program very greatly. Emergency measures of various kinds were necessary. With no pasture and little feed for livestock, arrangements were made with the consent of the Interstate Commerce Commission for the railroads to carry shipments of hay and feed for livestock at half the usual freight rates. Half rates were established for the removal of livestock to places where pasture was available, and similar rates were given by the railroads for hauling water.

In order to make sure that the benefit of freight reductions was to be given to distressed farmers, regulations were prescribed which required permits for such shipments. By arrangement with the United States Department of Agriculture, county agricultural agents were designated as the officers to make the necessary investigations and issue the permits. This work involved many details and imposed heavy responsibilities upon these agents and their supervising officers. The situation in general was handled by these agents to the satisfaction of all

concerned. Approximately 6,675 cars of roughage, grain and mill feed were moved at an estimated total saving in freight bills of \$320,527 to Kentucky farmers. Approximately two-thirds of the cars were of concentrates and one-third of hay or other roughage.

Various relief measures for those in distress were planned in the late summer and fall months. Extension workers were called upon to take an active part in the organization and distribution of supplies. The extension workers were requested by the Red Cross to aid it in its distribution of seed rye. The Red Cross organization decided to give to each of several thousand families seven and one-half bushels of seed rye to be sown for winter pasture to keep family cows in milk. Extension workers aided also in distributing garden seed for fall gardens.

Despite all the time-consuming duties laid upon Extension Workers by the unusual conditions, a normal year's work was accomplished in the usual lines. This was due largely to the assistance of the people in various communities who were foresighted and willing to give generously of their time and labor. A total of 7,752 leaders were enlisted in community programs of work. This was an increase of 780 leaders over the preceding year. Among the women 2,795 of them acted as leaders and assisted in the work with women and girls. This was a slight decrease of 147 from the number engaged in 1929. The enrollment in Junior 4-H Clubs, despite the complete drying up of crops in many sections, was 20,460, only 1,132 less than in the preceding year, and the percentage of completions was actually raised from 71.3 percent in 1929 to 74.3 percent in 1930. The quality of work was reflected in the baby-beef show in November, where the number of animals was the same as in previous years, with a quality pronounced by competent judges as superior to that of other years.

A new branch was added to the program for young people. This is a club for boys and girls who have passed beyond the 4-H Club age of 18 years, but who are not yet in position to participate fully in the program of activities provided for adult farmers and farm women. The clubs are known as Utopia

Clubs. The work of the members is on a project basis as in the 4-H Clubs for younger people, but is of a more advanced nature. Ten of these clubs were formed during the fall months.

Another feature added to the extension program was a landscape gardening service designed to stimulate interest in the beautification of home grounds, school yards and other places, where such service is desired.

Out of the distress of drouth, certain good has come. Lespedeza, a leguminous pasture and hay crop, recently brought into popularity thru the efforts of extension work, demonstrated its value in a dry year. The Korean variety especially proved that it should have a place as a pasture and hay crop in the farming system.

Another feature was the interest aroused in the need for better rural credit facilities evidenced by the establishment of agricultural credit corporations. The drouth also served to give emphasis to the importance of making the farm furnish provisions for the farm home. This has been stressed at all times by the Extension Service, for many farmers prefer to devote their energies to production of cash crops with which to purchase most of the needed food stuffs.

Believing that the experience of the past year will cause people to be more responsive to suggestions regarding home production of food supplies, the Extension Service has redoubled its efforts to point out the advantage of better gardens as well as the canning and curing of ample supplies of fruits, vegetables and meats. With the market outlook offering little encouragement to increase the supply of farm products to be offered for sale the Extension Service is calling attention to the advantage of reducing necessary cash outlays by producing as much as possible of the home food supply on the home farm.

COUNTY AGENT WORK

Theodore Roosevelt once said, "Community life makes the nation". If this be true, a real contribution is being made by the Kentucky county agricultural agents to the progress of the State and Nation by the number and character of community

programs conducted in 1930. During the year, 821 community programs of work were built in Kentucky, and 7,752 local leaders took an active part in helping to reach the goals assigned.

While there is usually some shifting of crops and methods, to meet economic fluctuations, more calls for assistance of this kind from the county agents were made in 1930 than in any other year since the World War. This gave the county agents an opportunity to develop a program for crop and farm enterprise improvement on the basis of economic demands. This program was developed thru a study of the agricultural outlook figures compiled in cooperation with the Bureau of Agricultural Economics of the United States Department of Agriculture. In addition to the outlook meetings, over 14,000 farm improvement demonstrations pertaining to crops, livestock and other farm activities were conducted.

Social and economic changes in rural life were also brought about thru the advocacy of higher living standards. Over 300 demonstrations of home conveniences were conducted by Kentucky county agents during 1930. Thus the farm income increased thru following the advice of county agents not only benefits the farmer, but also the manufacturer and the merchant who produce and sell the products demanded by a higher standard of living.

While the trying economic situation caused by the past season's drouth has discouraged farmers and ruined many promising programs of county agricultural agents, it has increased the agents' field of service. These agents have been quick to meet the emergency by changing their programs so that the greatest service possible might be rendered farmers during this trying time. The agents advocated a change of plans and methods of handling crops as the continuation of the drouth demanded; also they assisted in making surveys for the Red Cross drouth relief committees and, so far as possible, aided in the distribution of Red Cross seed rye. They assisted in the campaign for fall gardens, as well as for fall and winter crops and livestock.

County agents were placed in charge of issuing requests for

reduced freight rates and in the course of a few weeks they helped the farmers of Kentucky save approximately one quarter million dollars on freight bills.

The following statistics indicate activities of the county agents for 1930:

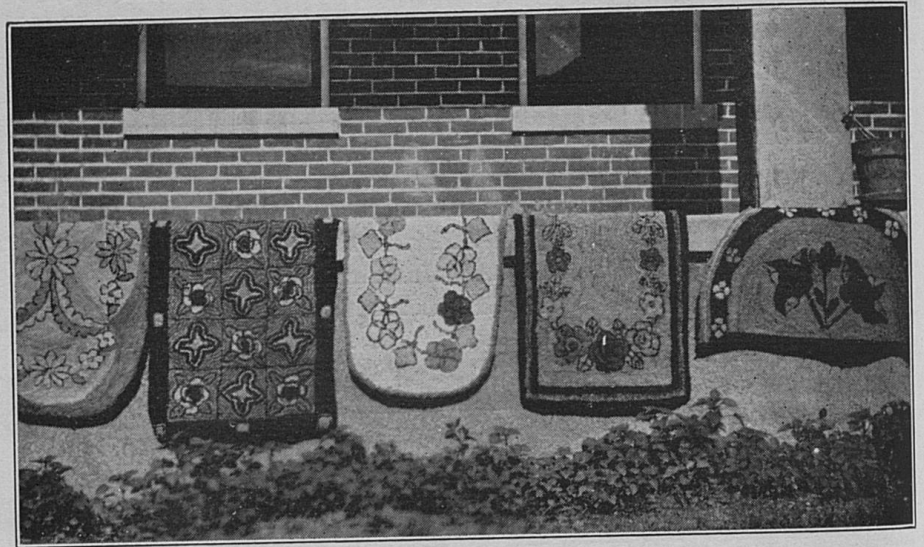
No. counties with agents	95
No. communities building extension programs	821
No. leaders in community-built programs	7,752
No. leader-training meetings	694
Attendance of local leaders	6,355
No. meetings held by local leaders	1,344
Attendance	28,626
No. method and result demonstration meetings	3,129
Attendance	53,458
No. adult result demonstrations started or carried thru the year	14,936
No. farm visits made by agents	64,993
No. farms visited	26,250
No. home visits made by agents	3,035
No. homes visited	1,678
No. office calls relative to work—Office	27,519
Phone	60,860
No. individual letters written	64,072
Total all meetings held, including demonstrations short courses, leader-training meetings, etc.	11,174
Attendance	415,185

Miscellaneous

No. breed associations organized, dairy cattle	25
No. breed associations organized, other stock.....	26
No. farms terraced	304
Acres terraced	1,884
No. farms installing drainage systems.....	251
Acres drained	4,111
No. water systems installed	72
No. lighting systems installed	63
No. animals in 4-H Club Work completed—	
Beef	634
Dairy	2,023
Poultry	75,156
Sheep	3,272
Swine	1,394

HOME DEMONSTRATION WORK

Thirty counties in Kentucky employ home demonstration agents under whose leadership an educational program in home-making is carried on. The home demonstration agent in each county works thru an organization of homemakers, known in Kentucky as the county homemakers' association. Participation in the activities of the organization has resulted in both the professional and personal development of rural women. The home agent is assisted in her program by a staff of supervisors and specialists from the College of Agriculture.



Hooked rugs made by Doney Club members. Muhlenberg County.

PROGRAM OF WORK

The program carried on in any county is determined by the homemakers. The three main divisions, food, clothing and home improvement, with many subdivisions, offer material for study of interest, help and information. In addition to the county program of work, homemakers have participated in fairs, exhibits, tours, and many other activities of both a recreational and cultural nature.

HOME IMPROVEMENT

The home improvement program pertains to both the efficiency and the beauty of the home. A happy and attractive home must be convenient, well arranged, well equipped and well managed so that the homemaker may perform the mechanical tasks of housekeeping without expending all her energy. A fatigued homemaker is merely a housewife, a drudge and not a mother, wife, or companion. After accomplishing the housekeeping in a convenient and well arranged house, the housewife's surplus energy goes into homemaking and community building.

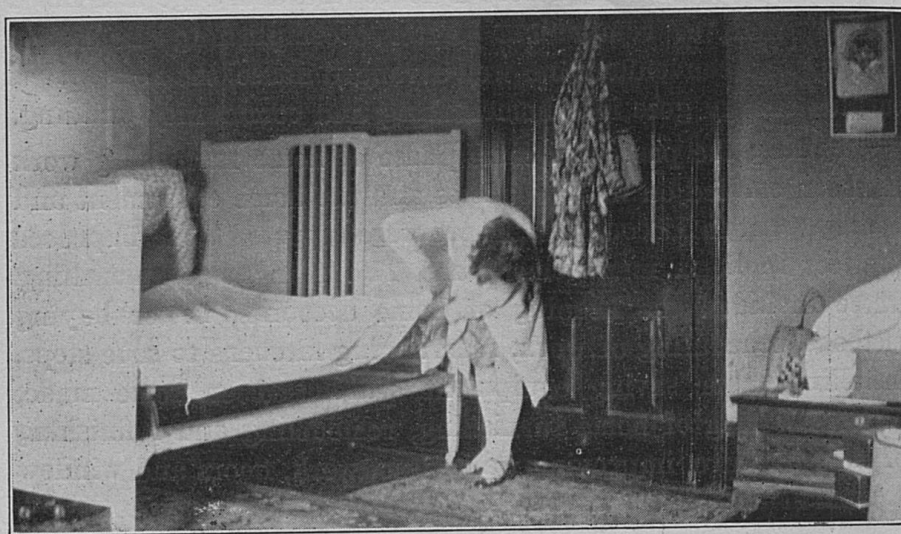
During the past year some phase of home furnishing work has been carried on in 19 counties and the home equipment and management in 11 counties. There were reported 7,343 improved practices in home management and 11,344 in home furnishing. These included the keeping of home accounts, better buying methods, scheduling of work, rearranging kitchens to save steps, installing labor saving equipment, purchased or home made, better selecting of home furnishing, remodeling and refinishing of old furniture, improving walls, woodwork, floors and window treatment and better arranging of rooms.

Handcraft work has taught women how to make at small expense many beautiful accessories such as lamp shades, attractive waste paper baskets, magazine racks, slip covers for furniture, stools, rugs, etc. The application of knowledge and skill gained in the home improvement work has helped transform many drab, uninteresting, unattractive, inconvenient rural homes into efficient and attractive ones in which the rural family justly takes pride, and the time saved by the homemaker is used to create a fuller home and community life.

FOOD AND NUTRITION

The modern homemaker is no longer contented merely to satisfy the appetites of her family. She must know that her family has had the essentials for growth, resistance to disease and maximum health. She is not only measuring calories, but is taking note of the protein, vitamin and mineral content of the food which goes on the family table. Her menu is planned

to build strong bones and teeth, pure blood, steady nerves, firm muscles, good digestion, proper elimination, resistance to disease and a general condition of good health. She considers the production of food, storage and preservation of food, cooking and serving of food, and nutrition for young and old.



Bedmaking demonstration at Croley Club meeting. Hickman County.

Many interesting stories have been told of chronic digestive disturbances overcome, of decreased doctor bills, and of underweight children brought up to weight, etc. There were reported 6,524 improved practices in gardening. These included production of new vegetables, use of a garden budget, a year-round garden program, etc. Twenty-seven counties carried a program of food study. In all 16,441 other improved practices in foods and nutrition were reported.

The drouth presented many problems of an emergency nature. Drouth activities included the planning of a late fall garden, canning of all available vegetables, preservation of eggs, canning of meat and poultry and making of sauerkraut. This special work did much to relieve the food situation.

CLOTHING

Work in clothing during the year included both simple and advanced dressmaking, renovation and remodeling of clothing, tailoring, millinery, buying problems and children's clothing. Homemakers in 27 counties reported 24,608 improved practices.

The drouth which resulted in reduced income to so many families created a special clothing problem. Homemakers' groups not only took great interest in the renovation and



Group of Fayette County homemakers making hat blocks.

remodeling of old clothing for their own wear, but in the reclamation of old clothing for distribution to needy families in their respective communities. One small group of homemakers reclaimed and distributed nearly 200 garments to needy families. Help was given in this work by the clothing specialist.

The clothing project has taught homemakers how to select becoming lines and color, to fit garments correctly, to construct them neatly, quickly and efficiently, to use correct and easy methods of construction and to spend clothing money to better advantage.

RECREATION

Realizing that all work and no play makes a dull family and a dull community as well as a dull individual, homemakers took an active part in providing wholesome recreation for the home and community. A short recreational program of games, stunts, music and dramatics has become a part of every homemaker's club program. In addition to this homemakers are assuming the responsibility for promoting recreation for the entire community. During 1930, 64 county-wide plays or pageants were given in 16 counties. Homemakers in 202 communities sponsored a recreational program for the entire community. These community functions take the form of community dramatics, pageants, musicals, minstrels, community meals, circuses, picnics and many other forms. One thousand and twenty-five homes reported recreation in the home.

CAMPS

Farm homemakers too rarely have the opportunity for a vacation of any kind. Four district homemakers' vacation camps and two county homemakers' camps were held in 1930. Twenty counties participated in camps with a total full time enrollment of 355 homemakers and 1,374 attending for part time. Recreation and relaxation play a large part in the camp program. Craft work is always thoroly enjoyed. Each homemaker attending goes home with an attractive accessory for her home which has been purchased at minimum cost and decorated in camp. The social life of camp and the opportunity to meet women from neighboring counties are fully enjoyed.

FARM AND HOME CONVENTION

The attendance at the Farm and Home Convention held at the University shows the interest which rural people are taking in this annual program. Four hundred and sixty-one homemakers from 41 counties were in attendance at the 1930 convention.

MASTER FARM HOMEMAKERS

This is the fourth year that outstanding homemakers in Kentucky have been given recognition thru the cooperation of the Farmer's Wife Magazine and the Home Demonstration Department of the College of Agriculture. Five are selected each year. The twenty women who so far have received recognition in Kentucky have organized a State guild which is part of a national guild of the Nation's outstanding homemakers. This is giving homemakers a great pride in their job.



Homemakers club room. McCracken County.

COMMUNITY ACTIVITIES

It is becoming a matter of pride for each group of homemakers to show its spirit of service by undertaking each year at least one project of benefit to the community. One hundred

and ninety-eight homemakers' clubs carried on some definite community project in 1930.

JUNIOR HOME ECONOMICS

Homemaking projects are carried in food, clothing and home improvement with girls between the ages of ten and eighteen. The projects are planned with the idea to help raise the ideals and standards of future homemakers, and to make a special appeal to the girls of teen-age.

Clothing work has been very popular, for every girl is interested in making garments for herself and in being dressed appropriately and becomingly. In the clothing work a girl learns how to make clothing, to select materials, to choose color and design, to care for her clothing, to select appropriate accessories and to plan her wardrobe. Four units of work are offered, each unit resulting in a complete costume for a stated purpose. There were enrolled in clothing projects this year 3,826 girls in the 30 counties having home demonstration agents.

The food project is planned to appeal to the young girl and to interest and encourage her in participating in the selection and preparation of the family meals and to give her skill in the handling of food stuffs. Three units of work which comprise planning, preparation and serving of the family breakfast, dinner and supper, are included in this project. In food work 715 girls were enrolled in home agent counties.

Food preservation is divided into three units—the canning of fruits and vegetables; making of jams, jellies, preserves, pickles, etc.; and canning for the family. There were enrolled 342 girls in canning groups in home agent counties.

The home improvement project is applied to the beautification of the girl's own room and is planned for older girls.

This year assistance was given to 42 counties in Kentucky in 4-H homemaking projects.

MISCELLANEOUS ACTIVITIES

Other junior homemaking activities carried on by the home demonstration staff in cooperation with the Club Department

are the homemaking program for Junior Week at the College of Agriculture, County and State team demonstration contests, State style show, food and canning judging contests, State and County health contest, community, county and State fair exhibits.

STATISTICAL SUMMARY

No. communities in which home demonstration programs with women and girls carried	475
Enrollment in junior homemaking projects	4,617
Enrollment in adult homemaking projects	5,217
Voluntary local leaders assisting in home demonstration program	2,781
Training meetings held for local leaders	318
Attendance at training meetings	4,704
Demonstration and judging teams trained.....	149
Visits made by home demonstration agents.....	4,515
Individual letters written	12,097
No. different circular letters prepared	1,070
No. news stories published	2,033
No. office and telephone calls relating to extension work.....	15,972
County meetings held in relation to home demonstration work	8,281
Attendance at meetings	224,034

JUNIOR 4-H CLUB WORK

Twenty thousand four hundred and sixty boys and girls were enrolled in Junior 4-H Club Work this year, and notwithstanding the drouth and other unfavorabe farm conditions, 74.3 percent of them completed their work.

LEADERS

The success of the Junior 4-H Club Work was due largely to the service given by 1,894 volunteer local leaders. These public-spirited citizens are essential to the success of all extension work. In particular is their service effective with the boys and girls of the 4-H Clubs. The Extension Service is continuing the plan of giving a leader's pin to all leaders who have successfully directed the activities of a club or project group for one year and a certificate of service to those who have served three

years or more. There is no practical way to reward these leaders. Their principal reward is in the organization's acknowledgement that they have rendered a real service.

JUNIOR WEEK

It was necessary to limit the attendance at Junior Week this year as a great many more club members wanted to come than could be accommodated in the University dormitories and



State champion home economics demonstration team. Henderson County. cafeterias. The attendance was limited to eight club members per county extension agent. The plan was to keep the number down to 500. The attendance, however, was 526 boys and girls from 84 counties, 55 volunteer leaders, 25 home demonstration agents and 66 county agents. Two hundred and sixteen club members came on prize trips given by transportation companies and others interested in club work.

DISTRICT 4-H CLUB CAMPS

Twelve district 4-H club camps were held this year. A temporary helper was added to each camp staff. This person

directed community singing and simple dramatics. All agreed that this was a valuable addition to the camp program.

DISTRICT DAIRY CATTLE SHOWS

The 1930 General Assembly appropriated \$3,000 to be used as premiums in five district dairy cattle shows for 4-H Club members. Shows were held at Mayfield, Bowling Green, Hopkinsville, Eminence and Lexington. Four hundred and forty-four registered dairy cows and heifers were exhibited in these shows.



Junior Week excursion to Frankfort.

BUTTERFAT PRODUCTION CONTEST

Six trips to the National Dairy Show were given again this year by Louisville and Cincinnati creameries to 4-H dairy club members. These trips were awarded to the owners of the highest producing cows. The contest continued for six months. Fifty club members had entered this contest.

NATIONAL CLUB CAMP

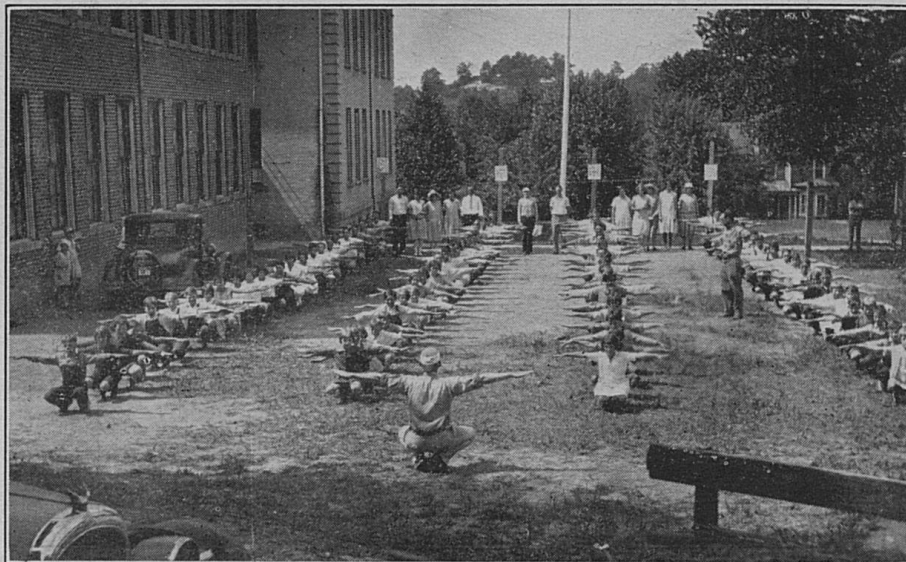
Kentucky sent two boys, two girls and one leader to the National 4-H Club camp held in Washington in June. The

representatives from Kentucky were Ed Hayes, Jackson County; Robert Graves, Boone County; Ruth Harris, Campbell County, and Elizabeth Word, Christian County. There are greater numbers of entries each year in the contest for these trips.

In the exhibit of State club literature held at the National 4-H Club Encampment, Kentucky was awarded the blue ribbon.

NATIONAL CLUB LEADERS CONFERENCE

Two volunteer leaders of 4-H club work attended the National Leaders Conference held at Springfield Massachusetts,



Morning exercise. District 4-H Club camp.

sponsored by H. A. Moses. The Kentucky delegates were Roberta Mayhew of Knox County and Woodrow Coats of Logan County. Their expenses were paid by Mr. Moses.

STATE FAIR

The dairy cattle show was added as a new feature for 4-H Club members at the State Fair. Ninety-nine cows and heifers, owned by club members, were exhibited. These were selected at the five district shows and were of high quality.

A new ring called, "County 4-H Club Poultry Exhibit" was set up at the State Fair. This proved effective in increasing the number of birds exhibited. This exhibit consisted of three standard pens of the same or of different breeds. The birds could be selected from as many flocks as desired. Nine counties had entries in this ring.

There were 315 entries of clothing, 208 of canning, 180 of foods and 44 in the 4-H room project.



State champion group of 4-H Club Jersey heifers.

BABY BEEF SHOW

Club members from 23 different counties exhibited 555 of their baby beeves at the State Fat Cattle Show. The cattle this year were of high quality, comparing favorably, despite the drouth, with those exhibited in more favorable years.

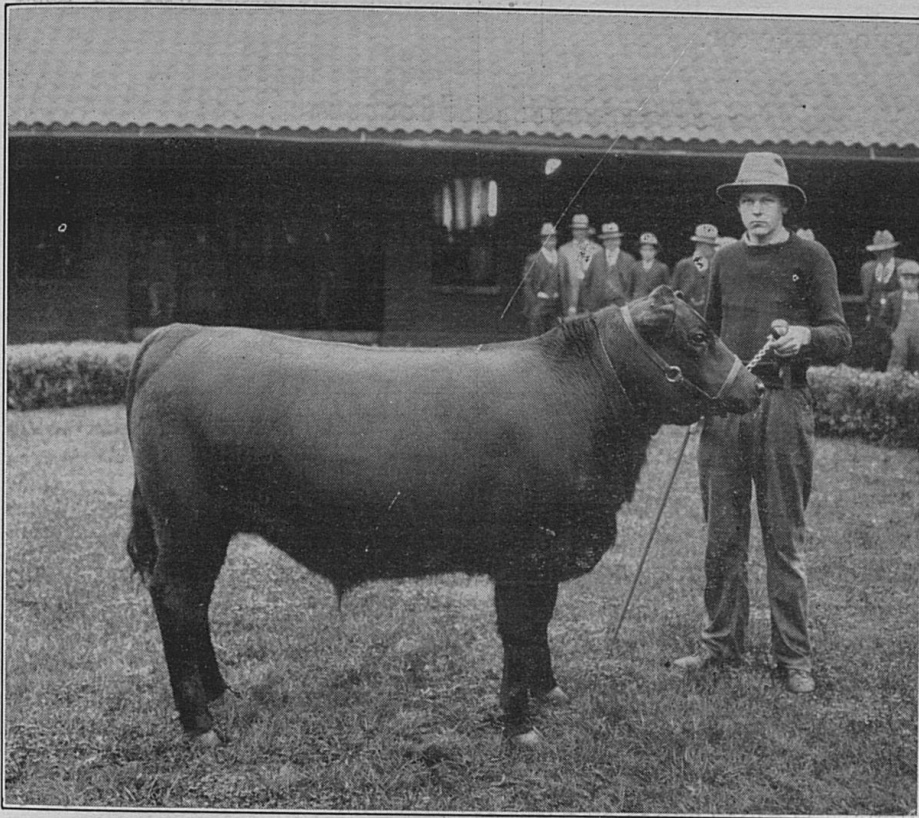
NATIONAL DAIRY SHOW

Kentucky was represented at the National Dairy Show by a judging team, a dairy demonstration team that placed third and a poultry demonstration team. Eleven head of Jersey



Champion room improvement exhibit. State Fair.

cattle were exhibited. Kentucky did not win first or second place in any of the club rings but thru numerous other awards won more premium money on dairy cattle exhibits than any other State. Twenty-two club members attended the show.



Paul Rich and his grand champion steer, baby beef show, 1930.

STATE ACHIEVEMENT PROGRAM

November 8th, was Achievement Day for more than 20,000 club members in Kentucky. The idea of having every county hold achievement day exercises at the same time, originated in Kentucky and was adopted by the U. S. Department of Agriculture and was made a nation-wide event. A state program was also put on the air from the University Studio of WHAS. This program included an address by the President of the University, achievement talks, and special music in which all club members were asked to join.

In each county assembly, appropriate exercises were arranged in addition to the radio program. Certificates and other awards were made at that time.

More interest was taken than in any other achievement program that has been attempted and the plan will be used again next year.

NATIONAL 4-H CONGRESS

Twenty-eight district and state champion 4-H club members and three leaders attended the National 4-H Club Congress this year. Exhibits were made in canning, clothing and 4-H club girls' room. There was also a team in the non-Collegiate Livestock Judging Contest.

PUBLIC INFORMATION

The Department of Public Information mailed each week to all newspapers in Kentucky and in cities and towns in territory adjoining the State, as well as to farm journals and other publications, a service containing 10 to 25 articles prepared in newspaper style, and containing information and news of interest and value to farm men and women.

Daily newspapers and press associations were furnished with items of spot news, including announcements of meetings, reports of meetings, stories of noteworthy accomplishments, and numerous other types of news articles. The newspapers received special material, consisting of feature articles, and news of value to particular sections of the State with cuts and mats or pictures, featuring extraordinary events.

The news service in 1930 contained approximately 2,500 articles, covering many phases of farming and homemaking.

A large amount of special material was requested by and furnished to various publications during the year.

Articles sent to the press during the year contained information on the following subjects: Livestock breeding and raising, crops and soil improvement, county agent and home demonstration work, dairying, feeds and feeding, horticulture, marketing,

farm economics, insect control, poultry raising, State Fair, junior club work, Farm and Home Convention, Experiment Station and College of Agriculture activities, forestry, radio programs, animal diseases, master farmers, demonstrations, etc.

AGRONOMY

LIMING MATERIALS

County agents' reports for 1930 show that 225,000 tons of ground limestone, 26,000 tons of marl, and 3,300 tons of burned lime were used. The total amount of lime materials used in these counties during the year was 225,000 tons. The report cannot include an accurate statement of the amount of liming materials used in the counties not having agricultural agents. According to similar reports issued by county agents in 1924, seven years ago, less than 75,000 tons of lime materials were used on Kentucky farms that year. During the period intervening from 1924 to 1930, inclusive, the amount of lime materials used in counties having agents totals more than 1,250,000 tons.

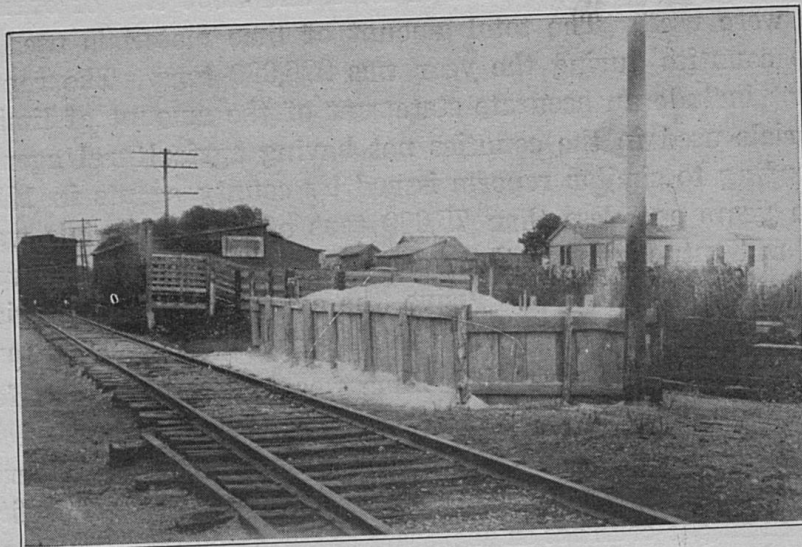
Ten years ago very little lime was used except in a few counties in western Kentucky, whereas now lime is used in every section of the State. Bourbon County, which is considered one of the best agricultural counties in Kentucky, takes first place of all the counties in the State in the amount of lime used. Her farmers have used over 70,000 tons of ground limestone during the past four years. Fayette County ranks second with approximately 50,000 tons used during that period.

Warren, Hardin, Christian, Simpson and Caldwell Counties led in the amount of limestone used in western Kentucky during 1930. Warren County reports the use of 13,500 tons of ground limestone during the year. Taylor, Russell, Wayne and Pulaski Counties are the leading limestone using counties in southern Kentucky, while Laurel, Rockcastle, Knox and Carter Counties lead in eastern Kentucky.

There were 179 portable crushers in operation during 1930 or 17 less than were in use in 1929. The number of lime sheds increased from 30 in 1929 to 37 in 1930. There were 125 retail

dealers in 47 counties as compared to 96 in 44 counties in 1929, and 1,601 lime demonstrations were carried on in 71 counties in 1930 as compared to 1,505 in 70 counties in 1929. The number of lime and superphosphate demonstrations in 57 counties was 1,102 in 1930 as compared to 865 in 61 counties in 1929.

In the fall of 1929, a State Honor Roll was established in order to interest the farmers of Kentucky in a more extensive use of ground limestone, marl and burned lime. In order for a farmer to have his name placed on the Lime Honor Roll, his



A serviceable and satisfactory railway lime-shed. This type is very inexpensive.

farm must contain at least 50 acres of tillable land and seventy-five percent of his tillable land must have been limed. The minimum amount of lime materials that must be used is 1,000 pounds of fresh burned lime, or 1,500 pounds of hydrated lime, or 2,000 pounds of ground limestone, or 4,000 pounds of marl per acre.

In 37 counties 537 men qualified for the Lime Honor Roll. Christian County led with 120. Russell County ranked second with 90, Laurel County third with 65, Simpson County fourth with 43, and Hardin County fifth with 40 men qualifying. Further surveys will no doubt bring to light many more farmers

who are eligible for the Lime Honor Roll. The Lime Honor Roll men represent, as a rule, the most successful farmers in their communities.

Attention has again been given to counties having marl. While no new counties have been added to the marl territory, yet many new beds have been found in the old territory and 544 samples were sent to the Experiment Station for analysis. Since the beginning of work with marl seven years ago, 5,371 samples have been analyzed by the Experiment Station.



Lime-spreading attachment on a manure spreader. Graves County.

In 1924, 138 men in 16 counties used.....	4,624 tons
In 1925, 437 men in 24 counties used.....	9,311 tons
In 1926, 317 men in 26 counties used.....	9,317 tons
In 1927, 243 men in 35 counties used.....	10,873 tons
In 1928, 233 men in 38 counties used.....	17,220 tons
In 1929, 472 men in 40 counties used.....	24,377 tons
In 1930, 390 men in 37 counties used.....	26,290 tons
	102,002 tons

FERTILIZERS

The number of farmers using fertilizers increases each year, especially in the Bluegrass region. Many county agents are now using the Illinois field test for soluble phosphate, which

enables them to know more accurately when to recommend phosphate fertilizers. This is especially useful in the Bluegrass region where the soils vary so much in their phosphate content.

There were 788 superphosphate demonstrations reported in 48 counties in 1930 and 1,102 lime and superphosphate demonstrations in 57 counties. Also 1,576 men in 25 counties used basic slag and 622 men in 21 counties used rock phosphate. Nine hundred men in 35 counties used light applications of lime and superphosphate mixed and 1,098 demonstrations with high grade complete fertilizers on tobacco were conducted in 60 counties.

LEGUMES AND PASTURE

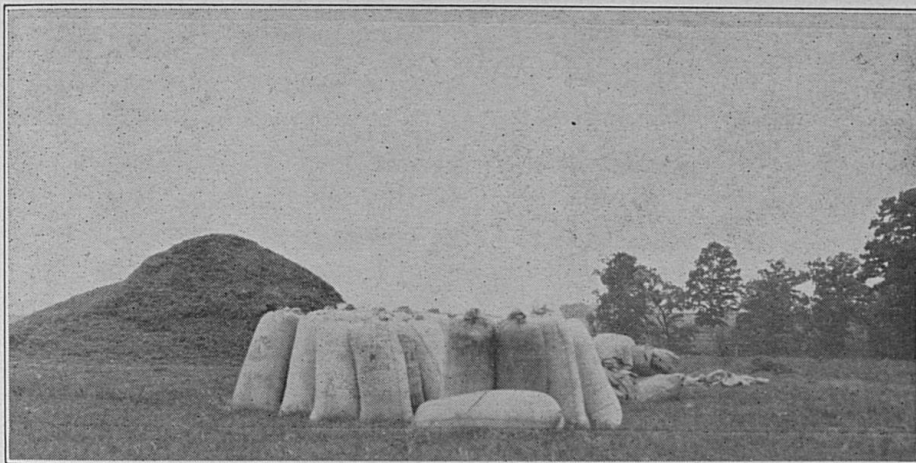
The year 1930 showed a continued increase in the acreage devoted to legumes. These were of the varieties best suited to profitable growth on the different types of land. The soybean acreage was greatly increased in the mountain counties. This is a phenomenal change in view of the rough lands on which much of this crop is grown. The use of 6,500 bushels of seed in Knox County, 5,500 bushels in Magoffin County, and 6,500 bushels in Lawrence County, indicates the trend. The best crops are grown on the narrow bottom lands, but many excellent crops come from the high hill sides.

Evidence of an effort to diversify cash crops is shown by 36 counties having some soybeans sown for seed whereas only 25 counties showed activity on this line in 1929. Only 14,500 bushels of seed are reported harvested in the entire State.

Sweet clover was sown to about the same extent as in 1929. It is noticeable that experienced men are sowing it in mixtures rather than alone. Of the 63,729 acres reported sown, two-thirds was sown in mixtures. It is estimated that half of this perished from drouth just as half of the alfalfa sown died from the same cause.

Pasture improvement continues to be made almost entirely by using from three to six varieties of grasses and clovers in mixtures as contrasted with the sowing of only one or two varieties a few years ago. This has not meant an increased cost for

seed. For example, the 7½ pounds of red clover and 6 pounds of timothy seed per acre ordinarily sown, costs at the date of this writing \$2.53 per acre. The improvement is made approximately as follows: Two pounds each of Korean Lespedeza, Common Lespedeza, Orchard Grass, Red Clover, Redtop and Timothy are sown, a total of 12 pounds, at a cost of \$2.60. Lespedeza has been used in about 95 percent of all improved mixtures. Orchard grass in this way is being introduced in many counties where before it was considered impossible to be grown. This is particularly true in the redtop section of Ken-



A crop of 550 pounds of Korean Lespedeza seed per acre. Simpson County.

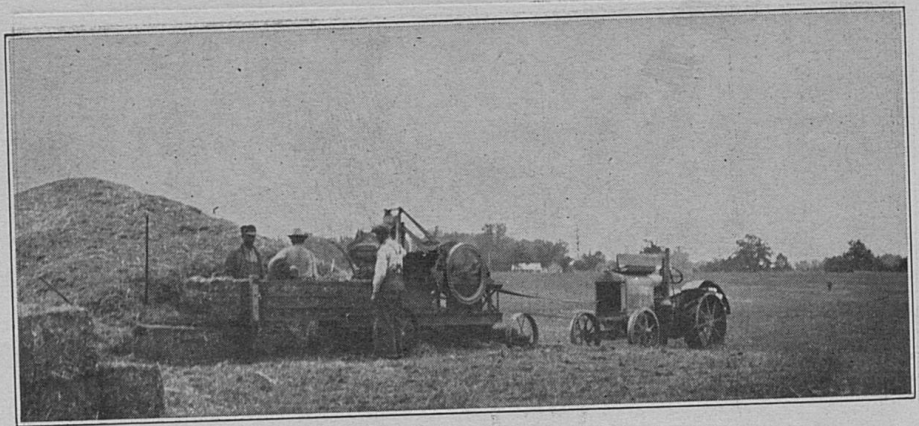
tucky. Graves County, for example, is getting much pasture from orchard grass. For better pastures, 1,361 farmers sowed alfalfa mixed in their red clover fields, and 1,796 sowed lespedeza in 17,220 acres of bluegrass.

The alfalfa acreage continues to spread in widely separated parts of the State. Approximately the same acreage was sown under the favorable weather conditions in 1929. Counties leading in sowings for 1930 are Christian 5,000 acres; Simpson 3,050; Owen 2,400; Henderson 2,200; Franklin 1,665; Warren 1,600 and Spencer 1,500.

Lespedeza is now widely used in Kentucky. Korean lespedeza sown by 4,200 farmers in county agents' counties in

1930 made successful stands in more than 90 percent of the crops, whereas generally other grasses and clovers were failures. In comparison with a common lespedeza seed crop of less than 1,000 bushels, due to drouth, the Korean seed crop is estimated at 30,000 bushels in spite of the drouth. These crops were harvested from what was left from approximately 1,600,000 acres of common lespedeza and 150,000 acres of Korean.

Typical of the experience with Korean lespedeza is this report from Larue County: "There were 22 fields sown; all came thru fine. Practically all farmers that have tried it are



Baling Korean Lespedeza straw.

well pleased with it. It is the one crop that withstood the drouth with practically 100 percent stand. Forty-one farmers sowed 53 bushels of seed. The seed was thot to be too high to buy but every one who used it said it was the cheapest seed they bought and sowed in 1930."

Leading counties in Korean seed production are Christian, Todd, Simpson, Union, Warren, Logan, Henderson and Graves.

In March of 1930, the Kentucky Seed Improvement Association was organized for the purpose of encouraging the production and use of clean seed of the best adapted crops. Members of this association for the 1930 season numbered 51 lespedeza growers, 3 orchard grass, 2 tobacco, 3 corn and 7 wheat.

SEED IMPROVEMENT WORK

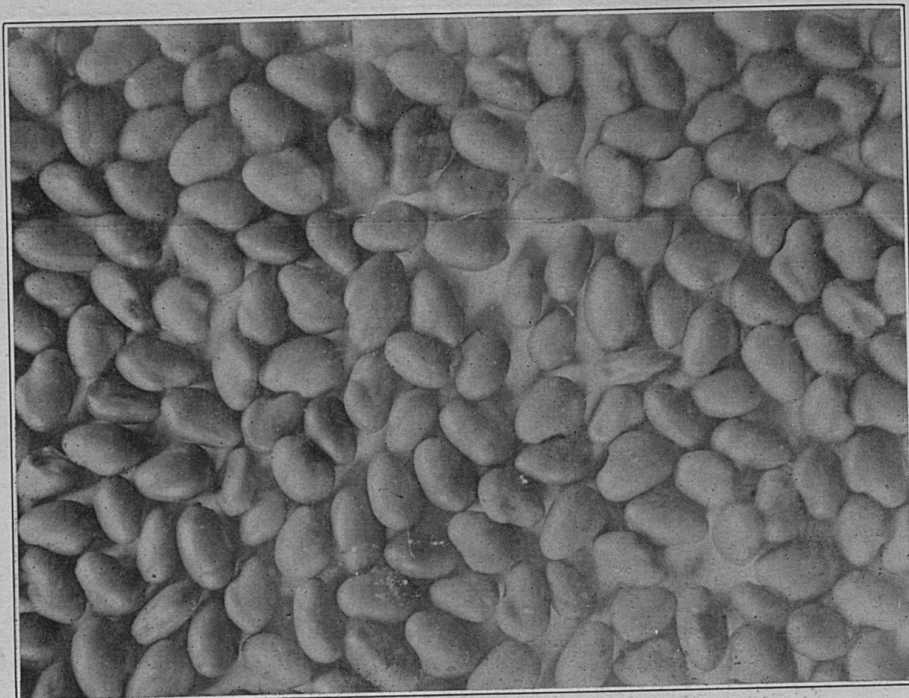
This work was started in August. The conditions which led to its adoption were the increasing infestation of farms with weed seeds, the presence on Kentucky markets of large amounts of low-grade field seed, and the tendency of most farmers of the State to buy seed on a basis of price rather than on a basis of quality. The purpose of this project is to call attention to the



Red clover seed priced at \$12.50 per bushel. The bushel contained 12 pounds of weed seed and 7 pounds of dirt. (Magnified)

increasing number of noxious weeds, their means of introduction, and losses due to them; to show that low grade seed are the most expensive, because they contain a low percent of good, viable seed, and a high percent of weed seed; and to explain how to avoid the purchase of inferior seed. In carrying on this work, 1,100 letters have been written to county agents, agricultural teachers and bankers. Radio talks and newspaper articles have been prepared, and more than 800 farmers have been interviewed.

The method of teaching the value of good seed is shown by the following illustration which was used in this campaign:



Red clover seed priced at \$18.00 per bushel. The bushel contained more than 99 percent of pure seed. (Magnified)

TWO LOTS OF RED CLOVER OFFERED FOR SALE IN KENTUCKY

Price per bushel	\$12.50	Price per bushel	\$18.00
	Percent		Percent
Purity	61.91	Purity	99.90
Weed seed	20.29	Weed seed10
Forage seed	7.14	Forage seed	T
Inert matter	10.66	Inert matter	T
Germination	58.00	Germination	93.00
One 60-lb. bu. contains—		One 60-lb. bu. contains—	
	Lbs.		Lbs.
Viable clover seed....	21.5	Viable clover seed....	55.70
Dead clover seed.....	15.6	Dead clover seed	4.20
Weed seed	12.2	Weed seed06
Forage seed	4.3	Forage seed02
Dirt	6.4	Dirt02
Price per bu. viable seed..	\$34.80	Price per bu. viable seed..	\$19.40

TOBACCO CURING DEMONSTRATIONS

Fifty curing demonstrations were started in Calloway County. Poor quality of tobacco due to the severe drouth discouraged many cooperators and only 20 completed the work. All these demonstrations, together with those of 1928 and 1929, point out very clearly the value of careful, systematic firing. It was shown that thoro wilting of plants for 4 to 8 days after cutting, slow, but gradually increasing fires for 2 to 4 days, hot fires for 4 to 6 days, and slow finishing fires for 20 to 40 days, produced the highest priced tobacco. The use of thermometers, the keeping of temperature records, and more systematic curing methods are increasing rapidly in this county.

TOBACCO SORTING DEMONSTRATIONS

Thirty-two tobacco sorting demonstrations were given in eleven counties. The total attendance was 850.

AGRICULTURAL ENGINEERING

The Extension Work in Agricultural Engineering is devoted mainly to drainage, terracing, sanitation and farm buildings.

DRAINAGE

The dry season of 1930 proved the value of tile drainage. In eastern Kentucky fields drained at least one crop year previous to this one produced much larger yields than did normally wet, undrained land, altho all crops suffered from the lack of moisture. The average yield of corn in the State in 1930 was estimated to be about 11 bushels per acre. The average yield of corn on tile-drained land was about 40 bushels per acre.

Following is an interesting report from Washington County:

“The goal set in community programs for tile drainage work in Fredericktown and Cecilville communities in Washington County was 14 cars of tile or 70,000 linear feet. Farmers of the two communities purchased and laid 15 carloads of tile. Last year 13 carloads of tile were laid. This work is a result of

one combined method and result demonstration and the work of local leaders. The farmers are very enthusiastic concerning the results."

Boyd County reports: "Tile drainage of the extremely high percentage of wet land in our county continues to hold a more important place and command more attention than any

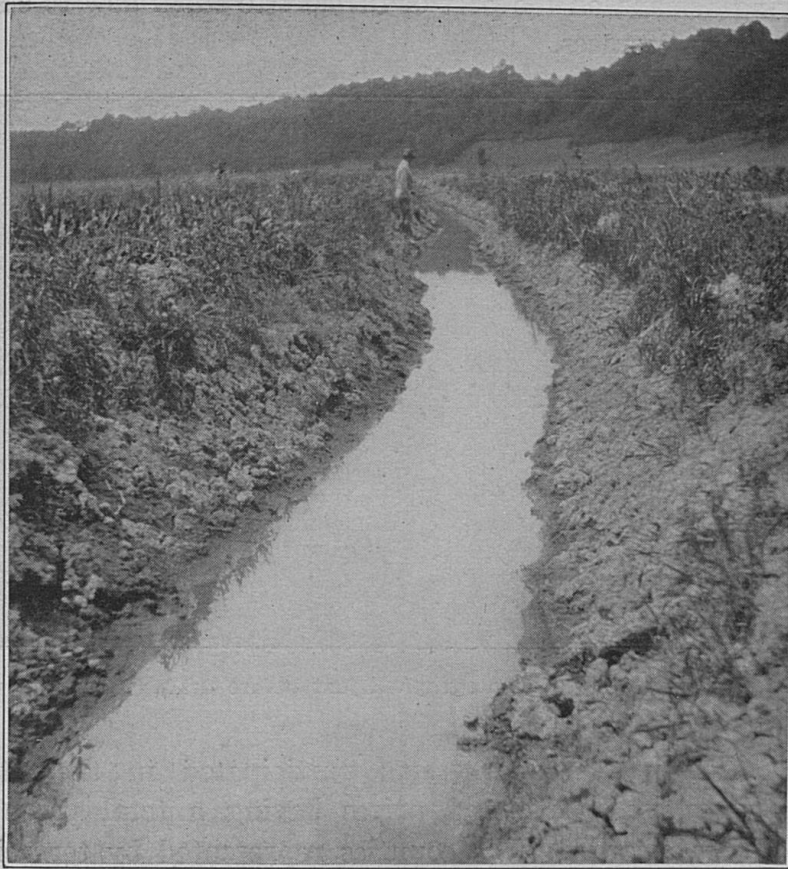


Placing dynamite on a curve in the ditch in the Elkhorn Creek drainage project in Franklin County.

other kind of rural engineering work. With tile drainage only two years old in Boyd county, it is gratifying to know that at this time 21 farmers have constructed drainage systems that have been laid to grade, established by an engineer. The old method of digging ditches and walling with rock is fast giving away to the installation of complete drainage systems of tile which can be secured at a factory located within the county.

Nine method demonstrations in laying tile to grade were given in five different communities of the county.”

Five Kentucky landowners living near Elkhorn Creek in Franklin County have completed the first major ditch blasting demonstration in the State. A ditch 2.85 miles long has been

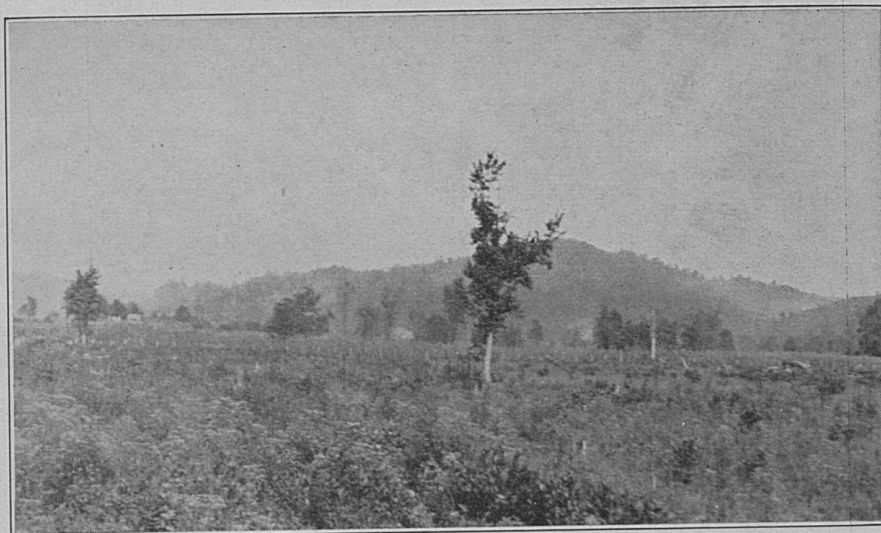


Blasted ditch, 2 feet wide at bottom, 5 feet wide at top and 3 feet deep. Cost only a little over 6 cents per linear foot.

constructed at a cost of approximately eight cents per linear foot. The total cost was \$1,152.20. The work was done in four days. During the first day's work 2,500 feet of trench was blasted at one shot. The average size of ditch was 2 feet wide at the bottom, 5 feet wide at the top and 3 feet deep. One mile of new channel was constructed and 1.85 miles of old ditch was deepened and widened.

TERRACING

Terracing work was handicapped by the severe drouth. A greater number of farmers constructed terraces this year than in any past year. The ground was so hard and dry, however, that the acreage terraced was not so large as last year. There is a growing demand on the part of farmers to learn how to stake out their own terraces.



A field in Knox County, photographed just before drainage project was started.

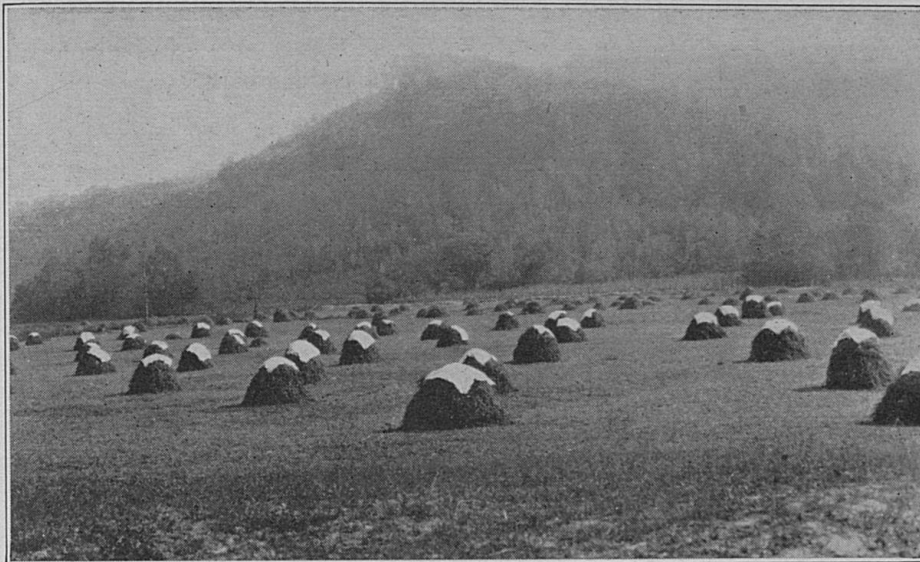
Six Junior 4-H club teams participated in the State terracing contest. Cash and prizes having a total value of \$168.50 were awarded. The counties represented by terracing teams were Graves, Fulton, Christian, Grayson, McCracken and Meade. Graves County won the contest with 478.7 points and Fulton was second with 478.6 points. Following the terracing contest the Graves County team terraced 75 acres in their county.

FARM BUILDINGS

During the past seven years approximately 9,500 farm buildings have been constructed according to plans prepared by the College. These included 6,574 poultry houses, 1,108 barns,

963 hog houses and 855 other buildings. In 1930 a greater use was made of the Farm Building Plan Service than in any previous year. This included 135 barns, 135 hog houses, 1,046 poultry houses, 106 silos and 172 other buildings. Structures other than dwellings were erected on 925 different farms.

There has been an increased demand for assistance in remodeling old dairy barns, building new barns, and in the installation of new equipment to meet the requirements of grade



The same field shown above. Since drainage was provided each crop has had a value equal to the cost of drainage. The value of the land has increased greatly.

A milk production. Many have become interested in the construction of bull pens and sheds for the safe handling of the herd sire. Five hundred and fifty-four sets of building plans and plans for livestock equipment were sent this year into 80 counties and into 27 different states. Four new plans were prepared for distribution, making a total of 132.

TRENCH SILOS

The drouth created a demand for silos, and the need on the part of many farmers for silos that could be constructed without a great cash outlay. At the suggestion of specialists in Agricul-

tural Engineering, several trench silos were constructed in localities where soil conditions were ideal for trench silo construction. These silos have kept silage perfectly to date, and it appears that the use of the trench silo will spread into other territory.

HANDICRAFT WORK AT CLUB CAMPS

Seven hundred and thirty-five boys received training in handicraft work at the 4-H Club camps. The exercises included the making of rope from binder twine, rope halters, chicken self-feeders, farm gates and poultry self-feeders.

ANIMAL HUSBANDRY

BEEF CATTLE

Beef cattle extension work included the following: (1) balanced rations and such systems of management as to make beef cattle feeding more profitable, (2) fattening cattle either as calves or yearlings, (3) fattening young cattle on grass by feeding grain, (4) establishing beef breeding herds, (5) improving housing conditions and arrangements for feeding and watering, (6) encouraging the use of silos where needed. The ultimate goal in beef production is to have all beef animals raised in Kentucky sired by purebred bulls; to improve the pastures and make proper use of them; to feed balanced rations; to provide proper housing, watering and management. Notwithstanding the adverse weather conditions, many men made a profit in the fattening of beef cattle, especially where the cattle were fattened for the winter and early spring markets. Good profits were obtained from calves and yearlings of good quality which were grain fed thru the summer and marketed in the fall.

Sixty-four meetings were held, with a total attendance of 3,882. A total of 514 visits were made to farms. The Grazing Beef Production Contest was held in Union County again this year. The Louisville Fat Stock Show has had much influence in promoting the production of baby beeves. The purebred beef cattle sale held at Maysville and the Mason County Fat Stock

Show also aided materially in buliding up beef cattle interest in Eastern Kentucky.

SWINE

Extension Work in swine husbandry embraces the following: (1) sanitation, (2) a ton litter contest, (3) better feeding methods, (4) improvement of home pork supplies.

Sanitation

Each year finds a greater number of farmers using sanitation as a standard practice in the program of hog production. More than five hundred farmers have adopted the practice and approximately twice this number are using some of the steps in sanitation. In one county on eleven farms it was found that 72 sows, handled in accordance with suggestions on sanitation, raised 545 pigs, an average of seven and a half pigs per litter in one farrowing season. The saving in grain per pig was two bushels—a little less than 20 percent. The time saved in getting pigs to market is about 43 days.

Ton Litter Contest

Ton litter work has been continued with marked success. Cost records were secured for 60 litters, 32 of which averaged a ton or more, in weight in 165 days. The average weight per litter was 2,221 pounds. The average number of pigs raised per litter was 10.3. The profit per litter above cost of feed, pasture and labor was \$70.53 in the group that weighed a ton or more per litter. The shortening of the feeding period decreased the number of heavy pigs, which sell at a price under the "top" of the market; also it enabled the contestants to continue feeding their pigs during the entire allotted period without having to take a reduced price. The total profit received on the 60 litters fed in the contest was \$3,715.13.

Better Feeding Methods

Twenty hog-feeding demonstrations were completed. The figures of a typical demonstration serve to illustrate the results

obtained. Fifty-two hogs were fed for 62 days. Altho the corn was bought at \$1.04 a bushel and other feeds at proportional prices, the net return above feed for the 62 days of feeding was \$158.17. This was accomplished in spite of the entire absence of pasture because of drouth. Many of the neighbors of this particular farmer after losing money on their hogs, are now ready to adopt his plan.

Home Pork Supply

At each demonstration of proper methods of cutting and curing meat and making sausage, one man is trained in the methods. He agrees to teach his neighbors and in this way the work is carried to larger numbers each year. Thirty-two demonstrations were given, with an attendance of approximately 1,000 farmers.

Assistance was given in locating and distributing purebred hogs, many going to mountain counties where they are badly needed.

SHEEP

Lamb standardization which started in the summer of 1920 is now being prosecuted along the following lines.: (1) the use of purebred rams as flock heads, (2) docking and castrating lambs, (3) parasitic control thru periodical drenching and rotation of pastures, (4) better feeding and management, (5) accredited flocks, (6) Golden Hoof Clubs.

The Use of Purebred Rams as Flock Heads

Eleven purebred flocks were established and 786 rams placed. Many of these were placed thru association sales. The number of purebreds brought to the State showed a marked decline from the numbers that had been imported in each of the recent years. This was due partly to the depressed financial condition, and partly because Kentucky flocks have been so developed that they are now practically supplying the present need for rams. Fifty-eight head of the best animals that could be procured from the leading Southdown and Hampshire flocks

in England were brought to Kentucky with the aid of a representative of the College during the year. Previous importations are already proving of benefit and are doing much to enable Kentucky to maintain her enviable reputation in the spring lamb industry.

Docking and Castrating

Proper trimming of lambs is now becoming a common practice among the best producers. Fourteen demonstrations were conducted by the specialist during the year and several hundred by the county farm agents, all of whom are now familiar with the methods.

Parasite Control

Internal parasities, particularly stomach worms, continue to be a limiting factor to profitable sheep production. Forty-two drenching demonstrations were held and an intensive campaign on the control of stomach worms kept the matter before farmers constantly.

Accredited Flocks

The Kentucky Accredited Purebred Sheep Breeders Association, a direct outgrowth of extension activities, is in its seventh year. It has been a potent factor in sheep improvement work.

An important development in accredited flock work is the tattoo system now in operation, designed to curb the traffic in nondescript breeding animals, especially rams. All registered animals which are good enough to meet the Association requirements are tattooed with the Association trade mark and only the progeny of these animals are eligible to the association tattoo in the future. An exception is made only of animals purchased from out the State. These are considered on their merits at each annual inspection.

Aside from accrediting the flock and promoting annual sales, the Association has assisted the College of Agriculture with a series of schools. Thirteen schools were held, with an

attendance of 1,187 sheepmen. The schools included a study of breed type, selection, culling, judging, handling sheep, parasitic control and general management problems.

The Kentucky Sheep and Wool Growers Association, also an outgrowth of extension activities, is a federation of county associations known as Golden Hoof Clubs. The Golden Hoof Clubs, aside from assisting with the general educational program, exert an influence favorable to sheep production. The demonstration flock project is now under way and will be extended as rapidly as possible until demonstration flocks have been established in every county having a Golden Hoof Club.

Eighty-four meetings were held during the year, with an attendance of 6,973. These meetings included demonstrations on docking and castrating lambs, drenching sheep for stomach worms, county organization meetings, lamb grading demonstrations, feeding and management schools and judging schools.

DAIRYING

In spite of a depressed market for dairy products and a shortage of pasture and hay, good dairy cows proved to be a dependable source of income. The extension program had for its chief object, increasing profits thru more rigid culling of cows, exercise of more care in the selection and use of feeds, a more carefully planned breeding program and marketing a better quality cream. The work included the following subjects:

1. Dairy Demonstration Herds
2. Dairy Herd Improvement Associations
3. Dairy Feeding Schools
4. Junior 4-H Dairy Calf Clubs
5. Cream Improvement

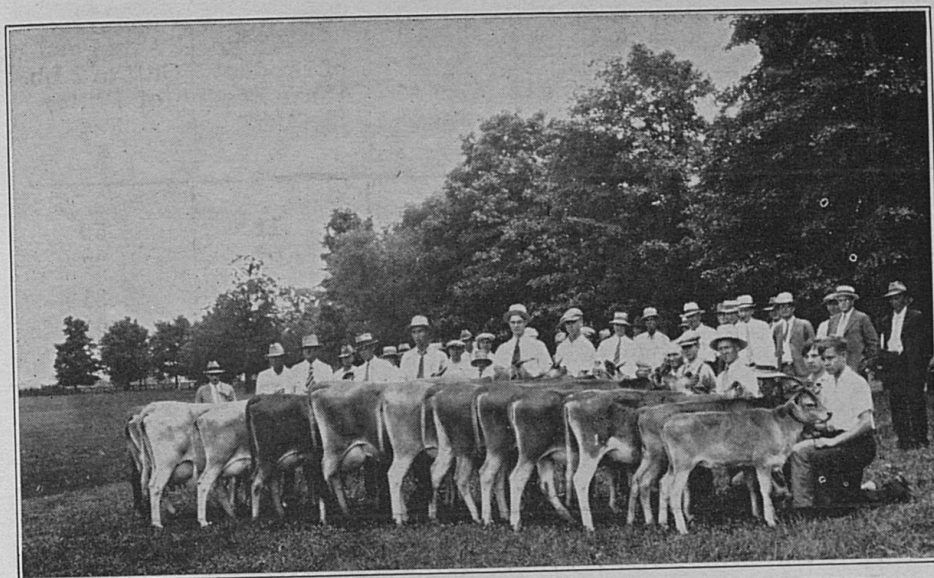
DAIRY DEMONSTRATION HERDS

The College assists the herd owner in keeping a simple record of production and feed cost of individual cows. The record book is furnished by the College of Agriculture. As approved dairy practices in care, feeding, management and

breeding are adopted, the results recorded appear strikingly in the record book and the dairyman becomes keenly interested in this herd. Complete records of one or more herds in each of 15 counties were obtained.

DAIRY HERD IMPROVEMENT ASSOCIATIONS

The dairy herd improvement association is a simple cooperative organization, the main object of which is to help its members to make more money from dairying. Each association has



A stop in the tour and picnic of the Marion County Dairy Herd Improvement Association. Only one cow which was in the herd at the beginning of the testing year was retained. The picture shows the herd in the tenth month of the testing year, after several high-producing cows and their heifers had been added to the herd. The herd average was 411 pounds of butterfat.

its own program of activities, depending on the dairy needs of the community. In the ten associations which completed their year's testing October 31, 5,148 cows in 253 herds were tested. Twenty-seven percent of these were registered. Sixteen percent, or 829 cows, were sold because they proved to be unprofitable. The feeding practices followed by members were as follows: 55 percent fed silage; 71 percent fed grain to cows on pasture; 47 percent fed grain to dry cows; 72 percent fed legume hay and only 8 percent of the members depended upon

non-legume hay. During 1930, 2,832 cow-record years were completed as compared with 1,942 during 1929.

The following table shows that low production is associated with low value of product above cost of feed and with high feed cost in producing a pound of butterfat. It also shows that an increase in the investment for feed for the better classes of cows was justified by a greater increase in the value of product produced by such cows over the cost of feed.

No. of Cows	Ave. Butter-fat Produced Lbs.	Ave. Milk Produced Lbs.	Ave. Total Cost of Feed \$	Ave. Value of Product Above Feed Cost \$	Ave. Feed Cost of 1 Lb. of Butter Fat \$
17	109	2580	55	11	50
158	155	3731	58	37	37
553	202	4724	62	61	31
758	250	5726	69	84	28
656	298	6833	76	106	26
389	346	7957	85	126	25
155	396	8857	94	148	24
58	447	10740	101	172	23

In interpreting the table do not confuse "value of product above feed cost" with "profit". When butterfat was sold in cream, cows were credited with the value of the skim-milk which they produced. This together with the fact that a majority of the association members in seven out of the nine associations reporting, sold whole milk, either retail or wholesale, accounts for an average valuation of 61 cents for a pound of butterfat.

The average cow in a Kentucky Dairy Herd Improvement Association during 1930 produced 270 pounds of butterfat compared with 256 pounds of butterfat during 1929. Better feeding practices and more rigid culling account for this improvement.

DAIRY FEEDING SCHOOLS

Thirteen schools were held, with an average attendance of 16 dairymen. Feeding charts were prepared and distributed among a number of the county agents at district conferences for use in their community meetings.

JUNIOR 4-H DAIRY CALF CLUBS

Dairy calf club work was conducted in 71 counties. A large proportion of the county dairy calf clubs in Kentucky use Jerseys. Five use Holsteins, two Guernseys, one Ayrshires and 63 Jerseys. One thousand seven hundred and forty-nine boys and girls, who owned 1,987 animals, were enrolled and 1,402 of these completed their projects. Seven fitting and showing demonstrations were conducted at points which were as accessible as possible to calf club members. Sixty-six 4-H dairy calf club members attended the judging school at the Experiment Station in July and 22 judging teams were trained by county agents and competed in the 4-H club dairy cattle judging contest at the State Fair. Five district 4-H club shows were held at which 345 registered dairy calves were exhibited by club members. Ninety-nine calves were exhibited at the State Fair. A new dairy record book was prepared especially adapted for keeping production and feed cost records.

CREAM IMPROVEMENT

The four-day plan of grading cream at cream buying stations has been found to improve the quality of the cream very much. The quality of cream greatly affects the quality of the butter manufactured. The four-day plan provides for a higher price for cream delivered at cream buying stations within four days of the patron's previous delivery. Cream sold at less frequent intervals sells for less and is known as regular cream.

The following table shows that farmers who sell to cream-buying stations are taking advantage of the opportunity to secure the premium paid for "four-day cream".

	Year Ending Dec. 1, 1929	Year Ending Dec. 1, 1930
Pounds of butterfat purchased.....	5,817,129	6,278,471
Total pounds of premium butterfat purchased	2,929,933	3,405,117
Percent of total	50.4	54.2
Total pounds of regular butterfat purchased	2,834,705	2,834,130
Percent of total	48.7	45.1
Total pounds of rejected butterfat purchased	52,491	39,224
Percent of total9	.7

During 1930 eight additional counties were included in so-called "Four-day grading territory", making a total of 55 counties now in the work. The table shows that, in spite of the new territory added and the increase in total volume of cream purchased at buying stations, there was still a significant increase in the percent of "premium cream" purchased.

POULTRY

The chief problems are: (1) To produce poultry and eggs more efficiently by using better methods of breeding, feeding, housing and culling; (2) To control diseases and parasites; (3) To raise and manage the young stock more efficiently. The ultimate goal is to have every flock in the State on a paying basis. Approximately 200 demonstrations of growing healthy chicks were conducted during the year. Previous to adopting this program, the chick mortality had been from 25 to 30 percent on the farms where the demonstrations were conducted. Sixty complete records show that 87 percent of the chicks were raised where the new practices are being followed. One cooperator in Grayson County reports that he has increased his efficiency in growing stock at least 25 percent as measured by feed consumption, lower mortality and more rapid rate of growth.

FARM FLOCK CALENDAR PROJECT

In most counties this plan is used as a prerequisite to the Demonstration Flock project. The information collected was issued to show what income is possible from the farm flock.

DEMONSTRATION PRACTICES

On November 1, 1929, 369 demonstrators started the year in this project. Approximately 75 percent finished the project on October 31, 1930. Eighty of this number joined the Certified Breeders Department of Kentucky Poultry Improvement Association, and their flocks were duly certified.

This is the second year for Record of Performance work in the State, with 10 breeders cooperating. One of the most outstanding accomplishments is that five hens made official records of over 300 eggs. The highest record, of 307 eggs, was made by a S. C. Rhode Island Red hen owned by E. I. Hunt, Vine Grove, for several years a Demonstration Flock owner. The highest White Leghorn record was 306 eggs. Two hens, one owned by W. E. Pyles of Maysville and the other by August Threlkeld of Corinth, each laid 306 eggs. A number of demonstrators had flock averages of over 200 eggs per hen.

Many cooperators in the "Grow Healthy Chicks" program raised 95 percent of their chicks. Perhaps the most outstanding results obtained in this project were accomplished by Mr. and Mrs. William H. Faulhaber, of Campbell County. They put 842 Rhode Island Red Chicks in two brooder houses on February 5th and 12th. On April 29th, when a field meeting was held at their farm, 834 of the chicks were living. Their average weight was over 2 pounds.

The annual poultry short course and a hatchery school were held and instruction was given in poultry during the Junior Week and the Farm and Home Convention. Sixteen poultry shows and community fairs were judged, with educational explanations. Of the 15 hatcheries visited a number were accredited and some were already selling chicks tested for bacillary white diarrhea. Thirty-five demonstration breeding pens were selected for farmers.

VETERINARY SCIENCE

Seventy-five educational meetings were held and 210 farm visits were made. Arrangements for meetings were in most instances made by the county agent who usually selected the topics to be discussed. His contact with livestock owners enabled him to learn what particular disease problems were giving trouble, about which owners were apparently not well informed.

DISEASES OF CATTLE

Seven educational meetings were held and 43 visits were made to discuss with owners detailed methods to be used in the prevention and eradication of contagious abortion. Twenty-five demonstrations were held on the technique of collecting blood for the agglutination test. Dairymen are taking an increased interest in methods of establishing herds free from abortion.

Coccidiosis in cattle appears to be on the increase. However, the increased number of cases encountered may be due to more accurate methods of diagnosis. Control of the disease consists almost wholly in sanitation. Therefore, after diagnosis the problem becomes largely one of proper herd management. Where this disease was found, sanitary control measures were given in detail for the use of cattle owners.

Twenty educational meetings in three counties were held preliminary to the beginning of official testing for tuberculosis by the State and Federal forces.

A few requests were received for information on hemorrhagic septicemia, Johne's disease and rabies in cattle. Meetings and consultations were held in the counties in which outbreaks of the respective diseases had occurred. There is great need for further educational work on the nature, control and prevention of rabies. Johne's disease is sporadic in nature, but loss in individual herds is often high. Hemorrhagic septicemia is apparently not so serious as was formerly supposed, but must be differentiated from suspected forage poisoning or botulism, plant poisoning and accidental poisoning from chemicals.

DISEASES OF SWINE

Hog cholera continues to be the principal disease among swine. Only three demonstrations were held last year on methods of vaccination against this disease, as the vaccination process is now generally understood. The greatest difficulty is in making diagnosis and differentiating hog cholera from other diseases with similar symptoms. Farms were visited to advise as to the proper way to clean and disinfect premises and establish control measures for cholera and other swine disease. The Extension Division directed its effort toward teaching proper control and preventive measures against hog cholera and also the parasitic and infectious diseases of swine.

DISEASES OF SHEEP

Intestinal coccidiosis in sheep is being encountered quite frequently. Often lambs are found heavily infested with tapeworm. Prevention of all the different parasitic diseases of sheep thru a definite plan of pasture rotation offers the most satisfactory solution.

DISEASES OF POULTRY

During the year 24 counties were visited and 38 educational meetings were held. Bacillary white diarrhea is the major disease problem in poultry. Coccidiosis, botulism, chicken-pox and parasites, individually and collectively, exact a heavy toll. Poultrymen were given information as to the nature of those diseases and instructed in the use of preventive measures. Successful control of parasites in a herd or flock is dependent upon the intelligence and thoroughness with which the owners carry out a program of prevention. Parasites in all species of animals is a never ending problem.

ENTOMOLOGY AND BOTANY

The State of Kentucky is blessed with a variety of nectar-yielding flora from which much excellent honey can be produced. Only a small proportion of this available nectar is gathered by bees. It is clear that an opportunity to increase the supply of

honey is being missed. The department of Entomology and Botany has centered its extension activities upon the bee and honey business. It has endeavored to teach and demonstrate better methods of beekeeping; to create a fuller appreciation of the value of the bee, both as a pollinating agent and as a manufacturer of one of the very best sweets, and to encourage the home consumption of locally produced honey. Pursuant to these ends twelve county meetings were held with attendance



A well-kept apiary.

ranging from 25 to 90. In addition to the county meetings five radio talks on the subject of bees were made, many answers to specific questions asked by individuals were given and two mimeographed letters were mailed to all county agents and to about 600 beekeepers.

HORTICULTURE

The Pomology Extension work consisted of three major projects, orchard management, junior clubs and commercial small fruit growing.

ORCHARD MANAGEMENT

More than 50 meetings were held, with the cooperation of the local fruit growers associations, in 25 of the leading fruit counties. Ten leader-training demonstrations of pruning and treating winter-injured orchards were held. Orchards treated as recommended made remarkable recovery during the summer. The following demonstrations were made with local leaders in



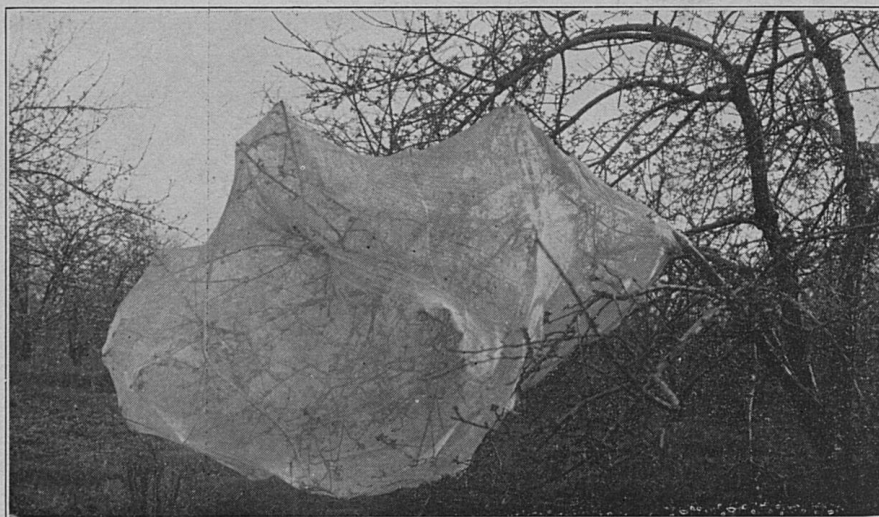
Increasing the set of fruit on winesap trees by introducing bouquets of pollen-producing varieties.

all the principal fruit counties: (a) Korean lespedeza cover crop for apple orchards, (b) summer cover crops and soil management for peaches, (c) straw mulch in bearing apple orchards, (d) bees in the orchard for pollination. The straw mulch proved to be very profitable in a dry year. The fruit produced with mulch was large and high in quality.

A demonstration was made in Henderson County which showed conclusively the dependence of pollination on bees. Only one apple was set on parts of a tree from which bees were ex-

cluded. Other demonstrations, in Ballard, McCracken and Henderson Counties, were made with bees, using bouquets of pollen-producing varieties. About four times as much fruit was set on trees near bouquets as on the trees some distance away which demonstrated the necessity for planting suitable pollen varieties in the apple orchard.

A spray service was established for apple growers in 24 counties. The service consisted of timely letters to over 300 growers telling them when to spray, what materials to use, and



Excluding bees from blossoms on a winesap tree, by a cheesecloth bag, resulted in failure to set fruit. The rest of the tree bore a full crop.

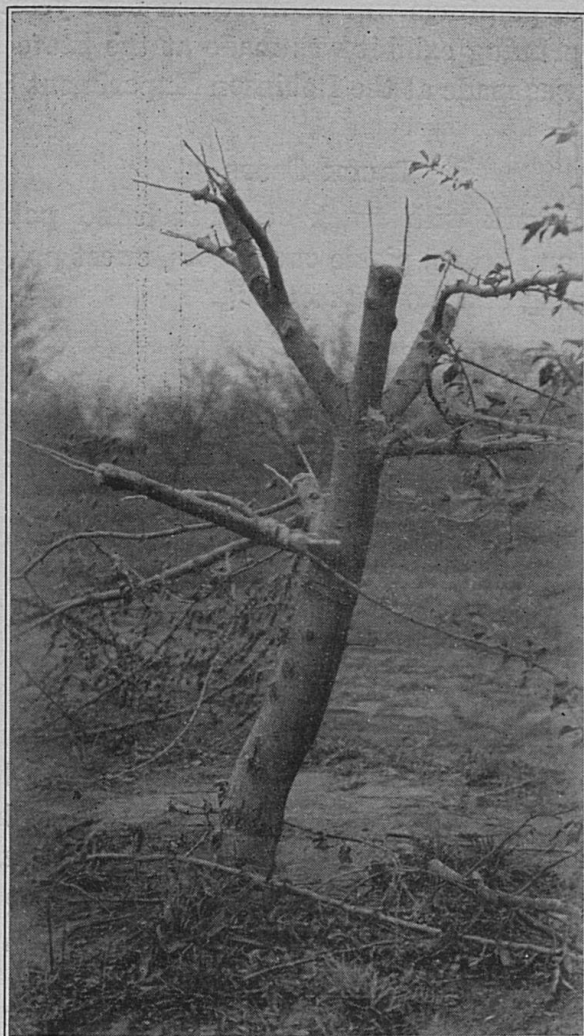
the seriousness of pest infestation, based on field and laboratory observations. This work proved to be very popular with the growers.

JUNIOR CLUB WORK

Thirty boys and girls in McCracken County selected the raspberry project in 1929. The net income of about half the club members in 1930 ranged from \$60 to \$127 from 1,000 plants. The project has been so successful that several members expect to double their acreage in 1931. As a result several farmers in the neighborhood will put out commercial plantings.

COMMERCIAL SMALL-FRUIT GROWING

The "200 crate per acre" strawberry club was continued in McCracken County. Cash prizes were awarded by local firms in



Changing a worthless variety to a desirable variety by top grafting.

Paducah. The practices followed by the winners were discussed at local meetings. The average yield obtained by club members was 21 crates per acre larger than in 1929.

Leader demonstrations with red raspberries in 1929 resulted in several commercial plantings in 1930. The results obtained

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by demonstrators have exceeded expectations and further plantings will be made in 1931. Raspberry leader-training meetings were held in Boyle County and a marketing association was formed. The results obtained in 1930 were generally profitable and commercial plantings will be increased next year.

A grape pruning exhibit was made at the State Fair. An apple display was made at the Robinson Experiment Substation.

TRUCK CROPS

Extension work with truck crops included potatoes, canning tomatoes and beans, pickle cucumbers, sweet potatoes, commercial gardening and home gardening.

POTATOES

The goal which was set, to introduce certified seed into six new counties, was exceeded by the addition of Elliott, Floyd, Crittenden, Knott, Casey and Taylor; and seventeen dealers in eight additional counties, Union, Lewis, Mason, Wolfe, Morgan, Laurel, Whitley and Menifee, handled certified seed potatoes for the first time. The College secured the cooperation of the St. Matthews Produce Exchange which supplies the seed potatoes at cost. Thirty-six cars of certified seed were brought into the State as a result of the Extension Service. One hundred and nineteen seed treatment demonstrations were held, with 1,314 persons in attendance. Forty-two growers each raised a demonstration acre of potatoes and followed fertilizer recommendations furnished by the College. The average yield obtained by the demonstrators was 212 bushels per acre, while the average yield for the section was estimated at 82 bushels per acre. Thirty-one growers demonstrated spraying potatoes with Bordeaux Mixture, which resulted in an average increase of 18 bushels per acre for the early crop, but was not significant on the late crop.

TOMATOES FOR CANNING

Twenty-two tomato schools were held with an attendance of 4,018. Follow up letters were sent to 450 growers. Forty-two

spraying demonstrations were given. Thirty-two demonstrators produced an average yield of 203 bushels per acre, in contrast to the average yield of 41 bushels. Four picking demonstrations were held.

PICKLE CUCUMBERS

Twelve meetings were held with an attendance of 274 men. Twelve dusting demonstrations were given for beetle control. The best demonstration acre returned \$242 to the grower, but several demonstrators did not complete their demonstrations because of the unfavorable season.

SWEETPOTATOES

Seven meetings were held with a total attendance of 392 growers, to demonstrate seed treatment and methods of handling beds. More than 50 percent of the growers used slips from treated seed.

COMMERCIAL GARDENING

Ten general meetings were held with an attendance of 1,301 growers.

HOME GARDENS

This work was carried as a joint project with the Home Economics Department. Twelve leader-training meetings were held, with an attendance of 119. Thirty-nine weekly garden articles were released thru the Department of Public Information. A mechanical exhibit at the State Fair presented six scenes of a playlet illustrating the mistakes commonly made by gardeners and how they should be corrected.

FARM ECONOMICS

The Extension Work of the Department of Farm Economics followed four principal lines: (1) Farm business analysis thru accounting, (2) farm business reorganization and budgeting, (3) farm business education and the training of leaders of economics, (4) rural life improvement.

FARM BUSINESS ANALYSIS THRU ACCOUNTING

Farm accounting was continued as a major project in the counties which carried the work in 1929, and was expanded by the inclusion of Todd and Christian Counties. The accounts of each cooperating farmer were summarized and his net earnings calculated. The records of all cooperators by county or regional groups were then summarized by averages for the group. An individual analysis with the business factors worked out in detail was then returned to each cooperator, the record showing in parallel columns a comparison of his performance with those of the average of the local group, also those of the most successful, and the least successful of the group. This analysis showed in each case the strong and the weak points of the individual business. Using this as a basis each cooperator was visited and shown how his business might be improved so as to return a larger income. Group reports of farm business analysis for seven counties were thus prepared and returned to 220 cooperating farmers. The field agents supervised 262 such farm records. Account books were furnished to 266 other farmers located in 51 counties.

FARM BUSINESS REORGANIZATION AND BUDGETING

Increased emphasis was placed on definite long-time plans or budgets for the farm business. Farmers were encouraged to regard the chief use of accounts as that of furnishing the basis for formulating a cropping and livestock system which would make the best possible use of the farm resources and result in the best possible net profit from the combination of enterprises. Supervision of a total of 31 budgets was given to farmers.

The results of a budget and a farming system worked out by the operator of a 96-acre western Kentucky farm under the supervision of this Department during the past five years serves as an illustration. This man started as a cooperator in the farm accounting project in 1924, the accounts the first year showing a net return of \$1,100 to the labor and capital of the operator for the year. Using the accounts to find the weak places in the business a start was made in reorganizing the farm by making

out a budget. By this means a calculation was made in advance indicating the effect of contemplated changes and adjustments. As the changes were made the operator kept accounts to check the results secured with those contemplated in the budget. The accounts and budgeting were continued year after year with a steady improvement in farm profits, the final result being an increase in gross sales to \$3,900 a year and a net yearly return of \$2,750 for the operator's labor and capital.

FARM BUSINESS EDUCATION AND TRAINING LEADERS IN ECONOMICS

To meet the wide-spread need on the part of the farmers for a better understanding of fundamental business and economic principles, a plan of work was undertaken for training leaders in economics. The chief object was to give farmers a knowledge of fundamental economic principles and their application. The work is promoted by holding meetings or schools, also by radio talks, press articles and monthly leaflets presenting timely economic and farm management facts.

RURAL LIFE IMPROVEMENT

Rural Life Conferences were held again this year in three Grant County Communities. The conference in one of these communities was the third, in two others the second successive annual conference. These communities were again scored by the 1000-point score card, on farms, homes, community economics and business, schools, churches, health, citizenship, community spirit and recreation. In each of these communities committees representing the various community needs and activities were selected by the conference and put to work. The chairmen of these committees constituted a community counsel or central committee, the function of which was to coordinate and foster collective efforts for the improvement of community life. Definite progress was made in the community life in these three communities. In Community No. 1, 700 persons attended the 1930 conference and a final score of 718 was made as compared with a score of 667 in 1929 and 614 in 1928. In Community No.

2, the attendance at the 1930 conference was 450 and a score of 728 was made as compared with 670 for 1929. In Community No. 3, 400 persons attended the conference and the score was 699 as against 683 a year before.

MARKETS AND RURAL FINANCE

AGRICULTURAL OUTLOOK

The collection and dissemination of information relating to the agricultural outlook was given major consideration. A statement of the factors that would probably affect the 1930 markets for Kentucky agricultural products was prepared early in the year. Printed copies of this report, together with illustrative and other materials were then made available to county agricultural agents, farm leaders and the press for educational purposes.

A wide distribution of the outlook information was obtained thru the various educational and publicity agencies of the State. Sixty-eight county agricultural agents used it as a basis for discussing plans for farming at 486 meetings where 15,972 people were given the information. Twenty-eight instructors in agriculture held 80 meetings and reached 1,478 persons. The outlook was also published, wholly or in part, by 95 county newspapers in addition to being used by agricultural journals and the city press. Basic information for adjusting production to probable market conditions was thus brought to the attention of many thousand farmers of the State.

CURRENT MARKET INFORMATION

Information of supply and demand conditions and the general business situation as related to agriculture was currently made available to farmers thru a monthly publication, Notes on the Kentucky Agricultural Situation, and thru news articles.

MARKETING ORGANIZATION

Increased interest in cooperative marketing created a greater demand for extension service in this field than has existed

for several years. Consequently, much attention was given to advising farmers with regard to their plans for organization of cooperative associations. Information regarding various plans of existing organizations, management problems, opportunities of cooperative organizations of service, limitations and relation of cooperation to national agricultural policy were some of the principal subjects discussed with many groups of farmers. Wool growers livestock producers, dairymen and tobacco growers, in addition to fruit and vegetable growers, were some of the larger groups of farmers in the State and were advised.

Groups of cooperating farmers were also advised with respect to operating problems of their cooperative marketing associations. This part of the service necessarily develops slowly as it is dependent upon the results of research. Some progress was realized, however. On the findings of a detailed study of cooperative strawberry marketing associations, strawberry growers were advised of the factors affecting the efficiency of cooperative strawberry marketing associations, as well as the policies of shipping, selling and pooling.

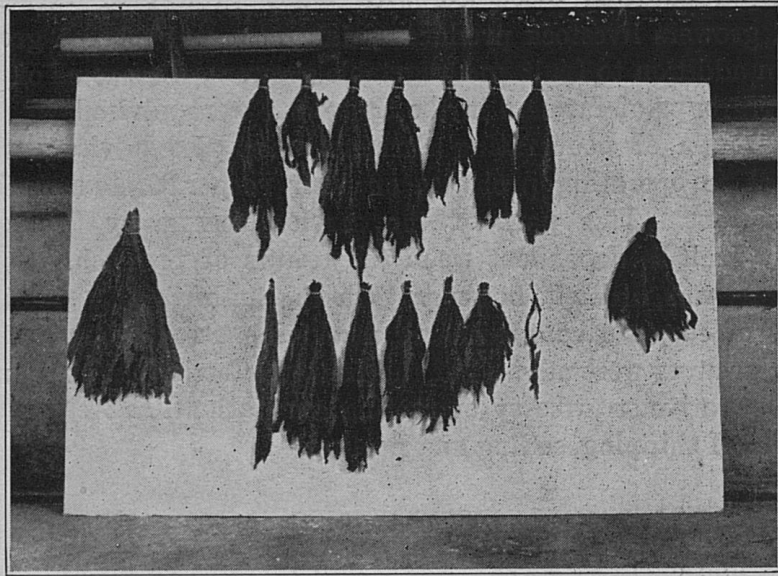
TOBACCO QUOTATION SERVICE

A market news service was begun for tobacco growers and dealers. This was the first known attempt to establish a regular quotation service for tobacco markets. Price quotations were prepared by a qualified judge of tobacco who daily visited the auction sales of burley tobacco held in Lexington. These quotations together with a statement of market conditions were then broadcast. Altho given only thrice weekly for the 1929 crop, the demand for the service was so great that a daily service was given for the crop of 1930.

TOBACCO SORTING DEMONSTRATIONS

Thirty-two sorting demonstrations, covering eleven counties and reaching 850 farmers, were given during the year. The accompanying picture illustrates the value of careful sorting and preparation of tobacco for market. The tobacco at the top of the picture represents several hands taken from the same

basket, selected at random and sold at auction for $1\frac{1}{2}$ cents per pound. The various hands were valued by the tobacco expert at 5, 1, 3, 3, 1, $1\frac{1}{2}$ and $1\frac{1}{2}$ cents per pound, in their order from left to right. When resorted by hands this same tobacco was valued at $2\frac{3}{4}$ cents per pound. The hands were then untied



Improving tobacco price by grading.

and resorted according to quality. The lower row in the Figure shows the result. These hands were valued from left to right at 15, 8, 7, 2, 2, 1, and 0 cents per pound. Thus resorted by leaves, this tobacco would have sold for $5\frac{1}{4}$ cents instead of $1\frac{1}{2}$ cents, the price which it actually brought.

PUBLICATIONS ISSUED DURING THE YEAR 1930

- Circular No. 75, Revised, Suggestions for the Winter Feeding of Steers.
- Circular No. 82, Revised, Corn Project, Junior 4-H Clubs.
- Circular No. 86, Revised, Tobacco Project, Junior 4-H Clubs.
- Circular No. 94, Revised, Soybean Project, Junior 4-H Clubs.
- Circular No. 100, Revised, Potato Project, Junior 4-H Clubs.
- Circular No. 110, Revised, Hatching and Raising Chicks.
- Circular No. 126, Revised, Tomato Project, Junior 4-H Clubs.
- Circular No. 128, Revised, Building Plans for the Dairy Farm.
- Circular No. 137, Revised, Feeding and Care of Laying Pullets.
- Circular No. 157, Revised, Brooding Chicks Artificially.
- Circular No. 188, Reprint, A System for Scoring Kentucky Rural Communities.
- Circular No. 194, Clothing Manual, Junior 4-H Clubs.
- Circular No. 227, Feeding Dairy Cows for Profit.
- Circular No. 228, Meal Planning.
- Circular No. 229, Lawns.
- Circular No. 230, The Production of White Burley Tobacco.
- Circular No. 230, Reprint, The Production of White Burley Tobacco.
- Circular No. 231, One-Dish Meals.
- Circular No. 232, Soybeans and Cowpeas for Hay.
- Circular No. 233, One Hundred-Calorie Portions of Foods Commonly Used in Kentucky.
- Circular No. 234, Salads.
- Circular No. 235, Raspberry Culture in Kentucky.
- Circular No. 236, Annual Report of the Extension Division for 1929.
- Circular No. 237, Walls as Backgrounds in the Livable Home.
- Circular No. 238, Strawberries for the Garden.
- Circular No. 239, The Family Meal Hour.
- Circular No. 240, A Kentucky Farm Which was Organized Into an Efficient Business Unit.
- Circular No. 241, Painting the Exterior of the House.

LIST OF EXTENSION WORKERS

January 1st to December 31st, 1930

ADMINISTRATION

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

AGRONOMY

George Roberts, Head of Department
 Ralph Kenny, Field Agent in Crops
 S. C. Jones, Field Agent in Soils
 E. C. Vaughn, Field Agent in Improved Seed Production
 *Russell Hunt, Field Agent in Tobacco

AGRICULTURAL ENGINEERING

J. B. Kelley, Field Agent in Agricultural Engineering
 Earl G. Welch, Field Agent in Agricultural Engineering
 *Howard Matson, Field Agent in Agricultural Engineering

ANIMAL HUSBANDRY

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

CLOTHING

Isabelle Story, Field Agent in Clothing
 Edith Lacy, Field Agent in Home Economics

DAIRY

J. O. Barkman, Field Agent in Dairying
 Ted S. Besh, Field Agent in Dairying
 *Jesse Collins, Field Agent in Dairying

FARM MANAGEMENT

*R. E. Proctor, Field Agent in Farm Management
 *Z. L. Galloway, Field Agent in Farm Management

FOODS

Florence Imlay, Field Agent in Foods

HOME MANAGEMENT

Ida Hagman, Field Agent in Home Economics

HORTICULTURE

W. W. Magill, Field Agent in Horticulture (Orcharding)
 J. S. Gardner, Field Agent in Horticulture (Truck Crop)
 N. R. Elliott, Field Agent in Horticulture (Landscape)

*Appointed during the year.

JUNIOR CLUBS

J. W. Whitehouse, State Leader of Junior Club Work
J. M. Feltner, Field Agent in Junior Club Work
M. S. Garside, Field Agent in Junior Club Work
Anita Burnam, Field Agent in Junior Club Work
G. J. McKenney, Field Agent in Junior Club Work
E. E. Fish, Field Agent in Junior Club Work
*Carl W. Jones, Field Agent in Junior Club Work

MARKETS

*L. A. Vennes, Field Agent in Markets

MOVABLE SCHOOLS

*L. C. Brewer, Asst. in Short Courses and Exhibits

PUBLIC INFORMATION

C. A. Lewis, Editor

POULTRY

J. H. Martin, Field Agent in Poultry
J. E. Humphrey, Field Agent in Poultry
C. E. Harris, Field Agent in Poultry
Stanley Caton, Field Agent in Poultry

RURAL SOCIOLOGY

W. D. Nichols, Head of Department

VETERINARY SCIENCE

T. P. Polk, Field Agent in Veterinary Science

COUNTY AGENT WORK

C. A. Mahan, State Agent
I. C. Graddy, Assistant State Agent
E. J. Kilpatrick, Assistant State Agent
H. F. Link, Assistant State Agent
W. C. Wilson, Assistant State Agent
A. C. Burnette, Agent in Charge of Negro Work
S. W. Anderson, County Agent, Jefferson County
W. J. Ashbrook, County Agent, Green County
J. H. Atkerson, County Agent, Allen County
John C. Bach, County Agent, Magoffin County
S. J. Jones, County Agent, Larue County

*Appointed during the year.

D. S. Bishopp, County Agent, Adair County
 C. O. Bondurant, County Agent, Owen County
 †K. J. Bowles, County Agent, Morgan County
 Stuart Brabant, County Agent, Todd County
 *W. L. Browning, County Agent, Powell County
 L. C. Brewer, County Agent, Fayette County
 H. C. Brown, Asst. County Agent, Scott County
 John C. Brown, County Agent, Warren County
 C. V. Bryan, County Agent, Taylor County
 †H. M. Christian, County Agent, Nelson County
 *H. B. Cravens, County Agent, Breathitt County
 Carl B. Day, County Agent, Casey County
 C. O. Dickey, County Agent, Webster County
 R. S. Dunn, County Agent, Spencer County
 J. M. Dyer, County Agent, Henderson County
 H. A. Edge, County Agent, Hickman & Carlisle Counties
 C. B. Elston, County Agent, Nicholas County
 F. C. Ewen, County Agent, Laurel County
 Robt. T. Faulkner, County Agent, Johnson County
 *John H. Finch (Colored), County Agent, Warren County
 B. W. Fortenbery, County Agent, Pike County
 T. E. Ford, County Agent, Hardin County
 H. R. Forkner, County Agent, Boone County
 C. E. Gabbard, County Agent, Estill County
 H. K. Gayle, County Agent, Union County
 C. L. Goff, County Agent, Rowan County
 M. F. Goff, County Agent, Pulaski County
 J. F. Graham, County Agent, Caldwell County
 *D. S. Green, County Agent, Leslie County
 R. M. Greene, County Agent, Mason County
 Robt. T. Harrison, County Agent, Harlan County
 H. J. Hayes, County Agent, Wayne County
 R. M. Heath, County Agent, Franklin County
 C. L. Hill, County Agent, Pendleton County
 Ray C. Hopper, County Agent, Meade County
 J. O. Horning, County Agent, Barren County
 Wm. B. Howell, County Agent, Oldham County
 Joe Hurt, County Agent, Boyd County
 S. L. Isbell, County Agent, Floyd County
 H. R. Jackson, County Agent, Shelby County
 Wm. C. Johnstone, County Agent, McCracken County
 S. J. Jones, County Agent, Larue County

*Appointed during the year.

†Resigned during the year.

T. H. Jones, County Agent, Lee County
G. H. Karnes, County Agent, Monroe County
R. H. King, County Agent, Carter County
†J. E. Kuykendall (Colored), County Agent, Warren County
H. A. Laine (Colored), County Agent, Madison County
Orem LaMaster, County Agent, Trimble County
*E. E. Lambert, County Agent, Menifee County
Harry B. Lane, County Agent, Anderson County
Fred Lawson, County Agent, Floyd County
*Aaron Lee, County Agent, McCreary County
R. H. Lickert, County Agent, Fleming County
H. S. Long, Asst. County Agent, Jefferson County
J. S. Loyd, County Agent, Muhlenberg County
J. E. McClure, County Agent, Daviess County
R. B. McClure, County Agent, Garrard County
Floyd McDaniel, County Agent, Montgomery County
R. J. Matson, County Agent, Gallatin County
Earl Mayhew, County Agent, Knox County
J. W. Michael, County Agent, Knott County
C. E. Miller, County Agent, Boyle County
J. L. Miller, County Agent, Madison County
Thos. W. Morgan, County Agent, Trigg County
M. P. Nichols, County Agent, Ohio County
L. C. Pace, County Agent, Ballard County
J. Ed. Parker, County Agent, Bath County
John E. Parsons, County Agent, Lawrence County
H. S. Patterson, County Agent, Grayson County
S. A. Porter, County Agent, Campbell County
D. B. Redman, County Agent, Greenup County
W. R. Reynolds, County Agent, Jackson County
Edgar Rice, County Agent, Elliott County
Harry D. Rice, County Agent, Henry County
R. R. Robbins, County Agent, Perry County
G. C. Routt, County Agent, Graves County
M. H. Sasser, County Agent, Russell County
C. C. Shade, County Agent, Jessamine County
E. R. Sparks, County Agent, Clay County
Robt. F. Spence, County Agent, Madison County
*Runyon Story (Colored), County Agent, Christian County
J. E. Summers, County Agent, Marion County
W. D. Sutton, County Agent, Hopkins County
*Joe Thompson, County Agent, Bath County
*H. H. Thompson, County Agent, Harrison County

*Appointed during the year.

†Resigned during the year.

E. P. Tichenor, County Agent, McLean County
 *R. V. Trosper, County Agent, Bell County
 C. M. Wade, County Agent, Scott County
 P. R. Watlington, County Agent, Bourbon County
 Clyde Watts, County Agent, Carroll County
 O. R. Wheeler, County Agent, Hancock County
 H. W. Whittenburg, County Agent, Simpson County
 C. A. Wicklund, County Agent, Kenton County
 W. E. Wiedeberg, County Agent, Christian County
 G. H. Williams, County Agent, Letcher County
 J. E. Wilson, County Agent, Grant County
 †R. O. Wilson, County Agent, Harrison County
 Ralph W. Woodfin, County Agent, Wolfe County
 Troll Young, County Agent, Washington County

HOME DEMONSTRATION WORK

Myrtle Weldon, State Leader Home Demonstration Agents
 Lulie Logan, Asst. State Leader Home Demonstration Agents
 Zelma Monroe, Asst. State Leader Home Demonstration Agents
 Elizabeth Aaron Porter, Home Demonstration Agent, Campbell County
 Bernice Bonar, Home Demonstration Agent, Oldham County
 Zelma Byerly, Home Demonstration Agent, Kenton County
 Florence Cobb, Home Demonstration Agent, Graves County
 Dora M. Duncan, Home Demonstration Agent, Hopkins County
 Marie Elmore Fortenbery, Home Demonstration Agent, Pike County
 Callie Everhart, Home Demonstration Agent, Magoffin County
 Hazel Graves, Home Demonstration Agent, Madison County
 Jennie C. Grubbs, Home Demonstration Agent, Boyle County
 Mildred Hall, Home Demonstration Agent, Leslie County
 *Alda Henning, Home Demonstration Agent, Fulton County
 Virginia Howard, Home Demonstration Agent, Garrard County
 Lois Husebo, Home Demonstration Agent, Boyle County
 †Myrtle Jackson Davis, Home Demonstration Agent, Fulton County
 Catherine T. Johnson, Home Demonstration Agent, Jefferson County
 Mary Kate Ledbetter, Home Demonstration Agent, Madison and Rock-
 castle Counties
 *Dicksie Lee Lewis, Home Demonstration Agent, Union County
 Louise McGill, Home Demonstration Agent, Hickman and Carlisle
 Counties
 Mabel McKinsey, Home Demonstration Agent, Ballard County
 M. Alma Moore, Home Demonstration Agent, Muhlenberg County

†Resigned during the year.
 *Appointed during the year.

Mildred Ohaver Bell, Home Demonstration Agent, Fayette County
Roxie C. Perkins, Home Demonstration Agent, Harlan County
Irene Piedalue, Home Demonstration Agent, Clark County
†Mary Fuller Skidmore, Home Demonstration Agent, Mercer County
Frances Stallard, Home Demonstration Agent, Madison County
Dorothy Threlkeld, Home Demonstration Agent, McLean County
Kate B. Walker, Home Demonstration Agent, Perry County
Helen M. White, Home Demonstration Agent, Daviess County
Frances Wiese, Home Demonstration Agent, Christian County
Sadie Wilgus, Home Demonstration Agent, Calloway County
†Isadora Williams, Home Demonstration Agent, Henderson County

*Appointed during the year.

†Resigned during the year.

RECEIPTS AND DISBURSEMENTS

For the Fiscal Year Ended June 30, 1930

RECEIPTS

Federal Smith-Lever	\$152,241.30
State Smith-Lever	142,241.30
Federal Supplementary	54,642.56
Federal Capper-Ketcham	37,291.95
State Capper-Ketcham	17,291.95
	\$403,709.06

DISBURSEMENTS

PROJECTS	Smith-Lever		Supple- mentary Federal	Capper-Ketcham	
	Federal	State		Federal	State
Administration ..	\$8,352.87	\$11,679.99			
Publications	6,811.36	810.00			
Co. Agent Work..	69,994.30	16,320.33	\$54,642.56	\$22,752.76	\$17,291.95
Home Demon- stration	19,225.54	24,656.17		14,539.19	
Clothing	1,926.11	5,400.00			
Foods	2,691.28	5,600.00			
Movable Schools	1,887.30	5,020.00			
Junior Clubs	10,967.47	21,151.24			
Agronomy	2,699.98	10,093.34			
Dairying	2,319.25	4,125.27			
Animal Hus- bandry	2,965.46	11,559.98			
Markets	2,863.52	3,566.66			
Farm Manage- ment	1,458.93	3,405.00			
Poultry	3,016.97	8,653.32			
Horticulture	2,457.52	7,100.00			
Veterinary Science	1,177.17	3,100.00			
Rural Engi- neering	5,986.96				
Publicity	4,539.42				
Farm and Home Week	899.89				
	\$152,241.30	\$142,241.30	\$54,642.56	\$37,291.95	\$17,291.95