

on peanuts have been lowered for the past several years, and 58% of the total farm income for Surry farmers depends on peanut production. A few of the small farmers will be renting their land to larger farmers in 1961 and will be going into public work.

15% to 20% lower than the three previous years. The reason for this is the large amount of rainfall that fell during July and August.

Surry County farmers' income is derived mostly from peanuts—58% of the total income. The farmers follow closely the recommendations of the Holland Experiment Station in regards to fertilization and cultural practices.

The 1960 corn crop in Surry County was the largest on record.

The farmers had excellent weather and moisture conditions during the growing season and at the time the grain was forming on the husk.

The greatest percentage of corn raised in the county is fed to livestock.

Surry County farmers have improved their type of hogs going to market a great deal in the past several years. The main reason for this is the fact that most markets are now buying hogs on the graded system, a premium paid for 82 hogs means more profit for the producer. Farmers realize that in order to meet competition from other types of meat production, it is necessary that they produce the type of hogs for lean cuts that the consumer desires.

The Extension Animal Husbandry Department, County Agents, and Swine Specialists have had a great deal to do with improved swine production in Virginia. News releases, radio programs, demonstrations, and tours have educated the farmer that swine production cannot be classed as just a sideline as a source of income, but must be included as a main source of income along with his crop.

Farmers in Surry County are beginning to feel the cost-price squeeze more each year. The main reason for this is that price supports

cases where needed. Two of the families have sheep and the Agent has worked with these farmers in selecting lambs to be put in sales and getting their sheep sheared.

#### VI. Cooperating with Other Agencies

##### A. Agricultural Stabilization Conservation Committee

The Agent has attended several committee meetings with the ASC Office Manager in regards to soil conservation practices in Surry County. The Agent, with a representative from the Forestry Service, Soil Conservation Service, and the ASC Committee, meets each year in selecting conservation practices suitable and practical for farmers in Surry County.

##### B. Soil Conservation Service

The Agent has had excellent cooperation with the Soil Conservation Service technician in Surry County. The Agent and the technician have visited farmers and worked with them on their conservation problems.

The Agent has attended several meetings of the supervisors of the Peanut Soil Conservation District to which Surry County is a member.

#### VII. Extension Accomplishments

The peanut yields in Surry County for the past several years have been exceptionally high. The 1957, 1958, and 1959 crops averaged approximately 2500 pounds per acre. These three years Surry County averaged more pounds per acre than any county in the state.

The 1960 crop of peanuts in Surry County will be approximately

The County Committee had two meetings in 1960. The following goals were set up for 1960-1961:

1. Make a display during National 4-H Club Week.
2. Work toward 100% project completion.
3. Encourage members to attend District 4-H Camp.
4. Encourage members to enter an exhibit at the County Fair.
5. Make plans to enter a booth at the Petersburg Fair.

#### V. Farm and Home Development Program

The Agent is working with seven farmers on the Farm and Home Development Program.

The Agent works with these farmers mostly on advising ways of increasing production of crops and livestock, keeping records, and good management.

The Agent, with the farmer, made a map of the farm, locating fields and pasture land. In studying these maps with the farmer, rotations were worked out to the farmer's advantage.

The Agent passed on to these farmers latest information in regards to better crop and livestock production. The farmers in this program have cooperated with the Agent and are responsive to new and better ideas of increasing production.

The Agent feels that the proper keeping of records is an important phase of the program. The farmers in the program admit that records have helped them a great deal.

In regards to livestock, the Agent has worked with these farmers on practicing good livestock management. The Agent has helped in securing boars and gilts for replacement in their swine herds in

The theme was the "Efficient Use of Electricity in the Home". The booth won a white ribbon and thirty-five dollars in prize money. The club plans to use this money to purchase welcome signs to be put on the main roads entering Surry County.

#### (4) 4-H Short Course

Two girls and one boy attended the Short Course held at V.P.I. in June of this year. Mac Cofer, who has been an outstanding club boy for several years, was taken into the All Stars in 1959. Mac is developing into an excellent junior leader, and is doing a good job in working with the Agent with younger 4-H Club members.

Mac entered the District Contests held at Petersburg in April, and gave a demonstration on care and cleaning of an electric motor.

#### D. Camps and Achievements

There were 14 boys from Surry County attending 4-H Camp Farrer in July. Charles Hunter, County Game Warden, attended as a leader for the boys from the county.

This camp is composed of club members from Isle of Wight, Southampton, Nansemond, and Surry counties.

Club members attending camp, by being associated with club members from other counties, seem to get a better over-all picture of the meaning of 4-H Club work.

Surry County 4-H Club members hold their annual achievement day in conjunction with the County Fair. At this time, club members, both boys and girls put on display items they have made and grown during the year.

Surry County club members have participated in the Annual Market Hog Show held in Smithfield for the past several years.

This show and sale has been educational for the boys showing the hogs. Extension Specialists and other professional workers do the judging of the animals. Club members and others attending the show are told, as well as shown, why one animal is picked over another in regards to type and confirmation. This show has been one of the teaching tools in improving swine production in Southeast Virginia.

(2) County Fair

Club members do an excellent job each year of entering exhibits in the Junior Division of Farm Products at the County Fair. Members of the senior club work with the younger boys in preparing exhibits, and urging them to enter some type of farm product.

The Senior 4-H Club entered a float in the Junior Division of the County Fair. The Agents worked with the committee in the type of float to enter in the parade; the club members assembled and decorated the float. The theme was "To Make the Best Better". This float won second place and ten dollars in prize money.

(3) Petersburg Fair

The Senior 4-H Club took the responsibility of entering a booth in the Petersburg Fair. A committee consisting of two boys and three girls worked out details as to the type of exhibit they would like to display. The Agent and Home Agent worked with this committee. The committee did the work, such as making posters and assembling material to go in the booth; the Agents only supervised the assembling of the booth.

### B. Project Work

(1) Livestock - There are 23 livestock projects carried on by 4-H Club boys. These boys carry projects consisting of breeding pigs, market pigs, and dairy calves.

(2) Home Gardens - There are 17 home garden projects carried on by club boys. Garden projects are carried on mostly by club members living in urban areas and new members.

(3) Crops - There are three crop projects carried on by club members. Two club members are carrying peanuts as a project, and one corn project.

(4) Poultry - There are seven poultry projects carried by club boys in the county.

(5) Rabbits - There are four rabbit projects carried by boys living in town and urban communities.

(6) Electric - This project was carried by the entire seventh grade and the senior club in high school. The seventh grade carried Unit I, and the senior club carried Unit II of the electric project. The club members taking Unit I toured the Virginia Electric and Power plant located in Chesterfield in May.

Two club members, Eric Alexie and Betty Jean Rollings, won trips to the 4-H Electric Congress held in Richmond in August.

Mr. Richard Trice, Rural Engineer for VEPCO, has worked with the Agents on this project for the past three years.

### C. Shows and Fairs

(1) Market Hog Show

to approximately 8,000 acres. For the last three years Surry County has exceeded its quota in planting pine seedlings. The county planted approximately 700,000 pine seedlings in 1960.

Farmers do not seem to be interested in the care of their woodland in regards to thinning, killing of hardwood, and good forest management. Income from forestry is about 3.5% of the total farm income.

The Agent with the cooperation of the Southern Pulwood association, set up a demonstration showing proper thinning, killing of hardwood, and setting out pine seedlings.

The Agent believes that by continued publicity and demonstrations, farmers will realize there are benefits and additional income to be had from their timberland.

#### IV. 4-H CLUB WORK

##### A. Organization

There are five organized 4-H Clubs in Surry County. The County and Home Agent meet with these clubs jointly each month. The clubs are divided into grades, starting with the fourth and going through the seventh in the grade school. There is one senior club in the high school. We find that by dividing the clubs into grades, enrollment has increased; and also by having members in the same age group, the members take a more active part in the meetings. The Agents meet with the principal and teachers of the grades having 4-H Clubs, and work out a schedule for meetings suitable for all.

management and feeding.

### 3. Dairying

There are only three Grade A dairies in Surry County. The Agent works with these dairymen mostly on herd replacements and management. The Agent works with the Extension Dairy Department in getting information from these dairymen for survey use by the Department.

The largest of these dairies has recently joined the D.H.I.A. The Agent has talked with this dairyman and finds that he is well satisfied with the work carried on by the D.H.I.A. He is now in the process of culling some of his lower producing cows.

### 4. Sheep

There are approximately twenty-five flock of sheep in Surry County. The Agent worked with these farmers in securing a sheep shearer to shear their sheep in the spring.

Three lamb sales are held each spring at the Smithfield Livestock Market. These sales have been a good outlet for sheep producers in this section of the state. The Agent has worked with producers in educating them to dock and castrate their lambs going in the sales and urging them to enter lambs of desirable weights for better grading

### C. Forestry

Surry County has approximately a woodland acreage of 55,000 acres. The 1955 woodland acreage was 58,547 acres. The county has 61% of its total land area in woodland.

Industrial companies' land holdings in Surry County amount

for efficient swine production. In news articles and farm meetings the Agent, with the help of Extension Husbandmen has emphasized the feeding of a balanced ration for best results in swine production.

The Agent is beginning to see improvement in swine management and feeding and believes that publicity by various means has caused this trend to better swine production.

(d) Farrowing Houses and Feeding Parlors

The Agent has worked with a number of farmers in the past year in regards to constructing farrowing houses. The Agent impresses upon the farmer that it is possible to save an average of two additional pigs per litter by using some type of farrowing house.

There are approximately seventy-five farmers in the county feeding hogs in some type of feeding parlor. The Agent has worked with farmers on renovation old buildings for feeding out hogs and furnishing plans for building new hog parlors.

2. Beef Cattle

The trend in Surry County for the past several years in regard to beef cattle has been increased buying of feeders and decreased number of herds. This trend is favorable as feeders are better suited to fit in with our type of agriculture than herds.

Beef production has increased approximately 90% in Surry County over the past ten years. The Agent has stressed the importance of having pastures to go along with the increased number of feeders.

The Agent, in working with farmers having beef cattle, passes on to them all information from Extension Specialists in regards to

The importance of disease and parasite control is stressed at all livestock meetings as well as through news articles and personal contacts.

The Agent encourages farmers to use the Diagnostic Laboratory located in Ivor to determine the kind of disease the animal has before administering treatment.

(b) Selection of Breeding Stock

The grading system of buying hogs has educated farmers a great deal of the benefits they can receive by having good type boars and gilts as breeding stock.

Demonstrations put on jointly by the packing companies and extension service on grading hogs on the hoof and later showing the quality of the carcass has increased quality of hogs going to market.

The Agent has worked with a number of farmers in getting better quality boars and gilts as replacements in their breeding stock. Continued publicity will be carried on in urging farmers to select good type breeding stock by means of demonstrations, news articles, and farm meetings.

(c) Feeding and Management

The Agent, in visiting farmers in regards to their swine, has found that there are too many farmers not carrying out a feeding and management program that is sound. This will determine to a large extent the amount of profit the farmer realizes.

The Agent has stressed to farmers the value of good pasture

a crop for better and more efficient means of raising livestock.

#### 4. Soybeans

Soybeans have increased in Surry County for the past several years. The reason for this has been allotments on peanuts and wheat and quotas on corn. Farmers who have cleaned additional land for crop production usually plant that land in soybeans.

The varieties of soybeans recommended for our type soils are publicized at farm meetings, and through news articles and newsletters. The Agent furnishes the seed dealers in the county with a list of the latest recommended varieties put out by the Experiment Station.

A number of farmers interplant soybeans with their corn mainly for livestock turned in the fields after the corn has been harvested.

#### B. Livestock

##### 1. Swine

##### (a) Controlling Diseases and Parasites

Surry County farmers loose thousands of dollars each year on their swine, the chief reason being the failure to use proper control methods of diseases and parasites.

This has been one of the worst years in the past several that cholera has been so prevalent. In the past, there have been a few farms in the county that cholera has killed some hogs; but this year the disease has been county wide. The Agent believes this is due to farmers becoming lax and not vaccinating their hogs against cholera.

Livestock in the county has increased from 65% to 70% in the past ten years, the largest increase being in swine. The acres of pasture has only increased approximately 50%.

There are approximately 8,500 acres of pasture land in Surry County, of this amount there is approximately 6,300 acres of a permanent type pasture.

The Agent is working toward a long-time goal of 10,000 acres of permanent pasture.

The Agent stresses the importance of good permanent pastures at farm meetings, in news articles, and by individual contacts.

#### (b) Supplementary Pastures

Surry County farmers do a good job on maintaining some type of supplementary pasture. Most farmers realize that extremely dry weather cuts back in their permanent pasture, and a supplementary pasture is necessary. Publicity is given on the importance of supplementary pastures at the annual Agronomy-Livestock meeting for farmers and through newsletters and news articles.

#### (e) Seeding, Fertilization, and Management of Pastures

The Agent feels that most farmers realize that in order to have a good permanent pasture, proper seeding, fertilization and management are necessary. Publicity given by the V.P.I. Agronomy Department, news articles, radio and TV programs has educated the farmers to a great extent on the value of proper pasture management.

Farmers are taking more soil samples of their pasture land than in previous years and are beginning to treat their pastures as

Recommended varieties are publicized in farm meetings, newsletters, and news articles during the winter and spring months.

(b) Spacing and Fertilization

Surry County farmers follow rather closely the recommendations of the Holland Experiment Station in regards to spacing and fertilization.

Proper spacing and fertilization has been emphasized at farmers' meetings, through news articles, newsletters, and demonstrations.

Surry County made the largest corn crop in history this year. The big factor in this is that the corn crop had ideal weather conditions and ample moisture.

(c) Insect Control

Surry County farmers are getting better stands of corn than a few years ago. The Agent believes the reason for this is largely due to farmers using chemicals for controlling subterranean insects in their peanut rotation. These chemicals are relatively toxic in the soil for a period of two or more years.

A few farmers had trouble with the shatter worm attacking corn in the bud before tasselling. The damage was rather slight, and only two farmers in the county had damage heavy enough to warrant spraying or dusting.

3. Pastures

(a) Importance of Pastures for Efficient Livestock Production

The pasture land in Surry County has not increased in proportion with the number of livestock for the past several years.

(2) Use of Sulfur and DDT to Control Leafspot and Leaf Hopper

The Agent feels that a majority of the farmers in the county realize the value of using sulfur and DDT for controlling leafspot and leaf hopper, but more education is needed on the amounts needed for proper control. The Agent also feels that more work is needed to educate the farmer that sulfur also prolongs the growing season, giving the peanut pods longer to grow and mature.

The benefits farmers receive from the use of sulfur and DDT was stressed at our annual Agronomy-Livestock meeting held for farmers. In the Agent's letter to all farmers in the County regarding crops and livestock, the use of sulfur and proper amounts to use was emphasized in regards to better peanut production.

News articles were published during June and July emphasizing damage caused by leafspot and leafhopper and how both could be controlled.

2. Corn

(a) Adopted Varieties

The use of hybrid seed corn adopted for soil and climatic conditions is important to farmers.

The Agent invites all seed and fertilizer dealers to the annual Agronomy meeting held for farmers in the county. Mr. Clark, superintendent of the Holland Experiment Station, usually attends this meeting and passes on information as to the performance of the recommended hybrid corn suitable for our section. A list of these varieties is sent to all seed and fertilizer dealers in the county.

The Agent has publicized through news articles, farm meetings, and newsletters, the methods of controlling stem rot. Continued publication is planned by the Agent until stem rot ceases to be a problem.

(b) Controlling Nematodes in Peanuts

Nematodes attacking peanuts is not a serious problem in Surry County except in a few spots on certain farms. The Sting Nematode and the Root-Knot are the ones that are reducing yields on these farms.

Four farmers in the county fumigated certain areas of their peanut fields before planting this year. Check plots were made, and in three of the four cases, favorable results were obtained. The one farmer who obtained no appreciable results used only about one half the fumigant that was recommended.

(c) Controlling Subterranean Insects

The Agent is sure that Surry County farmers could increase peanut yields as well as their quality by using Aldrin to control subterranean insects attacking the peanut pod.

The means of controlling these insects was publicized at farm meetings, fertilizer meetings of dealers and professional workers, news articles, and newsletters. Fertilizer dealers and insecticide companies have worked closely with the Agent in urging farmers to use materials for controlling these insects.

At the present time there are approximately 9,000 acres in pasture of one type or another in Surry County. Pastures have increased in the county due to the increased number of livestock, allotments, and land clearing.

The largest income from livestock in the county comes from the sale of hogs. Approximately 38% of the total farmers' income comes from the sale of hogs. Swine production fits in well with the crops grown in the county.

### III. Project Activities

#### A. Agronomy

##### 1. Peanuts

###### (a) Stem Rot Control in Peanuts

Stem rot has been a major factor in reducing peanut yields in Surry County for the past several years. In previous years, farmers have been forced to dig certain fields early to keep the disease from spreading so rapidly. Stem rot has not been too much of a problem this year for farmers in Southeast Virginia.

The Agent believes that the reason for this is the fact that farmers have become more educated to the fact that shallow cultivation, non dirting of peanuts when they are small, and plowing under deeper the organic matter on top of the soil aids in controlling stem rot. Another factor in the control of stem rot is the use of chemicals for weed control. A number of farmers are using a chemical, mostly Di-nitro, and are getting good results.

meets with the Directors of the Farm Bureau when possible, and gives them full cooperation in his capacity as County Agent.

#### E. Farmers Union

The Farmers Union was organized in Surry County the first of 1953. The Agent has received full cooperation from this organization and has met with the Directors several times and asked their opinion on different things pertaining to his over-all farm program. This organization has been most cooperative in all things asked of them.

#### II. Type of Agriculture

Surry County consists of approximately 306 square miles. There are about 38,000 acres in cropland and pastures and approximately 68,000 in woodland. Surry County is located within the coastal plains of the Tidewater section of Virginia. The winters are rather mild, giving larger grazing periods for livestock.

The soil type is sandy to sandy loam; the county from both soil and climatic conditions, is well suited for pastures, corn, soybeans, peanuts, and small grain.

The chief money crop in Surry County is peanuts. There were approximately 9,000 acres planted in 1959. Peanuts represent 58% of the income of Surry County farmers.

Corn is second to peanuts as a money crop in the county. The corn is sold mostly through livestock, mainly hogs.

Soybeans have increased in acreage in the past few years. This is due to quotas and allotments on peanuts, corn, and wheat.

## I. Brief Description of County Organizations

### A. Agronomy Committee

The Surry County Agronomy Committee was organized in 1952 with the cooperation of the District Agent and the VPI Extension Agronomy Department.

The Committee consists of the County Agent, professional workers in the county, six farmers and a representative from the local bank. This committee meets in January of each year and with the assistance of an Extension Agronomist, plans demonstrations, tours and field days.

### B. Livestock Committee

The Livestock Committee was organized in the spring of 1957. This Committee met in March with the County Agent and Extension Animal Husbandman and made plans for improving livestock in the county.

### C. Forestry Committee

The Forestry Committee was organized in 1955. This Committee, with the aid of the Extension Forestryman has planned demonstrations on thinning, killing of hardwood and seedling planting.

The Forestry Committee has also helped the Agent in publicizing the Intensified Forestry Program in the county.

### D. County Farm Bureau

The Surry County Farm Bureau is one of two farm membership organizations in the county. This organization has cooperated to the fullest extent in working with the County Agent in his work. The Agent

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