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of
Agricultural Extension Work
in
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NORTH CAROLINA
STATE COLLEGE OF AGRICULTURE AND ENGINEERING
AND
U. S. DEPARTMENT OF AGRICULTURE, CO-OPERATING
N. C. AGRICULTURAL EXTENSION SERVICE
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North Carolina Benefits From Agricultural Extension Work

(Report of the Agricultural Extension Service in North Carolina for the calendar year 1934.)

By L. O. Schaub, Director

The agricultural adjustment programs, administered by the North Carolina Agricultural Extension Service, have aided materially in restoring to farmers a more equitable share of the national income. Since the programs were instituted in 1933, the income of North Carolina farmers has been almost trebled by the rise in market prices for farm commodities and by the millions of dollars distributed in rental and benefit payments. This State was unusually successful with the cotton and tobacco adjustment programs, to which much of the 150 per cent increase in farm income for 1934 may be attributed. No other State in the Union experienced such a tremendous increase. All in all, the farmers are now in a more secure financial position, with a brighter outlook for the future, than at any other time in recent years.

But the growing prosperity ascribed to the adjustment programs has not been confined altogether to agriculture. The increased purchasing power of the farmer has been felt by all classes of people in the community and by people in other communities which trade directly or indirectly with the planters. Not only this, but the greater financial stability of farmers has exerted a wholesome influence on public morale. Farmers have been able to pay off many of their old debts, to buy needed equipment for their farms and make improvements, to make their homes more attractive, to obtain things needed by their families, and to raise their standard of living. Money thus expended has found its way through the channels of commerce and into the hands of the retailer, the wholesaler, the manufacturer, the producer of raw material, the wage-earner. Professional men have been able to collect old bills and to render more services when required.

The adjustment programs have also been instrumental in remodeling agriculture. Probably the most revolutionary change was that of adjusting crop production to the demand for domestic and export consumption. In the past, each farmer had endeavored to produce more and more when prices went down, with the hope that the greater quantity of produce sold would make up for the decrease in price. But the futility of this system was illustrated in 1932 and 1933, when the price of farm commodities sagged so low that thousands of farmers were losing their land and still other thousands were on the verge of ruin. Then came the adjustment programs with their policy of production control in cooperation with practically all the farmers who produce any appreciable amount of the basic farm commodities for market.

The better farming practices advocated by the extension service got a powerful impetus from the adjustment programs. The adjustment of basic
commodity production was only one phase of the AAA work. As farmers contracted to remove certain acres from the cultivation of cash crops, they were urged to devote these acres to the production of soil-building, food, and feed crops. Stimuli were given to balanced farming, crop rotation, erosion control, more scientific cultivation, the use of better seed, increased livestock production, self-sufficiency on the farm, better farm management, and co-operative marketing.

The farmer was not required to spend as much time in the cultivation of his crops as formerly, with the result that he had more time to plan his work and to cultivate more effectively the smaller crops which he had agreed to raise. The smaller crops also mean less need for either hired help or for the labor of women and small children in the fields. The sociological effects of this one change alone are already leading to the advancement of rural life to a more abundant plane.

Although the farmers' condition was significantly bettered in 1934, there still remains room for improvement and it is generally agreed that the adjustment programs should be continued, not only to make further advancement, but also to hold the ground that already has been gained. In this State, tobacco prices overshot the parity price of twenty-one cents that was desired, but cotton on the other hand failed to reach the parity level. Moreover, the better farming practices encouraged by the adjustment programs have not yet reached the stage of development desired.

Since many farmers still lacked sufficient money to finance their farming program adequately, to settle all their debts, or to make needed improvements to their homes or other buildings, the work of the Farm Credit Administration and the Federal Housing Administration was carried on in co-operation with the extension service. Some work was also done by the extension service in co-operation with the North Carolina Emergency Relief Administra-
tion. In the western part of the State, plans were made for co-operating with the Tennessee Valley Authority in developing the land use and conservation program in the fifteen counties lying in the TVA area.

COTTON PROGRAM

The cotton program got off to a good start in the summer of 1933, when 51,022 growers agreed to plow up approximately one-third of their acreage and to sign adjustment contracts covering their 1934 and 1935 crops. The contract sign-up campaign was conducted in January and February, 1934, with more than 72,000 growers coming into the adjustment program. With a few exceptions, those who did not sign up were small growers whose combined production was only a minor percentage of the State's cotton crop. In fact, the growers with only three or four acres in cotton were not asked to sign a contract, for at that time it was not considered advisable.

Under the contracts, the growers agreed to reduce their base acreage and production from 35 to 45 per cent, for which they were to receive rental payments at the rate of three and a half cents a pound on the average production of the land retired from cultivation, with a maximum of $18 an acre, and parity payments at the rate of not less than one cent a pound on the domestic allotment of each farm. The domestic allotment is considered 40 per cent of the crop. The rental and parity payments received in 1934 amounted to $6,521,997. Meanwhile, the price of cotton, which had been down to about 5.6 cents a pound, rose to nearly 13 cents and the price of seed jumped from 15 to 60 cents a bushel. As a result, the farmers' income from the sale of lint and seed rose from $23,423,000 in 1932, before the program started, to $50,993,000 in 1934, according to estimates on the 1934 crop in the North Carolina Farm Forecaster.

The Bankhead Act to place a tax of approximately 50 per cent of the market value on all cotton sold by any grower in excess of his allotment, which was approximately 60 per cent of his base production, was passed in March to satisfy a demand for protecting the contract signers from a possible large increase in production by growers who had not entered into the adjustment program. Under the Act, contract signers were allowed to sell tax free an amount of cotton roughly equivalent to the amount they were allowed to produce under their contracts. At the same time, it tended to restrict the production of non-signers in the same proportion.

The determination of individual growers' allotments was a gigantic task, requiring the employment of more than 100 extra workers in the State cotton office for several months. Applications for allotment were received from 115,000 growers and a total of 387,000 tax-exemption certificates were issued. So carefully were these certificates handled that during the entire year only two certificates were unaccounted for.

In December, 128,000 cotton growers cast ballots in the referendum to determine whether the Bankhead Act should be continued another year. In the fall there appeared to be a growing opposition to the Act in various parts of the State, but members of the extension service went on speaking tours to acquaint the farmers with the purpose of the Act and to show them concrete figures as to what it was doing for their benefit. Numerous news stories carrying similar information were published widely in the State daily
and weekly papers. When the votes were counted, 118,889 were for continuance of the Act and only 9,704 against—a thirteen-to-one majority.

TOBACCO PROGRAM

The tobacco program was launched in the fall of 1933 when the buyers signed a marketing agreement to pay enough for tobacco during the remainder of the season to bring the average price up to a parity level of 17 cents a pound. At the same time the growers signed an agreement whereby they were to sign adjustment contracts for their 1934 and 1935 crops. The contract sign-up campaign in December, 1933, and January, 1934, secured the signatures of approximately 70,000 growers, or 97 per cent of the number in the State. So disastrous had the tobacco marketing situation been that nearly all the growers were eager to cooperate with the adjustment program as soon as possible.

The contracts specified that the growers were to reduce their 1934 acreage and production 33 per cent under their base average, for which they were to receive $17.50 an acre on the land retired from tobacco cultivation, plus an adjustment payment equivalent to 12½ per cent of the market value of the 1934 crop. In addition, those growers who should fail to produce the full amount of their allotments were promised a payment of two cents a pound on the amount by which their production should fall short of their allotments. Similar provision was made for the 1935 crop year, with the amount of the crop adjustment and the payments to be determined by the Secretary of Agriculture before the 1935 crop was planted.

The ruinously low prices prevailing before the program started showed an average of 8.4 cents a pound in 1931 and 11.5 in 1932. A similar price obtained early in the 1933 season, but the effect of the marketing agreement brought the season’s average up to 16 cents a pound. The 1934 average price was 29.2 cents. The 1932 crop sold for $35,428,000 and the 1934 crop brought $122,142,000, approximately three and a half times as much, to say nothing of the $5,640,000 distributed in rental and adjustment payments during the year.

This phenomenal rise in prices brought to the tobacco growers a greater degree of prosperity than experienced by any other farmers in the nation. Tobacco was considered the golden leaf, both literally and figuratively.

The Kerr-Smith Act was passed in answer to requests of the contract signers for protection from an anticipated expansion of production by growers not under contract. The Act levied a tax of twenty-five per cent of the market value of all tobacco sold by non-signers, with the exception that a certain few non-signers who were unable to establish equitable bases under the provisions of the contract were given tax-exemption allotments under the Kerr-Smith Act.

So successful was the administration of the adjustment program and of the Kerr-Smith Act that the growers were almost unanimously in favor of government-supervised crop control. When the referendum was held in December, the growers voted 453,000 acres for continuance of the Act and 4,540 acres against it. The vote of each grower was weighted according to the number of acres he had in tobacco production. The 100-to-1 vote for the Act has been looked upon as the most conclusive endorsement given the adjustment program thus far.
N. C. BENEFITS FROM EXTENSION WORK

CORN—HOG ADJUSTMENT

Due to the low price of corn and hogs during the past few years, these two commodities were placed under an adjustment program with benefit payments to the participating growers. The program was intended mainly for the corn belt. But contracts were offered to North Carolina farmers who wished to take advantage of the benefit payments available. Something over 4,100 contracts were signed and eleven corn-hog control associations were organized over the State.

The benefit payments were $15 a head on the number of hogs by which production was reduced and 30 cents a bushel on the average production of the land taken out of corn cultivation. In 1934, North Carolina farmers received $301,494 in corn-hog benefit payments. The price of hogs in 1934 averaged about $7 a hundredweight as compared with $2 in 1932. Corn rose from 44 to 81 cents a bushel in the same time.

The corn-hog program was flexible in order to fit the requirements of different growers. For example, a farmer could sign to adjust his hog production and not reduce his corn production, or vice versa. However, he could not increase his corn production when under contract to adjust his hog production. The corn-hog program was so well liked by the farmers that they voted 12-to-1 for its continuance through 1935.

WHEAT PROGRAM

The wheat program was also intended for the great wheat-growing States of the Mid-west, but contracts were offered to North Carolina growers who were producing wheat for sale. The sign-up was held in 1933 and 1,000 contracts were accepted in twenty-two counties for a 15 per cent adjustment in wheat production for 1934 and 1935. Parity payments were given the contract signers at the rate of 29 cents a bushel, less a small charge for administration costs, on the growers' domestic allotment, which amounted to 54 per cent of their base acreage. The rental payments received in 1934 ran to a total of $56,442. Growers producing only enough wheat for their own consumption were not advised to sign contracts. As a result of the wheat program over the Nation, the price of wheat soared to almost double the 1932 level of 68 cents a bushel. The North Carolina wheat which was marketed in 1934 sold for $4,948,000 as compared with $2,429,000 in 1932.

PEANUT PROGRAM

The price of peanuts slumped to 1.3 cents a pound in 1932 and 2.5 cents in 1933 and the growers were unable to make enough money to pay their farm operating expenses. At the request of the growers, Congress designated peanuts a basic commodity in the summer of 1934. Representatives of the extension service went to Washington to confer with J. B. Hutson, who had been placed in charge of the peanut program, but little was done before Christmas. The preliminary forecast on the 1934 crop estimated the average price for the year at 3.2 cents a pound and the total value of the crop at $8,730,000. The 1932 crop sold for $3,898,000.

The purpose of the peanut program, as it was later worked out, was to divert part of the crop into oil production so as to eliminate the surplus of
peanuts offered for sale to confectioners. Provision was also made that the growers could divert a part of their crop for livestock feed. The diversion payments offered in connection with the contracts ranged from $8 to $16 a ton on the growers' 1935 crop, depending upon the type of peanuts upon which the payments were to be made.

FARM CREDIT

Thirty-one production credit associations, with a loan capacity of $10,000,000, were organized in the State in December, 1933, and January, 1934, in cooperation with the Farm Credit Administration at Columbia, S. C. During the year, North Carolina farmers borrowed a total of $3,000,000 through these organizations. Local farmers subscribed stock in the associations to supplement the funds from the FCA in establishing a reserve from which loans could be made. Since the minimum amount of a regular PCA loan was $50, and some farmers were ineligible for credit under the regular PCA requirements, an emergency fund was established for those farmers who could not secure the loans they wanted under the regular PCA plan.

The interest rate was five per cent, but incidental expenses attached to the work of issuing papers and making the necessary investigations regarding a farmer's credit status made the total cost of the loans somewhat higher, equivalent to 10 or 12 per cent of the money borrowed in some cases. The PCA authorities have been considering methods by which the cost of the loans, especially small loans, could be reduced.

TENNESSEE VALLEY AUTHORITY

The extension service worked out a co-operative agreement with the Tennessee Valley Authority to carry on the land use and conservation program in the fifteen North Carolina counties in the TVA area. The TVA agreed to finance the work, while the extension service supplied the men to administer the program. Arrangements were made for installing assistant county agents in each of the counties, their salaries to be paid with TVA money.

The land use and conservation program was designed to help the farmers determine which crops can be grown best on their soil, how to keep their soil fertile, how to protect it from erosion, how to market their crops to best advantage, and to help the farmers raise their general standard of living.

A number of fertilizer demonstrations started in co-operation with the TVA were carried on through the year in an effort to ascertain more facts regarding the types of fertilizers best suited to the crops and the soils in these Western North Carolina counties. As yet, it is too early to draw any definite conclusions from the demonstrations.

SOIL EROSION

A soil erosion program was developed in connection with the North Carolina Emergency Relief Administration. Three meetings held were attended by county agents, county commissioners, leading farmers, and representatives
of the extension service and the NCERA. So much interest was shown at these meetings that plans were made for launching the program early in 1935.

The program calls for the different counties to purchase tractors and other equipment and to send them around to the different farms, where a small sum is charged for the terracing done. The ERA is helping finance the purchase of equipment and the payment of workers' wages, but the projects are self-liquidating as a result of the small charge made for the work.

RELIEF ADMINISTRATION

The extension service also planned to carry on rural rehabilitation and land planning programs in co-operation with the NCERA. The purpose of the programs is to aid impoverished farmers re-establish themselves and to stimulate better use of the land by more scientific farming. Most of the preliminary groundwork for the programs was completed in 1934.

When the ERA was bringing livestock into the southeastern states from the drouth-stricken areas of the Mid-west, the extension service assisted in locating farmers who would give the animals feed and pasture. A large number of animals were brought into this State and were thus saved from immediate slaughter or death by starvation.

The extension service also assisted the NCERA with the meat canning program by selecting and training supervisors for the canneries and by aid in the general administration of the program. The canneries were established in sanitary buildings and were well equipped and manned for efficient operation. Adequate room was provided to carry on the work effectively and to care for the needs of the workers. The large canneries employed 800 laborers, the medium 400, and the small about 200. The average capacity was 20,000 cans a day for the large canneries, 10,000 to 12,000 for the medium-size canneries, and 4,000 to 5,000 for the small ones. The canning was so successful that in one plant, only 225 out of the 1,131,765 cans filled were lost through spoilage.

HOUSING SURVEY

The rural housing survey early in the year in co-operation with the Federal Housing Administration was conducted in twelve counties selected as representative of the State as a whole. Enumerators visited rural families and gathered data about the conditions of their homes in regard to the need for repairs, renovations, improvements, and additional rooms. A wealth of
information was compiled about almost every phase of the housing situation. The run-down condition of many homes and the lack of sanitary facilities as shown by the reports were almost incredible.

However, encouragement was found in the fact that practically all the families expressed a desire to make improvements if they could find some means of financing the work. The problem, then, was not so much in persuading the people to better their living conditions as it was in helping them with their financial problems. The statistics assembled in the rural housing survey were used in the development of the rural housing program of the FHA which will be launched in 1935 in co-operation with the extension service.

RURAL ELECTRIFICATION

The State Rural Electrification Commission, appointed by the Governor, was aided by the extension service in making surveys of about 700 rural communities which desire to secure electricity through the extension of power lines from nearby towns or other sources of electricity. The survey was made to determine in each community the practicability of supplying power, the cost of constructing lines and installing appliances, the number of prospective customers to each mile of line, and to gather other facts relative to rural electrification.

Statistical material gathered in the surveys are available for use by any group or organization wishing to carry out a rural electrification project. Administrators of the rural electrification program are expected to make use of the survey data in planning their work.

FARMERS' EXCHANGE

The organization plans of the Farmers' Co-operative Exchange, which were started in October, 1933, were completed so that the organization started operation in June, 1934. The FCX was formed of a number of farm cooperatives over the State with a view to building a bigger and stronger organization to help the farmers with their marketing problems and to secure a good grade of fertilizer to distribute at a moderate price to member farmers.

Members of the working committee which developed the FCX plans were representatives of the extension service, the State Grange, the North Carolina Cotton Growers Co-operative Association, the Farmers' Federation, the State Department of Vocational Agriculture, and the State Department of Agriculture. Plans were also developed for a harmonious relationship between the FCX and the Southern States Co-operative.

Shortly after the FCX was organized, educational meetings were held in a number of counties for the purpose of organizing local FCX branches. Two branches were opened that year. Usually, $3,000 in capital is needed to stock a local exchange with goods necessary to begin business. The goods carried in the branches include seeds, feeds, fertilizer, spray material, tobacco cloth, packing material, containers, paint, salt, and flour.
The branches are under the supervision of men trained in the work, and each branch is training men who may later go elsewhere to head new branches. Local farmers subscribe the necessary stock and become members of the exchange.

**DAIRY EXTENSION**

The lack of an adequate supply of good home-produced feed was the greatest obstacle to profitable dairying in the State. Milk prices were high, but the cost of producing it was high, too, and the farmers and dairymen, as a whole, were unable to make a fair return on their business. Consequently, the extension dairymen pushed the program to increase the production of wheat, oats, vetch, winter peas, lespedeza, and pasturage and to increase the number of trench silos in the State. The 699,000 tons of hay produced during the year were 29 per cent above the average production for the past ten years. There were 427 silos constructed and filled in 1934 as compared with 206 in 1933.

Exhibits and sales of purebred breeding animals were held in all sections of the State.

The six active dairy herd improvement associations in the State were composed of 81 members who had 2,918 cows on test. Ten new members were secured during the year, but the number of cows on test was 36 below the 1933 figure, as a result of the discontinuance of testing during the summer by a few members. The average production of the cows on test was 6,784 pounds of milk and 300 pounds of fat.

The low returns from the dairy industry caused many dairymen to postpone the purchase of better breeding animals; nevertheless, the extension dairymen aided in placing 46 purebred dairy bulls, 142 purebred females, and 45 calves to 4-H Club members.
Butter production in the State was 2,564,000 pounds, 4.6 per cent under the 1933 amount. Farmers received $535,000 for the cream from which the butter was made. Cheese production amounted to 464,000 pounds, an increase of six per cent over 1933, with $48,250 being paid the farmers for the milk. About 2,500,000 gallons of ice cream were manufactured in the 33 ice cream plants. The dairy products going into the cream were valued at $550,000. Milk plants paid the farmers $2,250,000 for 10,000,000 gallons of milk purchased during the year. The 1,000 producer-distributors delivered 20,000,000 gallons of milk, for which they received $10,000,000. The total value of dairy products in North Carolina for 1934, exclusive of butter and milk consumed on the farm, was $11,358,000.

POULTRY EXTENSION

The poultry industry in the State is taking on a more favorable appearance. More farmers are keeping poultry flocks, and more birds are being added to old flocks. The adoption of poultry practices recommended by the extension poultrymen has been a factor in the improvement of the industry. However, North Carolina does not yet produce enough chickens and eggs to supply its own demand, and the extension poultrymen continued to hammer away at the program for more chickens and better flock management. The greater interest in breeding work in 1934 was evidenced by the fact that 520 per cent more pedigreed males were placed during the year than in 1933. The extension poultrymen assisted in mating and breeding pen work involving 30,703 birds. The poultrymen of the State showed a greater concern over the removing of cull birds from their flocks, and as a result the general flock efficiency was raised. It was estimated that the number of inferior birds in the flocks was decreased by 25 per cent.

The popularity of the feed formulas recommended by the extension service has spread over the State and numerous feed mills are now mixing feed
according to these formulas. The requests coming into the extension poultry office indicate an increased interest in proper housing facilities for poultry, 623 requests being made in 1934 and 429 in 1933. The requests were for range shelter, brooder house, and laying house plans. The extension service co-operated with the State Department of Agriculture and the hatcherymen in the fight against pullorum disease.

During the year the extension poultrymen assisted in setting up a State Association to help enforce the national hatchery and breeder code. A State chairman and nine regional directors were elected. The organization functioned very smoothly during the first year of its operation. Membership in the hatchery association was also increased by twelve new members, and one new poultry association was formed.

SEED IMPROVEMENT

The crop adjustment programs stimulated interest in improved seed, since the farmers were interested more than ever in the net return per acre. This was especially true of crops like cotton and tobacco, in which value is determined to quite an extent by quality. The improvement in prices has also enabled farmers to use more seed of the better types. As in previous years, the seed certification work was handled co-operatively by the extension service, the State Department of Agriculture, and farmer members of the N. C. Crop Improvement Association.

At least one certification project was conducted in each of fifty-six counties, the largest number of counties ever represented. Especial attention is called to the growth of the Irish potato certification work in the western part of the State. Since North Carolina has been purchasing more than 500,000 bushels of potato seed each year, it is believed that this project has greater opportunity for expansion than any of the other certification programs.

Emphasis was laid on the need for varietal standardization, so that the farmers of a given area would all be producing the same variety and, therefore, be able to put on the market a large volume of the commodity with a uniform quality. Systematic marketing of certified seed was also encouraged. In the past, many of the growers have sold their seed wherever they could, but this method is not considered satisfactory.

TOBACCO DEMONSTRATIONS

Aside from administering the tobacco adjustment program, the extension tobacco specialist conducted much of the regular extension tobacco work. This consisted mainly in encouraging the use of better seed, selection of
better seed, and the production of a greater amount of good seed. The fertilizer recommendations made for the State are being followed by a number of manufacturers in mixing their fertilizers. Further studies were made to determine the effects of sulphur and calcium.

**SWINE EXTENSION**

Most of the swine specialist's time was taken up with the administration of the corn-hog program; nevertheless, he found time to carry on a little of the regular swine extension activities. He also made suggestions as to how the production of pork on the Caledonia Prison Farm at Halifax could be improved. There are 1,000 acres of land on the farm and 100 brood sows. The specialist made a thorough study of the conditions before making his report, which was to the executive director of the State Highway and Public Works Commission.

**BEEKEEPING**

Although the harvest for spring and summer honey flows was only about 80 per cent of the normal quantity, the 1934 season was pleasing to most North Carolina beekeepers. The honey was of good quality and prices were fairly high. The fall honey flow was good. Some apiarists reported a surplus of 50 to 60 pounds of honey from fall flowers in addition to the amount needed to keep the hives in good condition through the winter.

The objective of the extension bee specialist's program of bee management is to keep all colonies in good condition from the end of one honey flow to the beginning of the next. If the colonies are strong at the beginning of a honey flow, they are in better shape to gather great quantities of nectar. The importance of keeping each hive supplied with a young, vigorous queen cannot be overstressed, as the productivity of the queen determines the strength of the colony.

Demonstrations in treating colonies in which disease has broken out have educated large numbers of apiarists to the place where they can recognize the disease when it breaks out and start the proper treatment at once. American foulbrood, European foulbrood, and parafoulbrood have been identified in thirty-five counties. These diseases kill the brood and weaken colonies seriously.

Extensive beekeepers experienced little difficulty in marketing their 1934 crop at a profitable price. They also helped many small keepers by buying up honey from neighboring farmers. The large producers have the advantage of a greater quantity of well-graded and packaged honey. The extension apiarist has encouraged the smaller beekeepers to better their grading and packaging so they can dispose of their honey at attractive prices.

There are more than 34,000 beekeepers in the State who own a total of over 235,000 colonies. Of these approximately 25,000 are farmers who own 124,000 colonies and about 10,000 others, including extensive beekeepers, who live in cities and towns and own 112,000 colonies. The average production for the State was 28 pounds per colony. The average production of demonstration apiaries was 62 1/3 pounds per colony.
FRUITS AND VEGETABLES

The horticultural program was carried into thirty counties in the western part of the State and twenty-four counties in the East. In the western area the major part of the specialist's time was devoted to the commercial red raspberry project. The rest of the time was given to apples, peaches, and vegetable crops, with special attention to cabbage and Irish potato production. The 1934 program for the eastern counties called for emphasis upon demonstrations with Irish potatoes, sweet potatoes, market vegetables, strawberries, and soil-building in the Sandhills peach orchards. The planned program was not completed, however, since the AAA activities took up much of the county agents' time and the specialist for the eastern counties was asked to help the vegetable and potato growers with the development of a program looking to some form of crop control.

Lespedeza not only aids in soil building but also supplies much of the hay used in feeding livestock

EXTENSION AGRONOMY

The object of the extension agronomist is to establish North Carolina agriculture on a more stable basis by teaching the farmers to rely more upon the permanent and constant upbuilding of their soils and the production of most of their sustenance on the home farm, and less upon the production of crops for sale. The crop adjustment programs have taken so much of the county agents' time that they could not give the usual attention to agronomy work, but, on the other hand, the reduction of cash crops brought about by the adjustment programs has created an almost unprecedented demand for information about cereals, legumes, soil improvements, crop rotations, fertilizers, terraces, improved farm buildings, and other things that go to make farm living more satisfactory. It is hoped that steps now being taken will lead to the placing of enough men in the field to satisfy this demand and also keep the adjustment programs going.
EXTENSION ENTOMOLOGY

The war against insect pests was continued by the extension entomologist even though the county agents were unable to give an adequate amount of their time to the fight. The 1934 season was marked by heavy infestations of the tobacco horn worm and midges, cigarette beetles, cornstalk borers, corn ear worms, the Mexican bean beetle, curculio in peach orchards, codling moths in apple orchards, and a number of other insects. In most cases, the treatments prescribed by the entomologist aided in controlling these pests.

In spite of frequent rains during the growing season, cotton was singularly free from boll weevils until late in the summer. This was attributed to the cold weather late in the spring. All boll weevil control demonstrations were discontinued for the lack of infestations heavy enough to make demonstrations practical. Cotton was free from red spiders and leaf worms, but some fall armyworm damage was noted.

Farmers purchased a large number of small dusters for applying poison to horn worms on tobacco. The results were uniformly good when the dusting was made according to recommendations. The use of naphthalene on tobacco midges, first started in this State a few years ago, proved an excellent control measure during the past year. Experiments with derris dust containing a small amount of rotenone led to its recommendation for Mexican bean beetles. It does not leave a harmful residue like magnesium arsenate.

EXTENSION FORESTRY

The demonstration method of teaching by showing was followed as much as possible in carrying on the extension forestry program during the year. The extension forester made personal visits to 67 counties. In 56 counties he had the co-operation of either the county agent or local vocational teachers in conducting one or more forestry meetings or demonstrations. The planting of tree seedlings and the proper thinning of woodlands were demonstrated at most of the meetings. The forester also gave lectures at 12 CCC camps and two 4-H Club camps. He worked in co-operation with the TVA in making a general survey of forestry conditions and soil erosion problems in 12 North Carolina counties which lie in the Tennessee Valley.

During the 1933-34 planting season, a total of 42,550 tree seedlings were set out in 22 counties through the efforts of the extension forester and individual farmers. This does not include black walnut plantings by 4-H Club members or plantings by farmers who secured trees directly from the State
Division of Forestry. The U. S. census of agriculture in 1930 showed that North Carolina had 8,326,334 acres of farm woodland, 1,423,912 acres of which were being pastured. An additional 4,000,000 acres of small wood lots are considered farm woodlands by the extension forester. To this acreage should be added 1,073,844 acres of cleared land which has been standing idle and in places has eroded so badly that the only practical method of reclamation is through reforestation.

Major phases of the forestry program are: a balanced program of farm management to give the most complete utilization of land and labor, protection and better utilization of present stands of farm timber, development of a timber cropping system which will give periodical harvests, maintaining markets for disposal of timber and maintaining a permanent supply of raw material for woodworking industries, and reclamation and utilization of eroded or idle lands.

4-H CLUBS

The fact that 4-H Club work was continued through 1934 on a substantial basis at a time when the county farm and home agents were occupied with numerous other duties is a conclusive proof of the ability of well trained local leaders to keep the club projects going and hold the interest of the members. In 91 counties there were 22,309 boys and girls enrolled in 521 4-H clubs; 2,581 boys and 8,996 girls completed club projects during the year. Though the number of members was smaller than at any other time since 1925, the work done in the well-organized counties was particularly gratifying.

Stressing the need for more trained leaders, the farm and home agents conducted leader training schools which were attended by 3,780 boys and girls. Likewise, training was emphasized at the 35 4-H Club camps held during the year. Both the schools and the camps have turned out a fine group of young leaders ready to work and with a will to arouse enthusiasm among their fellow club members. Two boys and two girls who had made outstanding records were sent to the national 4-H Club camp in Washington to spend several days visiting government departments, studying advanced phases of club work, and have a general good time.

From all sections of the State, 380 boys and girls came to the short course held at State College, July 25-29. The programs provided intensive project instruction in farm crops, livestock, poultry, recreation, foods, home furnishings, home beautification, arts and crafts, good books, table manners, and account keeping. Supervised recreation entertainment and special educational features, sight-seeing tours, a health pageant, and athletic programs were among the afternoon and evening activities.

The corn and calf club exhibits at the State Fair were the best in 4-H Club history. The excellency of all the entries made it difficult to select the winners, but it spoke well for the work being accomplished by the club members.

Although there has been no State leader for girls in 4-H Club work, leadership activities have been carried on by the four district home agents and by the three women specialists. The work with girls was somewhat similar to that with boys, save that girls had projects concerning food, clothing, home-making and the like, while boys had projects in crop and livestock raising, farm record keeping, and other things suited to boys on the farm.
The division of publications holds the belief that a well informed rural people will co-operate fully with the adjustment programs, and with this in view it intensified its efforts to distribute, review, and interpret all timely news relating to AAA work in North Carolina. The regular efforts of the extension service were also reported through the newspapers. A steady stream of news was kept flowing to the weekly and daily press, with special articles being prepared for the Monday farm pages. All spot news of significance was given immediately to the local papers and to the press associations for general distribution.

Farmers on an inspection tour look over crops grown in adjoining counties.

The agricultural editor made four trips to Washington and two to Atlanta to carry on work in co-operation with the information service of the AAA. He also made twenty trips out into the State to address civic clubs, granges, and gatherings of farm people about the crop adjustment programs and the philosophy behind them.

The division was overwhelmed by demands for service work from county agents, commodity divisions, and extension specialists. Nearly 3,000,000 pieces were mimeographed or multigraphed and 10,000,000 pieces mailed during the year. Through the mimeograph news service, 387 stories were sent to the weekly papers and 637 to the daily papers. In addition, there were more than 100 spot news stories sent out. Mats and pictures were distributed more extensively than before. There were 289 special stories and seventy-eight cuts sent to the News and Observer farm page. An even larger number of stories was supplied the Charlotte Observer for its farm page. A special monthly service was started for the Progressive Farmer and the service to the Southern Planter was continued.
FARM DEMONSTRATION

Southwestern District. The only counties in the southwestern district which did not have county agents in 1934 were Swain, Transylvania, and Henderson, and indications are that they will not remain long without agents. Haywood County appropriated for an agent during the year. No county discontinued appropriations for farm demonstration work.

Demands upon the agents were heavy. Nearly 261,000 farmers called at the agents’ offices and there were 39,822 telephone calls asking information. The agents published 2,054 news articles, wrote 63,057 letters, gave out 136,407 bulletins, held 2,550 meetings, conducted 34 farm tours, held 12 achievement days, and nine 4-H Club encampments. In 19 counties 119 4-H clubs were organized. There were 2,544 members beginning projects and 1,724 who completed their assignments and turned in reports.

Aside from the AAA work which required most of the county agents’ time, considerable attention was given to regular extension work with soil-building, better farm management, crop rotation, farm self-sufficiency, more and better livestock, and other phases of farm building.

Northwestern District. Twenty of the twenty-five counties in the northwestern district appropriated funds to co-operate with the extension service in the employment of county agents. Most of the counties have boards of agriculture which aid the agents in solving their agricultural problems. The agents also receive splendid co-operation from civic organizations, farm organizations, business men, and the press.

The mountain counties of this district are not large producers of cotton, wheat, or corn, but adjustment contracts were offered all growers who wished to co-operate in the control programs. Under contract, 3,250 acres were taken out of corn production, 3,229 out of wheat, and about 6,000 acres out of cotton production.

The agents carried out the general extension activities to promote better farming, soil improvement, better marketing, economical production of livestock and poultry, more extensive 4-H Club work, and the like.

Northeastern District. Only one of the twenty-seven counties in the northeastern district is without the services of a county agent, and eight of them have assistant agents. During the year, six counties appropriated for farm demonstration work. Despite the time required in AAA work, the agents found time for working with 4-H Club members and carrying on a creditable amount of other extension projects. The response and co-operation on the part of the people has never before been equaled, and the support of the county commissioners was all that could be expected.

Speaking for the county agents, the district agent said: “Probably no finer nor more completely worked out piece of work has ever been done by extension workers than has been wrought this year in co-operation with the AAA. Throughout the year the men have labored hard and long in an effort to serve the farmers in an efficient and satisfactory manner.”

Southeastern District. Each of the twenty-two counties in the southeastern district was served by a farm agent in 1934, and assistant agents were employed in Craven and Pender counties. The district is a heavy producer
of cotton, tobacco, and hogs. As a result, the AAA programs placed a great load on the agents. Considerable work was also devoted to aiding the vegetable growers and the Irish potato growers with their problems and to preliminary work looking toward the organization of the industry for some form of crop control.

The beneficial effects of the AAA has been felt greatly in this district in a financial way, but due to the fact that most of the farmers were heavily in debt, a large proportion of their income has gone to pay off these debts and the full effect of their increased purchasing power was not felt during the past year. However, over the district new homes are going up, old ones are being repaired, fresh painting is in evidence, and there is a general air of well-being.

**HOME DEMONSTRATION**

At the close of the year, there were fifty-three counties organized for whole-time home demonstration agents for white people and eight counties with full-time Negro home agents. In addition, there were thirty-eight counties which had part-time white agents and seven part-time Negro agents serving from four to six months during the warm weather season.

The organized home demonstration club in a rural community is the unit through which the home demonstration programs are carried out. In the State there are 1,013 clubs with a membership of 23,842 women, and girls' clubs with a membership of 19,219 in the fifty-three organized counties. In the part-time counties, the groups were only loosely organized.

Buncombe, Columbus, Swain, and Tyrrell counties withdrew their home demonstration appropriations in the latter part of 1933, but Cleveland, Jackson, Montgomery, and Wilson counties started appropriations for full-time agents. The fine work done by emergency agents in Jackson and Montgomery counties induced the commissioners to appropriate for full-time work. Likewise, Durham and Rowan appropriated for full-time Negro agents as a result of the good work done by emergency agents.

The emergency agents were employed jointly by the extension service and the county emergency relief administrations to carry on home demonstration work in counties which did not have the services of a regular home agent. Much of their work was done to promote the growing and conserving of more food, and to encourage better sanitation. How to live more economically by buying judiciously and making use of materials already in the home was also stressed in foods, clothing, and home improvement activities.

In 1934 there were 7,124,500 cans filled with produce from home gardens. This was a decrease of 4,000,000 cans since 1933, due largely to the fact that as farm incomes increased the women preferred to buy some of their canned goods. Time thus released from canning work was spent at more agreeable tasks and recreation. Gardens were grown by 73,140 farm families. In planning for these gardens, the home agents and the leaders who assisted them urged each family to make a budget of the food needs for the year and then plan the garden accordingly.

The long time program of home demonstration work, which had to be modified to some extent during the year, contemplates a comfortable, livable home where farm life may bring satisfactions and where the child may find
security, and a vitalized rural community where men, women, and children come together for planned work, recreation, and community development.

This long time program confronts a number of problems, such as low average farm income, inadequate food and feed production on many farms, poorly balanced diets, the fact that only fifty-three counties have appropriated funds for home agents, and insufficient State funds to cooperate fully in the employment of agents.

The cash incomes of numerous farm families were increased through the sale of home and farm produce on the twenty-seven home demonstration curb markets and through cooperative group shipments to merchants, hotels, colleges, and other institutions. The gross income from farm women's marketing was $484,565.16, an increase of $79,912.44 over the 1933 amount.

**Clothing.** Seventeen counties selected clothing for their major home demonstration club projects in 1934, six made clothing, a minor project, and ten others had seasonal work supervised by the clothing specialist. The agents and the specialist were assisted by 1,100 leaders in carrying out the clothing programs. Although farm incomes have risen considerably, there was still a great deal of interest in how to make old clothes look neat and presentable, and how to either remodel old clothes or make a new garment from the better parts of several ones. A number of women supplemented their incomes by making clothing for persons outside their families.

**Home Management.** The ultimate goal of the home management and furnishings program is that the farm home shall be managed upon a sound business basis, co-operatively with the farm enterprises; that the physical plant shall be convenient, efficient, and attractive; and that relationships within the family group shall be correspondingly improved. Assistance was given 8,427 families in better home-making. Families were encouraged to make supplies used in cleaning and caring for their homes. Club agitation for better sanitation resulted in the building of 1,000 sanitary privies in fourteen counties, and co-operative effort with the State Health Department and relief agencies resulted in the building of 1,476 more in two other counties.

**Home Beautification.** There has been a very general interest over the State in planning and planting the farmstead to improve its appearances, particularly to beautify the home grounds. Men, women, and children have taken a hand in this work, with the result that hundreds of rural homes over the State have become more attractive. It is worthy of note that interest in home beautification increased in the depression years. Probably the beautification projects helped relieve the tension and gave the people something encouraging to do in their leisure time. Not only homes, but churches, schools, community buildings, and other public places were made more inviting by the planting of tastefully selected and carefully arranged shrubbery around the grounds.
The economic situation, with the accompanying need for something to divert the farm family from its cares and troubles, has opened the way for more emphasis on home and community recreation. There is no extension specialist in recreation, but 4-H Girls' Club leaders conducted a great deal of recreation work, teaching the boys and girls how to get the most out of their recreation periods and how to spread the gospel of wholesale recreation among their friends.

NEGRO WORK

The gratifying degree of co-operation given the AAA by Negro farmers is due largely to the work of the colored farm agents. They were in a better position to reach the colored farmers and explain the purposes of the programs. The twenty Negro agents were employed in counties which have large populations of colored farmers. Although there is some difficulty in finding men adequately trained to serve as farm agents, the agents so far selected have been nearly all satisfactory and the work they have done, and the cooperation they have received, speak well for the advancement being made by Negroes. Much of the work done by the colored agents is similar in purpose to the extension activities of the white agents.

The work of the colored home agents is somewhat like that of the white agents, though not so extensive in scope. They have worked with relief families to stimulate more home production of food and more economical use of home facilities for clothing the family. Home beautification, nutrition work, health and sanitation projects, and Negro 4-H Club work were among the projects sponsored by the colored home agents.

OUTLOOK

The rigorous training given all members of the extension service staff during the administration of the AAA programs in addition to the other work accomplished has "put them on their mettle," so to speak, and also helped weld them together into a more solidly knit organization. The programs also brought them into a closer touch with great numbers of rural people, with the result that the extension service has increased its effectiveness and enlarged its sphere of activities. The success attained with the adjustment program has awakened farmers and business men to the value of the work being done by the farm and home agents, and this, in turn, has added to the prestige of the service. The Increased State appropriations for the 1935-36 and the 1936-37 years are expected to aid in the development of a more efficient, complete, and well-rounded extension program for the future.