

ANNUAL NARRATIVE REPORT

North Carolina Agricultural Extension
Service

N. C. State College of Agriculture and Engineering

and

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and

Duplin County

Cooperating

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INTRODUCTION

It is the purpose of the following pages to show, in narrative form, the Extension practices which were carried out during 1947 and also to show methods and results.

It was in 1943 that Negro Extension work was first brought into the county by placing a Farm Agent. In the following years many new problems were discovered and, in many cases, solved as to practical purposes. The solution of problems surrounding farm life in the county, however, does not mean that the desired end has been reached. This can easily be understood when "Goals" are considered. In other words, a partial solution to a problem would naturally entail methods of procedure alone whereas absolute solution of a problem will involve "total work" or the desired coverage of the county with a particular practice.

Valuable assistance has been received from voluntary leaders who are located out in the various communities of the county. This group of leaders is composed of persons from various walks of life: Farmers, ministers, teachers, and some skilled workers.

In all cases, the Neighborhood Leaders are the first to hear of a particular line of procedure as concerns Extension work. In developing a special line of procedure, the Leaders from each community in the county (one man and one woman) who make up the Agricultural Advisory Board are called in and meet with the Extension workers. The group then discuss community problems and it is also then that methods are worked out. Each community Leader then gets a copy of his or her community plans. After this, the people back in the various communities are acquainted with the plans.

Intro. Cont'd.

It will be noted that for the past three years that an average of eight major lines of work have been carried on with adult Negro farm men and women, and with 4-H Club members an average of five. The following pages will clearly describe each. It will be noticed that, in view of future plans for the County Agricultural Program, more and more emphasis are being placed on a wider program of diversification of farming practices. It is intended that this will serve more or less to cushion a drop from peak income which has been received from tobacco for the past few years.

Agronomy

In Agronomy, the crops involved in this year's work include: corn, tobacco, pastures, and cotton. Phases entered into were increased production of a better quality product, through selection or purchase of better seeds; fertilization and cultivation, and information on marketing. The situation surrounding each of the above crops were more or less of the same nature.

Corn Production

It was the opinion of the Advisory Board that each individual community had the same shortcoming as concerned corn production. In no instance was the per-acre yield high enough even though some of the Leaders reported yields of 50 bushels per acre. It was the opinion of the group that a goal of 100 bushels per acre should be set for the entire County. Quite frequently, the question would arise as to the best ways to educate the general farm public as to various recommendations for over-all use on the general corn production. It was decided that in as many communities as possible at least one production demonstration would be set up under supervision of the County Agent with as many cooperators taking part as possible. Where possible, each cooperator would follow all of the recommendations as to practices. In each case, the demonstrations were set up on an acre basis with a check acre right beside the demonstration acre. The check acre was treated according to the farmers' usual methods whereas the acre on demonstration was treated according to latest recommendations. The results obtained from the demonstrations were satisfactory. It was definitely proved that use of an adapted hybrid. Closer rows and drill, and at least 2½ times the amount of fertilizer formerly

used- and recommended cultural practices will give at least 3 times the amount of corn previously produced on an acre of land, and that in the same cases the yield on the demonstration acre actually went up to five times the former yield.

The highest yield from the demonstration acres in the County during 1947 and 101.26 bushels per acre. The lowest from a demonstration acre was 71.3 bushels. The average taken from the demonstration acres was 87.1 acres.

The highest yield from the check acres was 37 bushels per acre for the County. The lowest from the check acres was 21 bushels. Demonstrations were run in 8 different communities during 1947.

Pastures

In working with farmers in corn production it is always the aim to have the same man do something about his grazing situation. As a whole, the County situation surrounding permanent pastures is not a satisfactory one. However, since 1943 fourteen demonstration acres of permanent pastures have been set up and indications are that within the next three or four years the 14 acres shall have made great increases. The goal for the County is at least an acre of good permanent pasture for each cow on the farm, doing all possible to get an acre and a half for each cow, planning to gradually increase the acreage to include each work animal and for seasonal grazing for sows and pigs. Very much interest is being shown by farmers in securing a permanent pasture. This is especially true of those who have taken the opportunity to visit the pastures which have been set up in the various communities throughout the County. In many instances farmers have been skeptical of results to be expected. Even those who were putting in the pastures were also skeptical. Such was the case on the McIver farm in the Scott's Store Community. This particular farmer was trying to find a buyer

for a cow he owned which he had been keeping on an all-dry feed ration. Of course the cow was very low in milk production. Many days she gave less than a gallon of milk all day. In fact, the farmer had offered to take \$20 for the cow. His pasture at that time was just coming in so he was prevailed with to keep the animal until his pasture mixture was big enough to turn her onto it. He did this and was later offered \$125.00 for the same cow that he had offered to sell for \$20.00 just 90 days before. The cow was giving 3 gallons of milk per day after having been on the pasture only four weeks. Also farmers have obtained splendid results having their pastures used by swine and poultry.

At all times efforts are made to educate the farming public at large that the day has passed for our thinking of a pasture as being only a plot of our most undesirable land with nothing growing there but bushes and weeds. But rather that we should set aside some of our best land to be used as pastures and that attention to annual fertilization is necessary for best results.

Tobacco Production

In that tobacco is the chief money crop of the County, much time is spent in carrying on phases of work intended to cut the cost of producing this particular crop. The main reasons for high cost of production are Blue mold field diseases. In addition to these is the poor practice followed by some or most of the County farmers of making new beds each year and also weeding the tobacco plant beds by hand. In figuring out the time it takes to make a new bed each year from which weeds are picked by hand was discovered that each bed represented an added expense of \$41.00 per year. (This expense being for preparing new ground and pulling weeds, at the present wage scale). The average farm has 500

yards of beds for growing tobacco plants. This means, of course, that if these plant beds are made in new woods land each year and continued to be hand picked the farmer has an unnecessary overhead of \$201.00 per year. It has been discovered also that the average farmer needs only $\frac{1}{3}$ the amount of beds prepared each year to meet his demand for plants, provided, of course, that Blue mold does not make its appearance. In other words, the general method the average farmer uses to combat Blue mold is costing him \$100.50 for each season on 5 beds or \$20.10 per bed. It is pointed out that this is mighty expensive treatment when compared with treating with Formate. \$2.00 worth of this material will, at the above rate, save the farmer \$18.10 per bed besides the expense of covering and fertilizing unnecessary beds.

Demonstrations bearing out the above facts have been conducted during the past 2 years with very good results, and with the added features of using peas and beans on each bed to cut back for green manure and also to discourage weed propagation. The use of weed killer is gaining in popularity, there having been 1800 yards of demonstrations put on this fall. Time on weeding plant beds by hand has been cut from 2 days (on check beds) to 1.5 hours per bed or a saving of 18.5 man hours per 100 yards of bed space.

Dairy Husbandry

The work in Dairy Husbandry is primarily that of placing family cows on farms without cows and also management of family cows. Naturally, the placing of animals with homes without a cow is important but their care and management are just as important. With that in mind, the first step usually taken when a farmer asks for assistance in obtaining cows is to learn something of how he is equipped to take care of a cow. In previous

years it has been observed that when the shed leaks or is open enough to cause undue exposure to the cow, the farmer also hesitates to go milk the cow during cold or rainy weather. The result is, therefore, doubly negatives: the cow suffers from exposure and from inattention.

In order to give the needed stimulus to this phase of the work, it has been the practice to hold cattle shows in the various neighborhoods throughout the County and also to take part in the District and State shows each year. Tours are also held during which visits are made to the Registered Jersey Herd at Willard Test Farm and also to individual farms having registered and other good dairy animals. There has been a gradual increase in the number of Registered and High Grade dairy animals on Negro farms throughout the County for the past three years. In 1943 there was not a single registered animal on Negro farms of the County. Since that time there have been 8 registered bulls and 1 registered heifer placed. In addition, 46 high grade Jersey cows and heifers have been placed, 41 of those springing and the other five bred. Though the efforts made along the line of feeding, the average milk production has increased from 1.5 gallons to 3 gallons in 8 of the County's 14 communities. The County Advisory Board has set a goal of "at least one cow on every Negro farm in the County and maximum production per cow.

Swine

The growth of work in registered swine has been remarkable. In 1943 of the then 1,533 Negro farm families in the County there was only one grower of registered stock. As of 1947 there are 17 farmers with at least a registered boar and 6 of these have registered sows and boars. To reach the present point of interest in Swine production, educational

meetings were held in each community and tours were made to the two leading producers of registered swine in Duplin County. Mr. E. V. Vestal, former Swine Specialist at State College, and to Mr. Franklin Quinn's farm. All of the animals placed with Negro farmers since 1943 came from one of these two registered herds. When the group would gather at either of the two places the producer would show them around the grounds explaining the need of farrowing houses, self-feeders, grazing, etc., and would give a lecture on the management of breeding stock, by giving demonstrations. He would then end the period by pointing out the desirability of good-blooded stock, by giving facts on gains made by pigs, from scrub stock as compared to those made by pigs from registered stock.

In addition to the above, losses from epidemics of cholera has practically been eradicated through cooperation with Dr. Weeks of Clinton, and Dr. Deal of Pender County. It is felt, however, that educating the individual raisers of swine as to the dangers of allowing them to be weakened through worm infestation has contributed to lowering of the death rate from cholera. This is especially true in regards to treatment for cholera by use of virus and serum; in one instance the sow vaccinated did not survive treatment. On performing a post-mortem it was found that there was an extremely heavy infestation of worms. They had rendered her weak, so much so, that the double treatment proved fatal. A new warning was sounded to the farmers on the importance of first worming the swine and getting them in a strong, healthy condition. Just as in the case with other farm animals, the farmers are urged to produce cheaper gains by giving their hogs access to good pasture or at least plenty of temporary grazing. This is especially true as regards sows and pigs.

Poultry

One of the most outstanding problems facing the owner of the farm flock on the farms of the Duplin County Negro farmers is that of low egg yield per bird. The present average is about 170 eggs per year or less than 1 egg per hen for every 2 day period. The two main reasons why this condition exists are poor feed and management practices. A campaign was begun this year to show that it is just as necessary to bring in good blood in the laying flock as it is in dairy cattle and swine.

From the nutritional side of the question, a county survey shows that the individual on the farm gets enough eggs and poultry. This is only because that, due to low production, each farmer is compelled to keep over two times as many birds as he would normally expect if the birds were producing up to the maximum. Therefore, even though the practice is sufficient from a health standpoint, it is unsound from an economical standpoint. That fact is very easily understood when considered from a feed point-of-view. It is poor management, the farmers are told, to use twice the feed needed to get the same amount of poultry and eggs possible by keeping half the birds they do keep.

Names and addresses of producers were secured and circulated to Neighborhood Leaders who in turn made them available to the individual farmers who wanted pure bred chicks and breeding stock.

Other work in poultry included construction of low-cost brooder houses made from poles cut from the farm wood lot. The poles were peeled and notched and then used to build houses accommodating from 400 to 500 chicks. The cracks were chinked with mortar made from brickmud and concrete floors were used in some while in others clean sand was hauled in and the floors were built up to a sufficient height. The average cost for materials for a brooder house made in this manner was nine-dollars and a quarter, as compared to sixty-dollars for those made of bought material.

Fowl, cont'd.

Culling demonstrations were held in four-teen communities with an effort to impress the fact that poor producers are not profitable and to show how poor producers are to be recognized. Of the entire four-teen communities there were twenty-one demonstration flocks carrying recommended practices. These flocks involved 3, 950 chickens and 1, 312 turkeys.

There is only one commercial grower of turkeys at this time among the Negro farmers of the county. He has been growing out an average of 1500 turkeys for the past three years, and has had very good success for a beginner. He has never lost as high as 25 of his flocks for any one year. The cost of feeds has proven to be somewhat prohibitive but by excellent grazing and raising part of his feed, he was able to make a nice profit on his flock this year.

FARM MANAGEMENT

In a series of meetings held in which a total of 918 farmers were asked if they kept records of expenditures, receipts and inventories, not one of that number was able to say that he did more than a mere part of the job. This part consisted mostly of warehouse bills and receipts for fertilizer. Part of those who lived in trucking areas said that they kept a part of the marketing receipts, the receipts coming from one of the two local fruit and vegetable markets. With the above facts to go on, a number of Simplified Farm Record Books were ordered and eleven demonstrators in as many communities were assisted in keeping accounts. With the records they now have they can tell just how they stand as to net income during the year and they also know just how much they spent for various items which would otherwise be forgotten. It was discovered that many of these items were deductible from their annual Income Tax returns, which

FARM NEGRO'S COUNTY

seems to them that the farm record should save them money in many ways. They are told that this is the only way to farm on a sound basis, and that it is the only way to keep posted on the progress, or vice versa, that the farm is making. Each of the demonstrators has promised to assist one of his neighbors to get started in keeping farm records for another year, with the understanding that this neighbor is to help some body else to get started in turn. In this way, each year will find more and more people who operate farms taking up the practice of keeping accurate records.

AGRICULTURAL ENGINEERING

The major work which was carried on in Agricultural Engineering this year was that of drainage. The method employed in draining the farmer's land was by use of ditching dynamite. The Soil Conservationist, Mr. Penny, gave valuable assistance in going around to the communities desiring co-operative projects and assisting the farmers with the estimation of the costs, and getting the correct fall for the ditches which were opened.

The first Negro farmer to take advantage of the new way of draining land with ditching dynamite was J. R. Dobson, of the Elder Community of this county. Dobson's farm is located in a very low area of the county. During wet seasons, his crops are always seriously damaged by excess water. But during dry seasons, he invariably makes good crops. After seeing his condition, Dobson was persuaded to go to the Production Credit Association and make a loan possible for draining his land by blowing the ditch. It so happened that the only direction that the ditch he needed could run was through a very stumpy, swampy area. It was estimated that \$180.00 would cover

Ag. Eng. Cont'd.

the total cost, and did. There were 316 feet of this canal blown through the swamp; the canal has already paid for itself after having only been blown in February of this year. The seasons were very rainy around that section of the county, and if it had not been for the canal ditch, Dobson's crops would have again been ruined.

In other sections of the county, there are groups of farmers who are cooperating in blowing ditches. For instance, out in the Little Creek section, a group of farmers called the County Agent and the Soil Conservationist in to discuss the opening of a ditch needed by the entire community to drain approximately 91 acres of low land. In October of this year, the ditch was laid off, and the dynamite ordered. The ditch will be blown in December.

HORTICULTURE

quite a bit of work was done during the year in assisting farmers in establishing and maintaining home orchards. In maintenance, the work included eradication of the peach tree borer and spraying. A chemical company operating out in the Sand Hill Section of the state was contacted, and farmers desiring to rid their trees of borers were given the company's name and address. When the order was made the persons were sent the material after which the County Agent spent the needed time in giving Neighborhood Method Demonstration on the use of the material. Also there was work in combating curculio and the rots by use of a prepared spray material obtained from the same company. It is very seldom that a farm is found that does not have at least two different kinds of fruit trees growing. On the other hand, it is very seldom that a farm is found on which the trees on hand are treated with the necessary care. During the year, work was carried on in 14 com-

Hort. Cont'd.

unities at which time there were 14 demonstrations carried on in the use of Dichlorodane for borar eradication, pruned demonstrations and 7 demonstrations in the use of sprays for the eradication of curculio and rots. Each of the demonstrators was able to save his entire crop of fruit from rotting and also the demonstrations involved a total of 63 trees.

SWEET POTATOES

The work in sweet potatoes for the entire year has been that of placing certified seed potatoes with farmers who expect to go into the production of sweet potatoes as a money crop. The goal set by the Advisory Board was "four carloads of cured sweet potatoes, of good quality, to be shipped out by Negro farmers of the county each year." There was one adult farmer, in addition to others, who set and grew out 2.5 acres of certified sweet potatoes. Fred Williams, of the Carleton Community, had an average yield of 206 bushels of choice potatoes per acre. Of the 1.5 acres cured, he expects an income of \$300.00. It is quite evident that if the Negro farmers of the county go into sweet potato production on a commercial basis, it will mean a lot to the plan of a more complete diversification of farm crops of the county. The main reason why farmers now scoff at the idea of growing sweet potatoes on a commercial basis is that the correct marketing and growing of potatoes has not been done as of this date. There has long been the idea that only Jumbo potatoes should be grown in order to get the proper amount of market appeal. This is shown by an incident which happened this year. One farmer did all that was possible to grow out a crop of very large potatoes. He did succeed in doing this. He took the potatoes to town and placed them on one of the local markets, and was very much surprised that out of the entire load of 61 bushels, only was he able to get rid of 2.5 bushels of the smallest potatoes.

Sweet potatoes, Cont'd.

After having talked with the farmer and taking him to one of the farms growing out market potatoes in order that he might get first-hand information on the ins and outs of the project, he is now convinced that it pays to grow potatoes of market quality, cure them and sell on the best markets.

4-H CLUB WORK

During the year, there were 9 clubs in the county. Enrolled in these clubs were 264 boys and 350 girls. The project year was exceptionally good. Out of 617 members enrolled, there was a total completion of 499 projects. Five clubs of the county engaged in five Church Sundays and the programs were arranged and carried out entirely by the clubs themselves, for the first time in 4 years. During previous years, it has been the practice of the Club Advisors to prepare the programs and delegate certain members for certain duties. It was felt, however, that if the members were given the opportunity to exercise more authority, that it would go a long way towards developing leadership-ability within the group.

The Annual 4-H Achievement Day Program was held in October with a total attendance of 149 members. Of this number, there were present 10 county champions. Certificates were awarded, and also the local business groups of the county gave cash prizes and other prizes of a useful nature, depending on the type of project the individual member had carried.

Activities engaged in outside the county this year include the following: Wild Life Camp, County Picnic, District Dairy Cattle Show, and 4-H Short Course at the State Land Grant College. At the County Picnic, there was a total attendance of 275 members from the 9 different clubs throughout the county. Following is a summary of the project activity for the year:

4-H Clubs, Cont'd.

There were 57 boys enrolled in Corn Production, of this number 31 completed the project; involved in this project was a total of 23 acres of corn. The average yield was 71 bushels per acre.

There were 26 boys enrolled in Sweet Potato Production; of this number, there were 18 completing projects. The completed projects involved a total of 9.5 acres of La. Porto Rico potatoes. The average yield was 206 bushels per acre. Of this amount, there were 3 acres cured and will be held for the late winter market.

Of 17 boys enrolled in Tobacco Production, there were 11 completing the project. Involved in the completed projects was a total of 12.2 acres of tobacco. The average yield per acre was 1270 pounds.

Of 91 boys enrolled in Home Gardens, there were 72 completing the project; number of acres involved in the completed projects was 9.5; the number of different vegetables grown was 11.

There was a total of 37 boys enrolled in poultry projects; of this number there was a total of 29 boys completing poultry projects. The number of birds involved in the completed projects was 2,127.

In Dairy Cattle, there were 10 boys enrolled; number of boys completing projects in Dairy Cattle work was 6; the number of animals involved in the completed projects was 8.

In Baby Beef, there was a total of 3 boys enrolled; number of boys completing projects in Baby Beef was 3; number of pounds of beef gained from projects was 2400.

Number of boys enrolled in Swine Production was 23; of this number

4-H Club Cont'd.

15 boys completed projects in Swine Production. The number of hogs involved in completed projects was 31; number of pounds of pork realized from completed projects were 9000 pounds.

Out of the 9 clubs in the county, there were 5 clubs engaging in beautification of school grounds as a community project. Most of the work done involved draining low areas, setting shrubs and establishing lawns. In such case, the entire club was given credit for the work as a group.

SUMMARY

In the 14 communities of Duplin County, there are 1,932 farms operated by Negro farm families. Of this number, there was a total of 632 farms reached this year for the first time by the Agricultural workers, and 1,384 of the total farms were influenced in 1947 by some phase of the work being carried on. Of the nonfarm homes, there was a total of 179 of these making some definite change as a result of the Agricultural program here in the county.

In facing the future of farm pursuits in Duplin County, the main theme of the entire program is to better prepare the farm population to meet the expected situations. For the past 5 years, the farmers have experienced an unprecedented era of prosperity. The main source of this prosperity was obtained from tobacco farming. Now that the situation surrounding the raising of tobacco has definitely changed for another period, it is quite necessary that the teaching being handed down to the farmers are clearly understood by them. With this fact in mind, periodical meeting of a group known as the County Agricultural Board, which has been set up within the county, is had in an effort to plan for the future well-being of the farming population at large. The plan is to formulate means by which all farmers will be independent of any one particular crop as a main source of revenue. To go about this, the group makes a study of the entire needs of each community within the county. The County Agent makes a study of out-look material in an effort to be able to contribute to the thinking and actions of the group.

An all out effort is being made to get the county as a whole more interested in livestock farming, poultry, sweet potatoes, small fruits and vegetables which will be used to maintain a steady flow of cash into the farmer's pockets. It is evident, to the Board and to some of the better thinking farmers, that not

Summary Cont'd.

until the farmer begins to farm 12 months out of the year will he be independent of any one source of income. It is therefore the desire of the group to lay the groundwork for this goal to be reached as soon as possible.

Other groups worked with during the year are: Red Cross, County Welfare Department and the Production Credit Association. In working with these groups, it is felt that, indirectly, all farmers in the county are being assisted in some way.

Now that material for RMA wiring is becoming more plentiful, many Negro farmers of the county are seeking and getting aid in having their houses wired for electricity and obtaining electricity. One group near Wallace, N. C. sent in a request for aid, and through the assistance of the local power and light company, 31 homes will receive electricity. During the same week that the request was received, a meeting had been scheduled to be held, dealing with the wiring of houses for electrical current, and after seeing that these persons from Wallace were interested, they were asked to send a delegation to the meeting. After attending, and listening to the Specialist from State College, many said that had they been able to have set in a meeting of that type 5 years ago, they could have saved money and worry in obtaining a person to wire their houses. It developed that there had been some inexperienced persons through the county and had charged excessively, and also had done some very poor work. Circular letters were then sent out to warn other persons to get only competent persons to do the wiring in their homes.