If changes are not fully understood and evaluated, and if leadership is not provided by those individuals and institutions who influence rural life, then the future communties of counties such as Powhatan may sadly lack a lot of the qualities that are most desirable, and wanted.

In addition to the families "started" and "worked with " in farm and home development as reported above, seventeen farm families were assisted in identifying, analyzing and solving complex inter related problems of the farm, but did not develop a total farm and home plan.

VIII. Evaluation of Year's Work and Trends:

1959 may be considered a successful year as far as Extension work is concerned in Powhatan County. A number of the goals, as set forth in the "Long Time Plan" may be looked upon as being one year nearer completion.

Significant changes are rapidly taking place in agriculture. A number of small inefficient farms are going out of business. Some of the larger, more efficient farms are expanding, by either buying or leasing additional land. Many acres of idle land have been cleared and put back in production. On the other hand many acres are being abandoned and allowed to go up in brush and trees. A number of acres of here to fore cropland are being used for other purposes. Two or three large housing developments have been started in the county, and it may be that this is just a beginning of a big change in that direction.

These fast and permanent changes means that the Extension program planning will have to change to meet new needs as they arise. Questions and requests for help on landscape problems are on the increase.

community club were trained in the functions of each officer.

An achievement program was held on this program - Mr. W. R. Turner of the State 4-H staff was the chief speaker. Awards and medals were presented to outstanding 4-H members for their 4-H achievements.

Each of the clubs held a community picnic during the summer.

In view of the past year's work it is believed that the 4-H program in the county can best be strengthened by concentrating on community clubs altogether , rather than meet the clubs in school. It has certainly been established, in this county at least, that the best quality 4-H club achievements can be accomplished through community clubs.

VII. Farm and Home Development -

The extension work in Powhatan county on the Farm and Home Development program (as such) has been partly reported elsewhere in this report, but for the sake of statistical facts the following figures are estimated.

Fifteen new families were started in the Farm and Home Development program this year. This with a previous total make s twenty-nine families worked with this year. Twenty of these families with whom Extension had little or no previous contact, Fifteen are families with low incomes, and twelve are families who are considered part time farmers.

It is estimated that ten of these twenty-nine families who have reached the point that they could go on with their farm and home development work without special extension assistance.

The methods to be used were:

1. Enroll entire 4th grade in 4-H Club.
2. Work with boys on individual club projects.
3. Coach 4-H members who will compete in the District Contests.

The Educational Activities to include:

1. Newspaper stories on outstanding project work.
2. Have 4-H members make and enter floats in seven county 4-H parade.

Sixty-four boys were enrolled in four community clubs in 1959. These club met monthly on a community basis after school, usually in the home of one of the leaders. Two of these clubs carried community projects in addition to their individual projects. The Jefferson Club carried "Forestry" and the Flat Rock club carried "Vegetable Gardening".

These sixty-four boys carried sixty-eight projects. Forty-eight of these boys completed fifty-two projects. Fifteen boys completed the garden project. Eleven boys completed the forestry project, three completed in poultry, eight in dairy, five in beef, six in swine, and 4 in home grounds beautification.

The 4-H clubs from the county were represented at the District contest by the following members - Robin Lester and Gene Walton on egg grading; I. B. Wilson, Jimmy Wilson and Meaux Thornton made up the dairy judging team from the county.

A meeting of the county council was held, and county 4-H plans were made. Also at this council meeting, the officers of each

were exhibited at the county fair. Bobby Rouse won first ribbon with his record book and was thus declared the county winner in the forestry project.

Two local voluntary leaders assisted the county agent in making one hundred seventy-five personal contacts individually or through meetings on forestry. It is estimated that forty-five different farmers and other individuals were assisted directly or indirectly to adopt recommended forestry practices.

One hundred and twenty-eight thousand pine seedlings were ordered from the Virginia Forest Service in 1959. This number does not include those trees set out by big land companies who plant from their own nurseries.

VI. 4-H Club Work

The 1959 Plan of Work sets forth the following under "goals" for 4-H club work in Powhatan county:

1. Increase membership to 60 boys.
2. Improve quality of work.
3. To take part in contests on the District basis.
4. Supervise on the farm projects.
5. Hold annual achievement day program.
6. Observe National 4-H Club week
7. Hold annual meeting of County Council.
8. Have 4-H members attend summer camp, and the short course at V.P.I.

1. To have one 4-H Club take a forestry project on a community basis.
2. To plant more pine seedlings.
3. To use the services of the Virginia Forest Service
4. To market timber more economically

The methods to be used were listed as follows:

1. Meet with the forestry committee and V.P.I. Forestry specialists for planning.
2. To supervise the forestry project for the Jefferson Sr. 4-H Club.
3. Through farm visits and other means of communication, point out to individuals the value of using the services of the Virginia Forest Service.
4. Through the soil bank and other government aid plant more pine seedlings.

The educational activities were to include:

1. Visits to good forest demonstrations in connection with general farm tours.
2. Have forestry exhibits at the local fair.
3. Conduct field trip for the 4-H Club members for the purpose of tree identification and forestry appreciation.

Eleven 4-H boys completed the Forest Appreciation I "Introduction to Forestry Project".

These boys with the able assistance of their leader carried out in detail all of the requirements for satisfactory completion of this project. Their project books along with forestry posters

The County Agent with the assistance of four local leaders contacted a total of one hundred and thirty-five individuals either personally or through meetings on some phase of beef cattle production. One hundred and thirty-five were assisted directly or indirectly to adopt recommended practices.

There are a score or more commercial swine producers, and almost every self sustaining farm produces a pig or more for home use.

E. M. Walton "Remwall Farms" in this county has one of the most modern swine breeding establishments in the state. Scotty Walton, a 4-H member captured three blue ribbons and two reserve championship ribbons at the State Fair this fall - E. M. Walton consigned a truck load of fifty pigs to the first Richmond Feeder pig sale. Forty-nine of these pigs went out of the grading ring wearing a spot of blue on its back. The one and last pig came out with a red spot. This means that forty-nine out of fifty were graded in the top grade, with the one pig going as low as the second grade.

Demonstrations on castrating, worming and vaccinating of swine were conducted on the farms of:

1. Charlie Hogg - Pine Creek
2. R. J. Lester - Ballsville
3. St. Emma' Industrial School - Rock Castle

D. Forestry

The forestry committee set the following as the 1959 goal:

The educational activities to include livestock exhibits at the local fair in both adult and 4-H classes and exhibits of 4-H steers and heifers at the State Fair and Spring Show.

The beef cattle industry in the county is expanding - one of our grade A milk producers has changed to the production of beef. The number of calves sold through the spring and fall sales has been increasing from year to year. For the first time, this fall, a yearling sale was held in the Richmond area. Something over 100 yearlings from Powhatan county went through this sale.

A few beef cattle can be found on most of the county farms. Most of these are commercial herds, although there are six pure bred establishments, and two farmers who feed out steers.

The County Agent spent considerable time during the past year working on some phase of beef cattle production. This work includes demonstrations on the following:

1. Castrating bull calves
2. Dehorning calves
3. Internal and external parasite control
4. Vaccinating for black leg and shippemgfever

These demonstrations were conducted on the following farms:

1. R. C. Goodwin - Powhatan, Virginia
2. St. Emma's Industrial School - Rock Castle
3. M. J. Michaux - Michaux, Virginia
4. E. Strudwick - Fine Creek, Va.
5. Lee Palmore - Powhatan, Va.
6. James R. Tilman, Fine Creek, Va.

of the county farm income is from this source. Most of this income is from beef cattle. There are very few hogs produced commercially, and practically no sheep.

The livestock committee assisted the Extension agent in setting up the following plan of work for 1959. The committee listed the problems as follows.

1. More feeder calves could be marketed to advantage through organized feeder calf sales.

2. Too many beef cattle producers are using un-registered and inferior sires.

3. Lack of good management on the following phases of beef cattle production.

a. Castrating

b. Dehorning

c. Disease control

e. Lack of abundant improved pastures, and sources of winter forages.

The methods to be used on beef cattle problems were:

1. Assist cattlemen in producing calves that will qualify for the feeder sales.

2. Conduct demonstrations on castrating, dehorning, vaccinating, and parasite control in each community in the county.

3. Distribute beef cattle information to farmers and 4-H Club members.

Eight voluntary local leaders assisted the County Agent in contacting 120 county farmers on some subject of Dairy Science. It is estimated that one hundred and fifteen different farmers and other individuals were assisted directly or indirectly to adopt recommended practices. Eighty-five of these farmers were assisted in some phase of management. Fifty-five were assisted with selections and breeding, forty with feeding, and eighty-five were assisted with control measures for both external and in-ternal parasites.

In the light of the year's work in Dairy Science, and considering the markets and trends, it is feltthat the program can best be strengthened by concentrated work along labor saving devices. Too many of our dairymen are still using the old conventional bern, and carrying the milk to the milk room. A number are still using cans instead of bulk tanks. Fortunately the Richmond market will not accept milk in cans after February next year.

Next to labor saving devices, the dairy committee felt that the most important problem was health within the individual herd, and the most serious factor of this problem was mastistis. An intensive program will be innaugrated along this line in 1960.

C. Livestock

Second to dairying, the livestock industry is next in economic importance in Powhatan county. Approximately 20% of the

One outstanfing dairy accomplishment this year was the records made by two purebred guernseys in the herd of Mr. C. N. Elam. Both of these cows were made National Champions by class leading production records made in 1959. Mr. Elam's herd will average over 570 lbs. of butterfat this year.

Our association has ten cows with a lifetime record of over 100,000 pounds of milk.

The Artificial Breeding program is now in its tenth year. Something over 2,000 cows will be bred in this manner this year. Not all of this number is in Powhatan county, however. The headquarters of the "Central " Breeding Association is located in Powhatan county and is estimated by the technician that tw-thirds of the total number of cows bred will come from Powhatan County. The remainder will come from adjoining counties of Amelia, Goochland, Cumberland and Chesterfield. Many of the county herds are made up entirely of artificially bred cows.

During the past two years the county agent has used the facilities of his office in making arrangements between cattle owners and veterinarians on the "Bang Testing Program". This county went on "area testing" in July 1958, and is now just aboutto become an accredited county. This program also includes vaccinating hiefer calves for Bangs and testing for T.B.

are planned as follows:

1. Distribute educational dairy material to county dairymen and 4-H members.

2. Individual visits to county dairy farms and 4-H dairy projects for the purpose of assisting with dairy problems.

3. Monthly D.H.I.A. summary sheets to be sent to all members of the association.

4. Exhibit dairy cattle in both the adult and 4-H classes at the state and local fairs.

5. Use radio, press, circular letters etc. to distribute educational information on dairying.

The County Dairy Herd Improvement Association is now completing its thirteenth year. There are twenty herds in this association, twenty-one in Powhatan and one in each of the counties of Cumberland and Goochland.

The County Agent has used these herds with their records as demonstration herds in good feeding, management, and record keeping. A herd analysis meeting was held early in the year, at which time the county agent went over the records with the individual herd owners. The average pounds of butter fat and milk in these herds has shown considerable increase from year to year, demonstrating the need for keeping good records on each individual cow, and using these records, not only in culling the herds but in the selection of replacement hiefers.

artificially this year.

From a number of long time goals in dairying, the committee selected the following as goals for the year 1959:

1. To continue D.H.I.A., and use the records of such hers to better advantage, in culling, feeding, and other management problems.

2. To increase the number of cows bred artifically.

3. To supervise 4-H Club members in their project work with dairy heifers, dairy cows, and dairy herds.

The dairy committee felt that the following were outstanding problems in dairying:

1. The records of the D.H.I.A. were not being used by the members to the best advantage.

2. More dairy cattle owners in the county should take advantage of the Artificial Breeding program.

3. 4-H Dairy Club members needed more supervision with their projects from the Extension worker, their parents and leaders.

The methods to be used in over-coming these problems are listed as:

1. Hold an annual analysis meeting for the members of the D.H.I.A.

2. Demonstrations and tours to dairy herds for the purpose of showing the advantages of using the service of the Artificial Breeding program.

3. Have fitting and showing clinic for both adult and 4-H members.

The Education activities in connection with the Extension Dairy

with their vegetable exhibits at the local county fair.

In the light of this past year agronomy Extension work, it is felt that next year's work can be strengthened by more community demonstrations on agronomy practices such as:

1. More general use of the soil testing service of the V.P.I. Agronomy department.

2. Increased use of fertilizer, certainly on all crops grown with the possible exception of tobacco.

3. The value of practicing rotating grazing on our dairy and beef cattle farms.

B. Dairying

The dairy cows brings more net profit into the county than any other farm enterprize, in fact more than all other farm enterprozes combined. It should naturally follow that the Extension Agent spent a good percentage of his time on Dairy Science.

Powhatan County suits itself well to dairying. We are close enough to both Richmond and Norfolk to enjoy the advantages of these markets. Powhatan County has one of the strongest D.H.I.A.'s in the state. At least six of the county D.H.I.A. members will complete their years testing program with a butter fat average of over 500 lbs.

Powhatan dairy cattle owners have a good strong Artificial Breeding Association. Something over 2000 cows will be bred artificially this year.

With the assistance of four local voluntary leaders, the County Agent made 135 contacts individually or through meetings on some phase of the production of hay and pasture. Six-ty -five of these farmers were assisted directly or indirectly to adopt recommended practices.

Seventy-five county farmers were assisted in the production and sale of tobacco. The use of the right varieties and strains have become increasingly important in the past two years. The total tobacco allotment to farmers in Powhatan is relatively small, and while this allotment is broken down into all types of tobacco grown in Virginia, it is very important to the farmers who hold these allotment to make the most, not only in quanity but also quality.

Sixty-five county families were assisted in some phase of vegetable gardening. Monthly garden letters, giving timely tips were sent out from the County Agent's office to interested families. One 4-H Club - the Flat Rock club took vegetables gardening as a club project. Fifteen of these boys completed project book no.1 in a very satisfactory manner.

Thirty-five county farm families were assisted in the use of improved seed varieties, use of fertilizer, and the control of insects and diseases.

The County Agent assisted several farm families, and 4-H members

growing season has been ideal. Above average crop have been harvested in small grain, corn, tobacco, hay and pastures.

Demonstrations on agronomy practices were set up on the following county farms:

Corn Hybrid V.P.I. 639 - Lee Palmore, Powhatan, Virginia

Sucker Control Tobacco - W. T. Nichols, Powhatan, Virginia

Alfalfa weed control - R. J. Lester, Ballsville, Virginia

Two tours were conducted to the corn demonstration on the farm of Lee Palmore. One in August and another in October. These tours were attended by twenty county farmers.

The sucker control demonstration was visited three times by the County Agent, and observation were made.

The alfalfa weed control demonstration was visited a number of times by the Extension Agent, along with other alfalfa producing county farmers.

The County Agent with the assistance of six voluntary local leaders made a total of sixty-three contacts with farmers on small grain crops. Forty-five farmers were assisted directly or indirectly to adopt recommended practices on this phase of farming.

Forty-five farmers were assisted with some phase of production. This includes use of fertilizer, use of improved varieties and strains, harvesting, storing, curing, and efficient work methods.

The agronomy committee felt that the following were the agronomy problems to be tackled in 1959.

1. The control of insects, disease and weeds in forage crops.

2. The need for more acreage of alfalfa and improved pastures.

3. Lack of use of the soil testing service, poor soil sampling, and incorrect use of fertilizer and lime.

The methods to be used on these problems are as follows:

1. Demonstrations on

   a. Alfalfa weevil control

   b. Chickweed control in alfalfa

   c. Conduct county wide silage producing contest.

2. Demonstrations on seeding alfalfa and improved pasture.

3. Encourage land owners to use the soil testing facilities, and to submit proper samples.

The Educational Activities to include:

1. Agronomy tours to alfalfa and pasture fields where approved practices are being carried out.

2. News stories on outstanding agronomy accomplishments.

3. Agronomy exhibits at local fairs by farmers and 4-H Club members.

4. Give information on approved agronomy practices through meetings, press, radio, circular letters and individual farm visits.

1959 has been a good crop producing year for Powhatan farmers with the exception of two brief dry spell in July and August, the

and working toward solutions. To bring these committees or representatives together as the Agricultural Extension Board, for the purpose of evaluating accomplishments and further planning.

The commodity committees have been active in planning, and assisting the Extension Agent with the county program. The dairy committee has assisted with educational information having to do with bulk tank and pipe line installations. This committee has also assisted with the operations of the D.H.I.A. and with the Artificial Breeding program.

The Livestock committee has assisted the Extension Agent in the selection and selling feeder calves at both the spring and fall sale. This committee also assisted with a yearling sale, and with a feeder pig sale.

The Agronomy committee has assisted the Extension Agent with a (1) corn Hybrid demonstration (2) a forage contest, (3) demonstrations on insect control on alfalfa, chickweed control on alfalfa, and with tours to these demonstrations.

The Forestry committee has assisted the Extension Agent in (1) tree planting demonstrations, (2) thinning and culling demonstrations, and acted in an advisory capacity for a 4-H Club whose members were taking "Forestry" as a club project.

V. Project Activities:

A. Agronomy

IV. Description of County Organization

As far as Extension work is concerned, the county agent's program is planned, and executed with the assistance of commodity committees. The active organized committees are 1. Dairy, 2. Livestock, 3. Agronomy, and 4. Forestry.

The County Extension program, roughly, revolves around the following projects:

1. Dairying
2. Livestock
   a. Beef Cattle
   b. Swine
   c. Poultry
3. Agronomy
   a. Alfalfa
   b. Corn
      1. For grain
      2. For silage
   c. Tobacco
   d. Pastures
   e. Small grain
4. Forestry
5. 4-H Clubs

According to the 1959 "Plan of Work - the goal was to use these commodity commitees in analyzing the problems, planning,

million and half dollars worth of farm products are sold annually.

Next to dairying, the livestock industry would rate second in economic importance. Something over $250,000 is realize annually by the county farmers from this source.

Third in economic importance would be poultry and its products. Over $200,000 worth of poultry products are sold annually.

Field crops sold include all types of tobacco, corn, small grain and some hay.

The climate of the county is temperate. The winters are not severe, although occasional snow can be expected from December to April. The summers are moderately long, with hot days during the months of July and August. The spring and fall weather is cool and pleasant. An average of 195 frost free days can be expected annually. Forty to forty-five inches of rainfall can be expected annually. This is usually distributed through out the year. The water supply is adequate and of good quality.

Of the 599 farms in the county, many are classified as being part time farms. These farms are operated by people who receive a part of their total income from sources other than agriculture. Many of the county residents commute to the Richmond area daily. Others supplement their income by working in the county at service stations, stores, sawmills, and on the State Highways.

Business establishments, consists of a bank, general stores, service stations, garages, electrical appliances and farm supplies.

III. Type of Agriculture

Powhatan County is located in the east central Piedmont section of the state. The county is small in area (270 sq. miles), with some 60 -65% of this total area in woodland or grown up abandoned farm land.

Powhatan is one of the small Virginia counties. It is bounded on the north by the James river which separates the county from Goochland - on the south is the Appomattox river which flows between Powhatan and Amelia. On the west is the county of Cumberland and on the east - Chesterfield.

The county seat, (Powhatan Court House) is located in the center of the county, just off U.S. route 60 which runs east and west through the center of the county.

The soils of the county are typical of the soils of Piedmont Virginia. Cecil fine sandy loam is the soil that shows up most frequently on those county farms where a soil survey has been made. The soils of the county are well adapted to the production of crops such as alfalfa, other hay, pasture, small grains and tobacco.

Dairying is the chief source of farm income. More net income is from this source than all other farm enterprizes combined.

According to the last census report (1954) there were 599 farms in the county. These figures include the negro farmers. The average size of the farms is 156 acres. On these farms, approximately a

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ANNUAL NARRATIVE REPORT

COUNTY EXTENSION WORK

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1959

POWHATAN
County