

NOVEMBER

Four radio programs  
Meet with directors Artificial Breeding Association  
Market flue cured tobacco from variety test  
4-H Club meetings  
County 4-H Council meeting

DECEMBER

Four radio programs  
Two tax meetings for farmers  
Meet with D.H.I.A. directors  
Meet with Artificial Breeding Directors  
4-H Club meetings  
Market dark fired tobacco experimental varieties

JANUARY

Six tobacco meetings  
Four radio programs  
Dairy School  
Annual meeting Artificial Breeding Association  
Livestock School  
4-H Club meetings

FEBRUARY

Four radio programs  
Four plant bed weed control demonstrations  
Agronomy Committee meetings  
4-H Forestry demonstrations  
4-H Club meetings

JUNE

Four radio programs  
4-H State Short Course  
4-H All Star Conference  
Summer recreational meeting for 4-H members

JULY

Five radio programs  
Meetings at tobacco variety tests  
Prepare catalog for county fair  
Four plant disease and insect clinics  
4-H Conservation Camp  
4-H Camp Week at Holliday Lake  
Hold Mastitis Control Clinics

AUGUST

Two farmers meetings at Southside Research Station  
Tour of impoundments on Roanoke Creek Watershed  
Meetings at tobacco varietal experimental plots  
4-H Electric Congress  
Leadership Camp at Camp Farrar, Virginia Beach  
Hold grading demonstration for beef cattle producers

SEPTEMBER

Five radio programs  
Hold Beef Cattle meeting  
Select calves for feeder calf sales  
Atlantic Rural Exposition  
Make livestock and crop exhibits at Five County Fair  
4-H Club meetings  
Hold sale of artificiall sired heifers and cows

OCTOBER

Four radio programs  
Assist with County Fair  
Tobacco plant bed weed control demonstrations  
Lynchburg Farm Show  
4-H Club meetings  
4-H Dairy tour

## CALENDAR OF TEACHING ACTIVITIES

### MARCH

Four radio programs  
Order 11 tons high analysis TVA fertilizing materials  
Attend meeting of Flue-cured Tobacco Stabilization with  
representatives from Charlotte  
Hold regular 4-H Club meetings  
Train 4-H Judging Teams - Dairy, Livestock, Egg Grading, Land  
Appreciation, Forestry, Landscaping.  
Meet with planning group for feeder pig sales  
Meet with forestry committee  
Hold meeting of 4-H Adult Advisory Committee  
4-H Camp planning meeting  
4-H demonstration on tree planting  
4-H National Club Week Program

### APRIL

Tobacco plant bed disease control demonstrations  
Five radio programs  
Sheep shearing school  
Assist in putting on feeder calf sale at Lynchburg  
Attend regular 4-H Club meetings  
Train 4-H judging teams  
4-H District Contests  
4-H Talent Contest  
Arrange 2 breeding line flue cured variety experiments  
Have five Aromatic tobacco demonstrations started  
National 4-H Club Sunday Program  
4-H Baby Beef Show & Sale

### MAY

Four radio programs  
Five soil fumigation demonstrations  
Meeting of directors of County Fair Association  
Meeting Roanoke Creek Watershed Directors  
Attend regular 4-H Club meetings  
Assist with Feeder Pig Sale at Lynchburg  
4-H Camp Planning Meeting

adjustments.

c. Work with three to six farmers on the new precision farm planning program.

d. Continue to furnish interested farmers with an enlarged map of farm to be used for records of crops fertilization and liming.

e. Assist dairy farmers in the area in converting to grade A production and becoming D.H.I.A. members.

f. Give assistance to interested farmers who expect to raise aromatic tobacco.

g. Work with three to five farmers on the electronic farm record keeping system.

VI. FARM AND HOME MANAGEMENT

1. Situation

Farm and Home Management assistance will be given to farm families throughout the county who have expressed a desire for assistance in farm management.

The increase in cost of farming and the shortage in acreage of the main cash crop, tobacco, has created a problem among the farmers of the county. Supplemental income is needed either from additional enterprises or off the farm employment. Some farmers are interested in Aromatic tobacco. Others are interested in livestock and poultry. The Extension Agents are working closely with these farmers to help them decide the best combination of enterprises for their farm.

2. Needs

- a. Additional farm income.
- b. New enterprises to offset loss due to reduction in acreage of cash crops.
- c. More assistance in setting up and keeping farm records.
- d. Information on production and marketing of new enterprises.
- e. Help in establishing farm and home as a unit.
- f. Assistance in determining what changes in the farm operation best suits the farm and family needs.

3. Activities

- a. Hold demonstrations on production of Aromatic tobacco.
- b. Assist farmers with setting up and keeping farm records, using both the electronic record keeping system and the regular type of farm records.
- c. Personally contact and work with several farmers on the new precision farm planning program.

4. Goals

- a. Work with farm families in planning changes in farm program, home improvement, water system and farm and home financing.
- b. Use specialist help whenever needed by farm families in making

- c. Conduct demonstration on tree planting for 4-H members.
- d. Plan summer meeting for County Council. This meeting to be a business meeting followed by a recreation hour.
- e. Keep the public informed on 4-H activities throughout the year by newspaper, radio, letters and personal visits.
- f. Plan program for 4-H Sunday and special edition of local paper for 4-H Club Week.

4. Goals

- a. Two church programs for National 4-H Sunday.
- b. Summer recreational meeting for County Council.
- c. Hold school for 4-H dairy, livestock, sheep shearing, egg grading teams, with specialists assisting.
- d. Have at least 25 members exhibit beef and dairy projects at local and district fairs.
- e. Increase 4-H enrollment at least 10%.
- f. Send full quota to 4-H Camp, Short Course and Conservation Camp.
- g. Enter six teams in district contest.
- h. Have 4-H members participate on radio programs during 4-H Club Week.
- i. Hold one training meeting for 4-H Adult leaders.
- j. At least one meeting of Adult Advisory Committee.
- k. Set up additional Father-Son forestry projects in planting, thinning, killing, or a combination of these.

5. Specialists who will assist

George Allen  
W. N. Patterson  
W. A. McElfresh  
R. L. Wesley  
Arden Huff  
E. W. Mundie

five elementary schools and the one consolidated high school.

Two elementary schools were discontinued and the enrollment from these schools were consolidated with another school. Due to this change the county has two less organized clubs than the previous year, yet the enrollment has increased.

Cooperation between the Extension Service and school officials is excellent, and 4-H meetings are held monthly during the school year. There are three 4-H Clubs in the high school, a teacher is designated by the principal as a sponsor for each of the clubs. The sponsors are responsible for arranging the meetings, helping plan the program and notifying the members of the meeting date. They also meet with the club and assist with the program.

Each of the clubs in the elementary schools have a teacher sponsor.

Each elementary 4-H Club carries a club project such as: Home Grounds Beautification, Wild Life, Safety, along with their individual projects.

Individual project instruction is done outside regular 4-H meetings.

Adult men leaders assist through the year with the club program, county contests, schools, county and district fairs, and project instructions.

## 2. Needs

- a. A 4-H overall program to hold interest of older boys and girls.
- b. Acquaint parents, public officials, business, and others with the 4-H program and what it offers to boys and girls.
- c. Training adult leaders in their field in order for them to do a better job with 4-H members.
- d. Additional adult 4-H leaders.
- e. More participation by members in contests, demonstrations, and team work.

## 3. Activities

- a. Hold a sheep shearing school and contest in conjunction with adult school.
- b. Meet with 4-H Adult Advisory Committee to plan program.

in order to realize an annual income from their woodlots.

e. An outlet for more hardwood, such as: a pulp or paper mill that can utilize hardwoods.

3. Activities for 1960

a. Meet with forestry committee to plan program for the coming year.

b. Conduct planting, killing and harvesting demonstrations for 4-H forestry members.

c. Make survey of insect injury during season insects are most active.

d. Work with members of Father-Son Forestry Club in setting up program on their farms.

4. Goals

a. Devote at least two radio programs to forestry activities in the county.

b. Assist state forester in planning program in the Roanoke Creek Watershed Area.

c. Add two more Father-Son Forestry Demonstrations.

d. Work with forestry committee in a survey to secure an outlet for more hardwood.

e. Assist Extension and State foresters in survey of sawfly infestation and damage.

f. Visit all 4-H forestry projects at least once this year to check progress.

5. Specialists who will assist

Carl J. Holcomb  
W. A. McElfresh  
John Amos

V. 4-H CLUB WORK

L. Situation

Five hundred ten boys and girls are enrolled in 15 4-H Clubs in the

4. Goals

- a. Enroll 1800 cows in Artificial Breeding Association.
- b. Have 40 artificially sired heifers and cows in sale.
- w. Encourage each dairyman to set a goal of 6 tons of silage to be stored for each cow.
- d. Eliminate mastitis from dairy herds.
- e. Increase number of Grade A producers in county.

IV. FORESTRY

1. Situation

The sale of timber and pulpwood in Charlotte County continues to be a source of income for land owners. The harvest of timber is still larger than the annual growth and replanting program.

Much of the timber acreage is of undesirable hardwood. This acreage is not producing an income for the landowner.

Some killing of this hardwood groth is being done by aerial spraying and other methods of poisoning. Many acres are being cut over with all desirable trees removed. The cut over acres are left to grow up in undesirable hardwood.

The pine sawfly continues to increase in the pine forests. No evidence of killing of the pines has shown up, however, with defoliation occurring year after year there may be areas damaged or killed by these insects.

Interest in forestry is on the increase among 4-H members. Some 4-H members have planted pine seedlings for the past three years. During 1958-59 season approximately 20,000 seedlings were planted by 4-H members as their individual projects.

2. Needs

- a. Continue increase in planting seedlings of desirable species of trees.
- b. More educational work on the importance of harvesting and management practices, and control of fire and insects.
- c. An incentive program to eradicate undesirable hardwood growth, and replant these areas to desirable timber tree.
- d. More participation by farmers in forest management and harvesting

4. Goals

- a. Forty beef cattle producers marketing 725 head of calves and steers cooperatively.
- b. Forty percent of calves going to cooperative sales grading fancy and choice.

B. Dairy Cattle

1. Situation

There are 41 grade A dairymen and 52 dairymen selling manufactured grade milk in Charlotte County.

There are 18 dairymen from Charlotte County in the Dairy Herd Improvement Association. These dairymen have 883 cows on test. This number is 17% of the dairy cows in the county.

The Artificial Breeding Association, which started in 1951, offers its services to all dairymen in the county. The number of cows being bred artificially has increased from 899 in 1958 to 1519 in 1959.

2. Needs

- a. To increase membership of artificial breeding association.
- b. To control mastitis.
- c. To lower the cost of feeding dairy cows.
- d. To make better use of D. H. I. A. records.

3. Activities

- a. Hold dairy school.
- b. Assist dairymen in putting on sale of artificially sired heifers and cows.
- c. Distribute mastitis control material.
- d. Hold mastitis control clinics.
- e. Work with dairymen in helping to solve marketing problems.

- b. Farmers will be informed through letters, meetings, visits, news articles, and radio programs concerning assistance available through this program.

### III. LIVESTOCK

#### A. Beef Cattle

##### 1. Situation

There are approximately 100 producers of beef cattle in Charlotte County, who have herds averaging 40 breeding animals. There are many other farmers in the county that have a few beef cattle.

Thirty six producers sold 682 calves and steers through organized cooperative sales in 1959. The quality of cattle in the county has improved greatly in recent years on account of educational programs and the emphasis on top grade animals in the sales.

##### 2. Needs

- a. More and better home grown forage, especially silage.
- b. Continued improvement of breeding herds.
- c. Adequate control of internal and external parasites.
- d. Less mud in feed lots.

##### 3. Activities

- a. Cooperate with two feeder calf associations through which calves and steers from Charlotte County are sold.
- b. Hold educational meetings and field trips for beef cattle producers.
- c. Hold at least one grading demonstration for feeder calf producers.
- d. Producers, selling through cooperative sales for the first time, will be assisted by representatives of the Beef Cattle Committee in selecting calves for the sales.
- e. The county agent and certain members of the Beef Cattle Committee will assist in putting on sales in April and October.

connection with the conservation work being done.

b. The completion of one or two structures in the Watershed Plan so that they may serve as demonstrations for the rest of the Watershed.

3/ Activities

a. Keep landowners in Watershed informed by letters, news articles, personal contacts and radio programs as to plans and progress of the Watershed.

b. Take landowners from communities adjacent to other structures to see the two impoundments that should be completed during the first part of 1960.

4. Goals

a. To complete the signing of all easements on lands involved in water retaining structures to be built in 1960 and 1961.

5. Who Will Assist in Carrying out Activities

a. Officers and directors of the Watershed Association.

b. Committees representing each tributary of the Roanoke Creek.

c. Soil Conservation Service technicians will furnish the technical assistance needed.

B. Agricultural Conservation Program

1. Situation

There are approximately 1900 farms in Charlotte County. In 1959, 226 farmers in the county received assistance through the Agricultural Conservation Program in establishing of soil building and maintaining practices.

2. Goals

a. The county agent will assist in the selection of soil building practices for which financial assistance will be given to farmers in the county through the Agricultural Conservation Program.

d. Use all available publicity media to encourage farmers to bring samples of diseased plants or unusual insects to the County Agent's office for identification.

e. Conduct tours of the different experiments.

4. Goals

a. Perform at least three demonstrations for fall treatment of plant beds for weed control.

b. Conduct two flue cured tobacco variety experiments and two breeding line experiments.

c. Have five farmers grow Aromatic tobacco and use them for demonstrations.

d. Have one dark fired fertilizer experiment and one dark fired tobacco variety experiment.

e. Strive for 100% soil tests for tobacco land.

f. Hold at least 4 disease and insect clinics in different parts of the county.

II. SOIL CONSERVATION

A. Roanoke Creek Watershed

1. Situation

The Roanoke Creek Watershed Project, operating under Public Law 566, A Watershed Protection and Flood Prevention Act, was approved by the State Soil Conservation Committee in 1955 for the development of a Work Plan.

The Work Plan has been completed and has received Congressional approval. Easements are now being obtained from landowners, in areas involved, to permit the construction of retaining structures.

All easements on two structures have been completed and signed by property owners. About 50% of the remaining easements have been signed.

2. Needs

a. Better organized landowners in the area of each structure so as to bring about more community pride in

2. Needs

- a. Continued emphasis must be placed on informing farmers on the factors that cause undesirable grades of tobacco and what the probable results will be if too much of these grades are produced.
- b. Emphasis must be placed on Aromatic tobacco as a source of supplemental income. All farmers agreeing to grow this tobacco should be encouraged to obtain the proper facilities.
- c. With many new chemicals on the market to treat various insects, diseases and for sucker control, the producers need to know all the factors about them, such as health hazards, effect on the quality of tobacco and how to use them to the best advantages.
- d. Producers must be kept abreast of the ever changing recommended variety lists and encouraged to select the variety that suits their particular situations.
- e. Farmers that do not have disease problems should be encouraged to grow non-resistant varieties.
- f. Soil sampling must be stressed as being the basic tool for determining fertilizer and lime needs.
- g. Farmers must be made aware of the possibility of stricter grading and lower prices on mixed tobaccos in 1960
- h. Farmers need to be urged to treat plant beds for weed control in the fall.

3. Activities for 1960

- a. The Farm Bureau will sponsor one county-wide tobacco meeting for the purpose of making producers aware of production and marketing problems. At least three other meetings will be held by extension personnel in different parts of the county for the same purpose.
- b. Full use will be made of letters, personal contact and demonstrations to give farmers the latest information on varieties, fertilization, plant bed management, insect and sucker control, and marketing.
- c. Discourage the use of MH-30 for sucker control until more research is done on it.

3. Activities

- a. Distribute current lists of recommended hybrids to seed dealers and farmers.
- b. Hold meeting of farmers at corn variety plots at Southside Field Station.
- c. Give information to livestock producers concerning relative value as a feed of corn when harvested for grain and when made into silage.

4. Goals for 1960

- a. Increase acreage of corn being used for silage by 10%.
- b. Hold six demonstrations on controlling soil insects to improve stands of corn.

D. Tobacco

1. Situation

The allotted acreages of different types of tobacco in Charlotte County for 1960 are as follows:

Flue cured	3412.02
Fire cured	1057.15
Burley	17.00
Sun cured	10.90

Many of the grades of flue cured tobacco produced by farmers in Charlotte County were not acceptable to buyers in 1959. Many farmers are lowering the quality of their tobacco by spacing too close in the field and using too much fertilizer.

Insects are still causing much damage to tobacco. Certain diseases such as blackshank and root rot difficulties are causing increasing losses in tobacco.

The use of the soil test is becoming more important as a basis for fertilizing tobacco.

There were two flue cured and one dark fired tobacco variety experiments in Charlotte County in 1959, and also a dark fired tobacco fertilization experiment.

Weeds in plant beds offer a serious problem to tobacco producers.

2. Needs

- a. More high quality pastures, especially for owners of small herds.
- b. More silage for use when pastures fail in dry weather.
- c. Improved methods of curing hay.

3. Activities

- a. Meeting of Forage Committee to plan program
- b. By means of letters, personal visits, meetings, radio broadcasts and newspaper articles present to livestock owners plans for meeting forage needs.
- c. Hold a forage tour.

4. Goals for 1960

- a. Continue working through Forage Committee.
- b. Try out forage practices on farms of pilot test demonstrators.
- c. Hold forage tour
- d. Hold meeting at Experiment Station.
- e. Hold one other meeting on forage production.

C. Corn Production

1. Situation

Corn is a major crop in Charlotte County and has been for many years. In terms of quantity and quality of feed per acre, it is the leading crop for silage.

Corn yields in Charlotte County have been going up for several years, because of the use of hybrid seed and higher rates of fertilization.

2. Needs

- a. To improve stands of corn
- b. For more of the corn produced to be used as silage.

## 1960 PLAN OF WORK

### I. AGRONOMY

#### A. Extension-TVA Demonstrations

There are four Extension-TVA demonstration farms in Charlotte County. Two new demonstrators will be added during 1960 to bring the number up to six. The two new demonstrators will replace two that were graduated in 1959.

These farms are known as Pilot Extension-TVA demonstration farms. They are used to test varieties of crops, fertilizers and certain practices that are showing up well at research stations, but are not yet ready to be recommended to the public.

High analysis mixed fertilizers, made from ingredients, manufactured in the Tennessee Valley Area, will be used as the chief fertilizer on these farms.

The results obtained on these demonstration farms will be publicized by means of tours, pictures, and newspaper articles.

Farm record books from the demonstration farms will be summarized and the results analysed by the Farm Management Specialist at V.P.I. for the purpose of suggesting adjustments in the demonstrator's business.

Annual soil tests are made on fields on which high analysis fertilizers are used. A copy of these soil test reports is filed at the County Agent's office and a copy sent to the demonstrator.

#### B. Forage Crops

##### 1. Situation

There are 18,547 acres in permanent pasture on farms in Charlotte County. The demands on this pasture are represented by livestock population as follows: beef cattle 4625, dairy cattle 5200, sheep 280, and hogs 4500.

The amount and the quality of the forage stored for livestock during the past two years have improved. The quality of hay in many cases is low. Not enough silage is being stored because of the high cost of harvesting and storing equipment. The larger herd owners, in almost all cases, are well supplied with pasture, but many owners of a few animals do not have adequate pasture.

PLAN OF WORK

1960

CHARLOTTE COUNTY

Lee W. Morton, Jr., County Agent  
Kermit Barbour, Assistant County Agent  
Thomas E. West, Assistant County Agent  
P. E. Vipperman, Jr., Assistant County Agent  
Gladys C. Crute, Secretary