

13. A 4-H Rally Day will be held in July for 4-H members and their parents.
14. The 4-H club members will participate in a County Youth Fair.

XI. Cooperating With Other Agencies

A. Agricultural Stabilization and Conservation

1. The agent through personal contacts, letters, news articles and meetings will help to carry on the educational program.
2. The agent will help with community meetings to explain the program.
3. The agent will attend county committee meetings whenever requested.

B. Credit and Loaning Agencies

1. The agent will cooperate with loaning agencies by recommending farmers needing credit to the proper loaning agency.
2. The agent will work with the FHA Supervisor and help where necessary in making recommendations.
3. The FHA Supervisor will be informed on new developments by circular letters, meetings and bulletins.
4. The agent will cooperate with the local bank and keep the personnel informed on agricultural programs.
5. The agent will attend Agricultural Credit Conference held at Natural Bridge.

C. District Soil Conservation Service

1. The agent will work with the county SCS personnel in helping farmers conserve soil and water.
2. The agent will assist the Tidewater Soil Conservation District in formulating and executing district plans.
3. The agent will attend Tidewater Soil Conservation District Supervisors meetings.
4. The county planning technician will be informed of new developments in Agriculture in the county.
5. The agent will assist the local soil conservationist whenever requested in making recommendations for his farm plans.
6. The agent will give the local soil conservationist the names of farmers requesting soil conservation help.

C. Methods

1. Farmers requesting individual help in farm planning will be selected for this program.
2. The program will be done during the year. An inventory will be made with the farm family to determine what is available and what is being done at present. After the inventory is made, the agent will budget with the farmer on several alternatives and let the farmer decide on the alternative of his choice.
3. Mr. Kenneth Loope, Extension Agricultural Economist at VPI, will be requested to visit the county to assist the agent in working with farm and home development families.

X. 4-H Club Work

A. Situation and Needs

Six 4-H clubs are organized in the county and the meetings are held in the schools.

B. Objectives and Goals

1. To conduct meetings and programs for six (6) clubs with an enrollment of approximately 160 boys.

C. Methods

1. An Adult 4-H Advisory Committee will be organized to plan the 4-H club program for the county and to assist in carrying on an effective program.
2. Two county council meetings will be held to plan 4-H activities.
3. Adult leaders will assist with the conduct of meetings and the project program.
4. Each member will carry at least one agricultural project.
5. Members of each club will exhibit outstanding projects at Fredericksburg Fair and Richmond State Fair.
6. 4-H club members will attend 4-H club camp.
7. The agent will work with and encourage 4-H members to participate in the Fredericksburg Fat Stock Show and Sale and the Richmond Fat Stock Show and Sale.
8. Success stories will be published in the local paper to increase interest in the 4-H program.
9. A Sears-Roebuck Pig Chain will be conducted.
10. The agent will visit 4-H club members to assist them with their project program.
11. The agent will train a livestock judging team and a dairy judging team.
12. The agent is conducting the Farm & Home Electric Project and will have a delegate attend the Electric Congress.

C. Methods

1. The agent will discuss the 1960 Agricultural Outlook with farmers at meetings, when making farm visits and when farmers are visiting the county agent's office.
2. News articles will be published on the 1960 Agricultural outlook.
3. A bulletin, "Farmers Income Tax and Social Security" will be sent to farmers in Caroline County.
4. The agent will assist farmers with Social Security and Income Tax problems when farmers visit the office and when he is making farm visits.

VIII. Agricultural Engineering

A. Situation and Needs

Farmers are in need of plans and information on building farm buildings. They also need information on labor saving equipment.

B. Objectives and Goals

1. To distribute plans for buildings whenever requested.
2. To increase the use of labor saving equipment.

C. Methods

1. The agent will secure plans of agricultural buildings and equipment for farmers and advise with them on planning the buildings and equipment.
2. Publicity will be given to new labor saving equipment.
3. C. D. Kite, Extension Agricultural Engineer of VPI, will discuss buildings and equipment for hogs and beef cattle at a Livestock School. He will also visit farmers with the agent and assist with building and equipment plans.

IX. Farm and Home Development Program

A. Situation and Needs

This is the sixth year such a program has been tried in Caroline County and it is proving very beneficial to most farmers and homemakers working with the program.

B. Objectives and Goals

1. To work with additional families in an effort to increase their efficiency in farming.

B. Objectives and Goals

1. An increase in the yield and quality of the commercial vegetables produced in the county.

C. Methods

1. The county Vegetable Committee will meet at the beginning of the year to plan an educational program for the year.
2. Mr. L. B. Wilkins, Extension Vegetable Specialist at VPI, will be invited to the county to assist with a county meeting in April on the production of cucumbers, sweet potatoes and tomatoes.
3. News articles, bulletins, circular letters, office visits and farm visits will be used to promote the control of diseases and insects and other improved cultural practices.

VI. Forestry

A. Situation and Needs

Approximately two-thirds of the farm land is in forest and considerable income is derived each year from the sale of forest products.

There is an immediate need for re-forestation of the cut over area.

B. Objectives and Goals

1. 500,000 pine seedlings to be planted during 1960.

C. Methods

1. The agent will use every opportunity available to influence farmers to set pine seedlings on the cut over areas.
2. News articles, meetings and farm visits will be used by the agent to promote the forestry program.
3. 4-H club members will be encouraged to set pine seedlings.

VII. Farm Management and Public Policy

A. Situation and Needs

Farmers are anxious for information on Social Security, Income Tax and other items of public policy.

B. Objectives and Goals

1. To inform farmers on matters pertaining to the agricultural outlook, social security, income tax, farm record keeping, and items of public policy.

- e. Four result demonstrations will be held on weed control in the plant bed with the use of Methyl Bromide.

F. Pastures and Other Forage Crops

1. Situation and Needs

The acreage in pasture has decreased about 20% during the past ten years but the quality has greatly increased because 50% more livestock is grazing this smaller area. Farmers are doing a better job of fertilizing and managing pastures.

The immediate need is for a plentiful supply of pasture and forage crops stretched over a larger period for more efficient livestock production.

2. Objectives and Goals

- a. An increase in the number of farmers seeding winter cover crops for grazing.
- b. More farmers to seed sudan grass for supplemental grazing.
- c. Farmers to continue to use heavy applications of fertilizer for pastures to insure more grazing.

3. Methods

- a. General educational activities such as news articles, circular letters, bulletins, farm visits will be used to encourage farmers to continue the pasture fertilization and seeding program and to seed winter and summer supplemental grazing crops.
- b. The Agronomy Committee will assist with the 12 month forage program.
- c. Result demonstrations will be conducted on pasture fertilization.

V. Vegetables

A. Situation and Needs

The sweet potato and tomato acreage were decreased four times during the past ten years. The cucumber acreage was greatly decreased.

The immediate need is for better yield and quality.

ten years. The rye acreage increased about 33%. Very little increase in yields have been noted.

2. Objectives and Goals

An increase in yield.

3. Methods

- a. In an effort to get increased yields fertilizing and other cultural practices will be stressed through news articles, circular letters, bulletins and farm visits.
- b. Farmers will also be encouraged to use good treated seed as a method of increasing yield.

E. Tobacco

1. Situation and Needs

The acreage of sun-cured tobacco has been decreasing in Caroline County for many years because the farms are becoming more mechanized and farmers can get a greater return per man hour from other crops. Tobacco yields more income per acre than any crop grown in the county and for this reason it is mostly grown on the small farms. Acreage allotments has also caused the acreage to decrease.

The immediate need is more efficiency in production and higher yields to meet the demand caused by the short supply.

2. Objectives and Goals

Since allotments are in effect for sun-cured tobacco, the only way left to increase the supply which is far short of demand is to increase yields. The goal in Caroline County this year is a 10% increase in average yield per acre.

3. Methods

- a. G. R. Mathews, Extension Service Tobacco Specialist at VPI, will be invited to a county tobacco meeting to discuss ways of increasing the yield of tobacco.
- b. Timely news articles will be written on tobacco production.
- c. The agent will assist with tobacco production problems when making farm visits and when farmers are visiting the office.
- d. Circular letters will be used to get information to the tobacco producers.

### 3. Methods

- a. General educational activities such as news articles, circular letters, and bulletins will be used to promote efficiency in production and marketing.
- b. Farmers will be encouraged to sell their corn through livestock rather than sell it as cash grain.
- c. Farmers will be assisted in corn production and marketing by the agent when he is making farm visits and when the farmers are visiting his office.

## C. Soybeans

### 1. Situation and Needs

The acreage of soybeans last year almost equaled that of corn, the number one crop in Caroline County. The acreage in soybeans was over one-third of the total crop land in the county.

The greatest needs are more efficiency in production and higher yields. The corn earworm did considerable damage to soybeans last year and is a continual threat to the soybean crop.

### 2. Objectives and Goals

Accepted cultural practices to be stressed in an effort to get at least a 10% increase in average yield.

### 3. Methods

- a. Mr. Houston M. Camper, Jr., Manager of Eastern Virginia Research Station, Warsaw, will discuss accepted soybean practices at a meeting held in April for soybean producers.
- b. The agent will write news articles and circular letters on soybean production.
- c. Bulletins on soybean production will be distributed to soybean producers.
- d. The agent will assist with soybean production when he is making farm visits and when farmers are visiting the office.

## D. Small Grains

### 1. Situation and Needs

The wheat acreage has decreased one-third during the last ten years. Barley acreage has increased three times and the oat acreage has doubled during the last

## IV. Agronomy

## A. Alfalfa

## 1. Situation and Needs

The acreage of alfalfa is decreasing because of the insect, disease and weed problem.

The immediate need is for farmers to maintain the stand by proper fertilization, insect, disease and weed control and to establish new stands.

## 2. Objectives and Goals

To improve the stands of alfalfa in Caroline County and to seed an additional acreage.

## 3. Methods

- a. Circular letters will be used to keep the alfalfa grower informed on the alfalfa weevil control.
- b. News articles will be written for the local paper on the alfalfa weevil control.
- c. A mimeograph, "Control the Alfalfa Weevil" will be sent all alfalfa producers in the county.
- d. A news article will be published on the chickweed control.
- e. Also news articles will be published on fertilizing and seeding alfalfa.
- f. The agent will assist with alfalfa problems when making farm visits and when farmers are visiting the office.

## B. Corn

## 1. Situation and Needs

The corn acreage in Caroline County is continuing to decrease because of the reduced price per bushel.

The immediate need is for more efficient production and better marketing to meet the reduced prices.

## 2. Objectives and Goals

- a. More farmers to use chemicals or a rotary hoe for weed control.
- b. An increase in the number of farmers plowing under crimson clover for corn.
- c. A 10% increase in the number of farmers selling corn through cattle and hogs.
- d. An increase in the use of nitrogen as a side dressing for corn.

3. More dairy farmers to use sudan grass for supplemental summer grazing and rye and crimson clover for winter grazing.
4. To influence more dairy farmers to cull out the low producing animals.
5. To promote a mastitis control program to cut down on the loss of milk production as a result of this disease.

C. Methods

1. Meetings, news articles, circular letters, leaflets, and farm visits will be used to influence dairy farmers to: (1) harvest hay in a younger and more tender stage; (2) to use sudan grass for supplemental summer grazing and rye and crimson clover for winter grazing; (3) to encourage home mixing of the dairy ration with the use of home grown grains when available; and (4) to encourage culling the low producing animals.
2. An Extension Service veterinarian will be invited to a county meeting in June to discuss mastitis control.
3. News articles, circular letters and farm visits will be used to promote the mastitis control program.

III. E. Poultry

A. Situation and Needs

With the exception of five large commercial poultry producers most of the poultry in Caroline County is family size flocks and about the same numbers are maintained each year.

The immediate needs are for more commercial laying flocks and more efficiency in feeding and management.

B. Objectives and Goals

1. To increase the number of commercial laying flocks in the county.
2. An increase in efficiency in feeding and management.

C. Methods

1. The county Poultry Committee will meet to plan a poultry program for the year.
2. News articles, circular letters, office visits and farm visits will be used to promote the poultry program.
3. County and area meetings will be planned to keep the poultry producers informed.

### C. Methods

A county Livestock Committee, composed of one livestock producer from each magisterial district, president of Caroline County Farm Bureau, and representatives from two feed companies, will meet in January to plan an Extension Service livestock program for the year. To be included in the plan will be a one day Livestock School for county livestock producers. Extension Service specialist from VPI will be invited to assist with this Livestock School to discuss feeding and management for hogs and beef cattle, housing and equipment for hogs and beef cattle and silage making and equipment for silage making.

Publicity will be given to this livestock school by writing articles for The Caroline Progress, Free Lance Star and Richmond Times Dispatch. WRVA radio station will be requested to give publicity to this livestock school.

A free meal will be served those attending the livestock school by the women of the Caroline County Farm Bureau with funds provided by the local bank, feed companies and Caroline County Farm Bureau.

The Livestock Committee, at the January planning meeting, also decided to encourage participation in the Fredericksburg Feeder Calf Sale, Tappahannock Feeder Pig Sale and organized fat cattle sales. The committee agreed to work with farmers to encourage the feeding of more hogs as a method of marketing the surplus grain produced.

## II. Dairying

### A. Situation and Needs

Dairy cattle numbers decreased approximately 15% during the past ten years.

There is an immediate need for more efficient production and Mastitis control.

### B. Objectives and Goals

1. To influence more dairy farmers to produce a better quality hay on the farm.
2. To encourage dairy farmers to use more of their home grown grains in their dairy rations and to mix the dairy feed on the farm which will result in a considerable savings on feed.

### General County Problems, Needs and Opportunities

The average size of farms in Caroline County is 133 acres. The size of farms need to be increased for more efficient production and to supply the family with the needed income.

Thirty-five (35) percent of the farms have a gross income less than \$1000. More off the farm employment is needed to raise the farm income.

Pastures have greatly improved in Caroline County during the recent years, but there is a great need for further improvement. There is also a need for larger numbers of livestock to consume the surplus grain produced.

During the last few years there has been a great increase in the number of farmers planting pine trees and improving the present stands, but there is a great need for more and more re-forestation.

### Activities

#### I. Livestock

##### A. Situation and Needs

Hog and beef cattle numbers have been increasing for the past several years. Hogs are grown on practically all farms in the county for home use and a large number of farmers produce hogs for market. Most of the beef cattle producers maintain a cow herd and sell feeder calves. Some few farmers grain feed the steers and sell fat cattle.

The immediate needs are better marketing, breeding, disease control, management, feed production and feeding for hog and beef cattle. More hogs and beef cattle are needed to consume the surplus grain being produced in the county.

##### B. Objectives and Goals

1. To increase the number of confinement feeding units for hogs which will increase feeding efficiency and aid in disease control and management.
2. To increase the number of hog producers selling pigs through the Tappahannock Feeder Pig Sale, Inc. which should insure higher prices for pigs sold.
3. To increase the number of hogs produced in the county by 10%.
4. To assist with marketing of beef cattle by encouraging beef cattle producers to sell their cattle through organized feeder calf sales or fat cattle sales.

### Brief Description of County

Caroline County is a rural county with 1169 farms and according to the 1954 census the average size of the farms is 133 acres. General farming is the chief type of farming in the county with corn, wheat, oats, barley, soybeans, lespedeza hay and seed, alfalfa, tobacco and commercial vegetables being the chief crops. Poultry and hogs are on most farms in small quantities. Beef cattle and dairy cattle are on many farms.

The chief commercial vegetables grown in the county are cucumbers, sweet potatoes and tomatoes. Tomatoes and cucumbers are grown for local canneries.

About 2/3 of the farm land area in Caroline County is in forest trees and every year a considerable sum is added to the farm income from forest products such as excelsior wood, lumber, cross ties and pulp wood.

### Changes in the Situation

Favorable prices and fair yields for soybeans during the past few years has caused the soybean acreage to almost equal that of corn the number one crop in the county.

Declining agricultural prices and the high prices paid by farmers are causing many farmers to loose money. The farm debt is increasing and many farmers are finding it harder to secure the necessary credit needed.

Fifty percent of the farms in Caroline County have less than 100 acres. Seventy-three (73) percent of the farms have crop land under 50 acres. This acreage is too small for efficient use of machinery and labor and to supply the family with an income to meet the family needs. More and more farmers are forced to take other jobs to supplement the farm income or to increase the size of the farm. In fact, approximately 60% of the farmers in Caroline County now have other income exceeding the value of agricultural products sold.

### Program Development

The agent met with an Agricultural Planning Committee in January to plan an Agricultural Extension Program for the year. Special interest committees also met in January and February to plan their programs.

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ANNUAL PLAN OF WORK

CAROLINE COUNTY

December 1, 1959 through November 30, 1960

R. G. Eagar

Katherine W. Salmon

County Agent

Stenographer