

will have to go back into the school. Some effort has been made toward this end, and will be made further in the coming year.

Significant changes are rapidly taking place in the county agriculture. A number of small inefficient farms are going out of business, and some larger, more efficient farmers are expanding. Many acres of idle land have been cleared and put back into production, on the other hand, many acres are being abandoned and allowed to grow up in brush and trees.

The trend in agriculture is toward "Dairying". Of the 396 farms listed in the most recent census report fifty-four of these farms are classified as dairy farms.

It is the feeling of the Extension Agent that the Dairy Industry is foremost, and of the greatest economic importance. Therefore the Extension Agent can be of the most value to the county by increased emphasis on the many phases of Dairy Science.

Five new members were started in the program this year. This with a previous total make twenty-seven families worked with this year. Eight of this number are families with whom Extension had little or no previous contact, and six were families who were just getting started in farming. Fifteen are families with low income, and twelve are families who are considered part-time farmers.

It is estimated that eight of these twenty-seven families have reached a point where they could go on with their farm and home development work without special extension assistance.

In addition to the families "started" and "worked with" in farm and home development as reported above, fifteen 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

1961 may be considered a successful year as far as Extension work is concerned in Powhatan County. A good number of goals as set forth in the plan of work were reached. On the other hand, some of the goals as set forth in the work plan were not reached. This is true as far as 4-H Club goals were concerned.

For the past several years the entire 4-H Club program has been out of school and on a community basis. Consequently the total number of 4-H enrollment has been small. It is felt that before much can be accomplished toward increasing enrollment, the clubs

There is no organized county groups of 4-H All Stars, but the Powhatan members participate in district and state meetings. Active all stars living in the county include C. N. Elam, Jo Elam Gates, C. N. Elam Jr., Mrs. John Cosner, Mrs. Helen Mootz, Mrs. Ruth Mann, Dorothy Gills, Robin Lester, Ruby Brown, Betty Lee Nichols, E. B. Wilson Jr. and Anne Lester.

D. Activities:

Powhatan county had 13 4-H members and one leader to attend 4-H Camp at Jamestown early in the summer.

Powhatan county had four girls and two boys attending State Short Course at Blacksburg. One boy and one girl were taken in the All Star Chapter.

An Achievement program and "Share-the-fun Contest" was held in February.

A county wide 4-H tour was held in the summer. This tour was to a local bakery in Richmond. Approximately 50 4-H members, friends and adults attended. The methods of making and marketing bread commercially was observed.

VII. Farm and Home Development

The Extension work in Powhatan county on the Farm and Home Development program has been partly reported else where in this report. The following is a brief summary of the Farm and Home Development work to date:

in addition to their individual project. The Jefferson Sr. and the Flat Rock club carried a wildlife project on a club basis.

Forty-six boys completed 54 satisfactory projects. The project with the largest number in of completions was the Unit I of the Wildlife project. Twenty-eight boys from two clubs were enrolled in this project. Twenty-five boys completed the requirements necessary for completion of Unit I of this project.

Three boys were enrolled and completed the Vegetable Garden Unit No II project. Five boys completed the poultry project on brooding and rearing. Seven boys completed the dairy project. Two boys completed a beef calf project. Eight boys completed a swine project, and five boys completed the Home Grounds Beautification project.

C. Organizations:

The County 4-H Council is made up of all club officers plus the adult leaders who serve as advisors. The council met early in the fall to train these officers in their duties. A local leader and newspaper reporter assisted the Extension Agents with the training.

The executive committee of the group met throughout the year to plan county wide events.

Officers of the 4-H County Council elected for 1961-62 were president-Anne Lester, vice-president-Wayne Willis, secretary-Bunny Hurt, Treasurer-Myra Lipscomb, Song Leader-Sarah Sue Lyons and reporter-Sandra Walton.

8. To hold two meetings of county council.
9. To recommend two boys to the All Star Chapter.
10. To have twenty-five member from the county attend summer 4-H Camp.
11. To send three boys to the State Short Course.

The methods to be used were as follows.

1. Meet with prospective club members in school.
2. Arrange for monthly meeting place out of school.
3. Work with boys on individual club projects.
4. Coach 4-H members and teams who will compete in the District Contest.
5. Assist members in the completion of their records.
6. Assist members with their fair exhibits.

Educational Activities:

1. Newspaper stories and pictures on outstanding 4-H Club work.
2. Reports from each club at the Achievement Day Program.
3. Posters to be made and exhibited by club members.
4. 4-H Exhibits at the State and local fairs.

B. Projects

Fifty-seven boys were enrolled in five community club in 1961. These fifty-seven boys carried sixty-three projects. These clubs met monthly on a community basis after school hours. The meeting places were the local community house or a private home of one of the club members. Two of these clubs carried a club project in

during 1961. One meeting in January and the other in September. The January meeting was for the purpose of planning beef cattle work for 1961 and the September meeting was for the purpose of discussing special problems in connection with the organized fall sales.

Demonstrations on castrating, worming and vaccinating of swine were conducted on a number of farms during the year. These farms include:

Jack Clayton
R. E. D. Blanton
M. J. Michaux
R. J. Lester
G. C. Harris

VI. 4-H Club Work

A. Plan

The 1961 Plan of work calls for the following as the goals for 4-H Club work in Powhatan County:

1. To enroll 75 boys in community clubs.
2. To hold regular monthly meetings after school.
3. Have 80% of the members complete a satisfactory project.
4. To enter District Contests with judging teams in dairy, beef and poultry.
5. To supervise on the farm 4-H projects.
6. To hold annual achievement day program.
7. To observe National 4-H Club Week.

The agent assisted the beef cattle committee in the selection of calves for the spring sale and the three fall sales. The agent assisted the Feeder Sales Association in the weighing, grading and penning of these calves before the sale date.

The agent conducted four demonstration on vaccinating and castrating beef calves during the month of May.

These demonstrations were conducted on the farms of

J. W. Hatcher

W. T. Mitchell

St Emma's Industrial School

M. J. Michaux

These demonstrations were attended by 37 county farmers.

The County Agent assisted three county 4-H members with their entries in the Richmond Premium Stock Show and Sale. These boys were Scotty Walton, Max and James Timberlake. These boys won the following ribbons:

2 - 1sts

1 - 2nd

3 - 3rds

2 - 4ths

These 4-H members showed a total of 2 steers and 8 pigs from

Powhatan County attended

The County Agent attended the B.C.I.A. bull sale in Culpepper in March with three county farmers. He assisted in the selection and purchasing one bull in the sale for Powhatan County. This bull going to St Emma's Industrial School.

The County Agent met with the beef cattle committee twice

5. Cull poor milkers, late calves, and cows producing poor grading calves, also cull heifers on the basis of their first calf record.

6. Make use of low grade roughage on the farm for cows, releasing some of the high quality feed for young stock.

7. Strict grading on the farm before selling.

The 1961 Plan of Work listed the following methods to be used in reaching the above objectives:

1. 1. Hold beef cattle school for the purpose of presenting information on

- a. Feeding and management
- b. Selecting, breeding and culling
- c. Castrating, dehorning and vaccinating
- d. Controlling disease and parasites
- e. Marketing through Feeder Sales
- f. The advantages of using the Virginia Beef cattle improvement association

2. Assist the selection committee in the grading of calves on the before the sale.

3. Assist beef cattle producers with locating, selecting, and purchasing purebred production tested bulls.

The County Agent spent eighty-two working days of 1961 on some phase of livestock work. This number also includes the work with Dairy Science. Considerable time was spent, however, working on some phase of livestock production and marketing.

daughters is Emory's St. Patrick Gail, who in Elam's herd has made four class and three national records. She was the first Guernsey to make over 20,000 pounds of milk in ten month under the age of five years. Her last record is 20,326 pounds of milk and 915 pounds of fat 305 days 2 X as a junior 4 years old.

Another outstanding accomplishment in dairying is the DHIA 1961 production record of D. Les Palmore of Powhatan County. His herd of 34 ^{artificially} bred cows produced an average record of 14,456 pounds of milk and 600.2 pounds of fat for the year 1961.

In addition to the above listed activities in dairying a general dairy meeting was held in December 1960. The subject of this meeting was feeding and management. The meeting was held in the Bank of Powhatan attended by 23 of the county dairymen.

3. Livestock, beef, hogs and poultry are second to dairying in economic importance in Powhatan county.

The livestock committee listed the following goals under the 1961 Extension Plan of Work.

1. To get more producers to market their calves and yearlings through the organized feeder sales.
2. To save the best heifers as replacements. Too many of the best heifers are going to market as calves.
3. Use only registered bulls, and bulls with good performance record if possible.
4. Adjust cattle numbers to pasture and feed available.

The DHIA is now in its fifteenth year. There are 22 herds in the association. Eighteen of these herds are in Powhatan county, one in Amelia, one in Goochland and two in Cumberland.

The county agent has used these herds with their records as demonstration herds in 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 milk and butter fat in these herds have 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 heifers.

An outstanding dairy accomplishment was again made this year with by C. N. Elam and Son the "Belnemus herd". For the second straight year this herd has led all Guernsey herds in Virginia. This year mature equivalent records on 97 cows amounted to averages of 11,802 pounds of milk and 591 pounds of fat.

"Emory's St. Patrick", the highest proven Guernsey bull for milk and fat ever proven in "The Old Dominion State" and among the top in the nation did a lot for the herd" according to Elam.

Elam sold this bull to the Central Ohio Breeders' Association but is still using him artificially at Belnemus. Among his top

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

3. See that all information available on the mastitis program gets into the hands of each dairyman in the county.

Dairying has grown rapidly in the past fifteen years, and is now by far the chief source of farm income, contributing over one million dollars from milk and cream sold. The dairy cow brings more net profit into the county than any other farm enterprise, in fact more than all other farm enterprises combined. It should naturally follow that the Extension Agent spend a good percentage of his time on Dairy Science work.

Powhatan County suits itself well to dairying. The county is close enough to both Richmond and Norfolk to enjoy the advantages of both these markets. The A grade milk shipped from the county is pretty evenly distributed between the Richmond and the Norfolk market.

There is also a good market for a "cool" grade milk at Fork Union, and the majority of the shippers of the grade milk use this market.

Powhatan county has one of the strongest Dairy Herd Improvement Associations in the state.

Powhatan county has a very active Artificial Breeding Association. Something over 2400 cows will be bred artificially this year. A good number of our dairy herds are made up entirely of cows who are daughters of the bulls from the Virginia Artificial Breeding Association at Rocky Mount.

1. Send a local man to V.P.I. for training in DHIA work.
2. Hold a dairy school for the purpose of bringing to county dairymen information on:

- a. Dairy Herd Management
- b. Breeding problems in dairy cattle
- c. Feeding silage hay and grain
- d. The EDPM testing program - an explanation of the advantages and disadvantages of machine processed DHIA and owner-sampler records

(Objective) To cause Dairymen to change the new method and utilize their records properly.

3. To hold annual analysis meeting for DHIA members.
4. To conduct tours to demonstration dairy herds, for the purpose of showing the advantages of using DHIA and the Artificial Breeding Program.
5. Have fitting and showing clinic for both adults and 4-H dairy club members.
6. Observe "Dairy Month" with a special county dairy tour to which both producers and consumers would be invited.

(objective) To improve relations and cause a better understanding between the people who produce milk and those who drink it.

7. Coach a County 4-H Judging team.

Educational Activities:

Monthly DHIA summary sheets to be prepared and mailed to DHIA members.

A county wide tour was conducted in July. This tour was attended by eighteen county farmers. Farms visited on this tour include the farm of C. N. Elam, J. W. Hatcher and Lee Palmore. Farm management practices observed on this tour include:

1. Silage corn production
2. Pasture management
3. Hay Harvesting practices
4. Coastal Bermuda grass production

Many individual farm visits were made by the County Agent for the purpose of observing practices and making recommendation on agronomy problems. These problems include: harvesting practices, use of machinery, curing and storing management problems, fertilization and insect and weed control

2. Dairying

According to the 1961 "Plan of Work", the Dairy goals were listed as follows:

1. Increase membership in the local DHIA, and look into the possibility of setting up another association to meet the needs of county dairymen.
2. Study the milk marketing situation with the possibility of establishing a local cheese manufacturing plant.
3. To increase the number of cows bred artificially.¹
4. To supervise 4-H boys with their dairy projects, to have a dairy judging team participate in the District Contest.

Methods to be used in meeting these objectives are listed as follows:

SUPPLEMENTAL INFORMATION FOR SCORE CARD

- 1. No. acres in forage crops (hay, pasture silage) _____
- 2. No. head livestock on farm
 - dairy cows _____
 - dairy heifers _____
 - dairy calves _____
- 3. No. silos on farm
 - size _____
- 4. No. silos full
 - type of ensilage _____
- 5. No. acres in alfalfa
 - No. bales harvested (alfalfa) 1961 _____
- 6. No. acres other hay
 - No. bales harvested _____
- 7. No. acres improved pastures _____
 - Was pasture rotated - yes or no _____
 - Was pasture top dressed 1961 _____
- 8. Weed Control program _____
- 9. Insect control program _____

POWHATAN COUNTY FORAGE PRODUCTION CONTEST

THE CONTESTANT WILL BE SCORED ON THE FOLLOWING POINTS:		PERFECT SCORE	FARM SCORE
1.	Adequate permanent or semi-permanent pasture to provide grazing for livestock on farm-Bluegrass, White Clover, Tall grass - ladino.	15	
2.	Provides for adequate grazing during mid-summer pasture "slump" (tall grass-ladino, sudan, alfalfa, orchardgrass).	5	
3.	Provision for saving excess spring growth as silage or hay.	5	
4.	Utilizes available pasture from standpoint of satisfactory return on investment.	5	
5.	Provides for rotational grazing of tall growing grass and or legume pasture or supplemental pasture.	5	
6.	Provides for maintenance of pasture-liming, fertilization, weed control, etc.	10	
7.	Grazing management-avoid overgrazing and undergrazing of bluegrass, white clover, tall grass-ladino or other mixtures.	10	
8.	Provide adequate forage for winter feed for livestock wintered (hay, grass, silage, corn silage).	25	
9.	Forage system provides for some crops to be harvested for winter feed in at least 3 different summer months as a drought insurance measure.	10	
10.	Make wise use of soil suited to cropping practice.	10	
TOTAL SCORE		100	

R. A. Cosby and Son	93
E. P. Hicks	91
R. L. Phaup	91
St. Emma's Industrial School	91
C. N. Elam	90
R. D. Bowlin	90
R. E. D. Blanton	89.5

A copy of the score card is shown in table .

An Achievement program was held in November. Congressman Watkins M. Abbitt was the speaker. Engraved cups were presented to the three winners.

In light of the extension work in Forage Production, and the amount of interest shown it is believed that work in agronomy can be strengthened in 1962 by a similar contest, perhaps in corn silage alone. An analysis of Virginia's Changing Agriculture clearly shows that improved feeding, with increased emphasis on the use of corn silage is one way Virginia livestock producers can meet competition and stay in business.

1961 has been a good producing year for Powhatan farmers. A brief period of drought was felt during July, but a near record crop has been harvested in tobacco, corn, small, hay and pastures.

Demonstrations on agronomy practices were conducted on the following farms:

1. Coastal Bermuda grass	C. N. Elam
2. Corn Hybrid V.P.I. 639	Lee Palmore
3. Alfalfa weed control	St. Emma's Industrial School
4. Weed control in corn	Robert Walton

Probably the most outstanding Extension project for the county during 1961 was the "Forage Production Contest", this will be treated in detail as an achievement worthy of note in this report.

The agronomy committee consisting of the following members- E.P. Hicks, Father Kelly, R. E. D. Blanton, Lee Palmore and Ford Harris and Nick Elam met early in the year with the agricultural committee of the County Ruritan club. The purpose of this meeting was to consolidate work plans for 1961. The result of this meeting was the idea to conduct a county wide "Forage Production Contest. As usual the county agent was assigned the job of working out the details, preparing the score card, and conducting the contest.

A letter describing the Forage Production Contest and enclosing a copy of the score card was mailed to all white farmers in the county in April of this year. Farmers interested were asked to enroll. Thirty-six county farmers were enrolled in the contest during the summer months.

The agronomy committee met again in August for the purpose of selecting the judges and making plans for scoring each farm. The result of this meeting was that the County Agent was selected to score each of the 36 farms sometime during October and to turn in the ten highest score cards to a committee of three selected judges for a final scoring.

D. Lee Palmore won the first prize. Lee's farm was scored 96.5 points out of a possible 100. Henry Hatcher won second prize with a score of 95.5 points. The third prize was won by E. B. Orange and Son with a score of 94 points. Seven other farms in the county were given honorable mention. These farms are listed with the scores:

3. That proper harvesting, liming and storing methods be used.

For pastures, the committee recommended,

1. That sufficient acreage of improved permanent pasture for the farms livestock needs be maintained on all county farms.
2. That livestock produces, particularly dairymen, provide some temporary pasture as drought insurance.
3. That farmers consider the following points in pasture management:
 1. Fertilization
 2. Rotational grazing
 3. Clipping early pastures for hay or silage.
 4. Weed control

The agronomy committee recommended that the Extension Agent put special emphasis on the use of hybrid corn as an ensilage crop, and that the farmers be encouraged to use chemicals to control weeds in the corn fields.

For methods to be used in carrying out the recommendations of the agronomy committee on the above listed goals, the agronomy committee decided to sponsor a "Forage Production Contest" for the county farmers in 1961. This contest to be open to any farmer who would enroll. The top three winners to be presented with a suitably encribed cup. The winners to be selected by a score card which will consider a number of factors having to do with the "over all" forage production on each individual farm.

especially active this year in the "Forage Production" program.

The forestry committee assists the Extension agent in setting up and conducting a forestry school, in setting out trees, and conducting demonstrations on good forestry practices.

In addition to the commodity committees, other organizations are interested in the agricultural activities of the county.

The County Farm Bureau has an active organization in the county that assisted with many farm problems. Among these problems are farm legislation, marketing certain commodities, and personal service programs.

The Farmers' Union also has an active organization in the county and performs services similar to those of the Farm Bureau.

The County Ruritan Club is very strong in Pewhatan County. The Agricultural committee of this club has always been most active as a sponsoring group for project activity such as 4-H Camp, fairs, achievement programs and contests.

V. Project Activity

1. Agronomy

The agronomy committee recommend that the following goals be set up in the 1961 County Extension Plan of Work:

For alfalfa, it was suggested that effort be made towards getting the growers of the county to

1. To top dress annually with the proper kind and amount of fertilizer.

2. That the alfalfa acreage be treated annually with chemicals for the control of weeds and insects.

According to the 1959 census, there are 396 farms in Powhatan county. These farms combined total 80,152 acres or 202.4 acres per farm. These acres are broken down as follows--cropland 24,253 A., woodland 47,490 A., pasture land 5,437 A. and miscellaneous land use 2,972 acres.

Of the 396 farms in the county, 98 are 50 acres or less in size, 88 from 50 to 90 acres, 67 from 100-179 acres, 54 from 180 to 259 acres, 60 from 260-499 acres, 16 from 500-999 acres, and 12 1000 acres and over.

Fifty-four of the county farms are classified as dairy farms. However, 211 farms out of the total reported milk cows. These 211 farms reported 2359 milk cows with a total value of milk and cream sold at \$1,197,283.

IV. Description of County Organizations

With reference to Extension work, the county agent's program is planned and executed with the assistance of the commodity committee. The active organized committees for 1961 were:

1. Dairy
2. Livestock
3. Agronomy
4. Forestry.

The dairy committee assists with such programs as D.H.I.A., The Artificial Breeding Association, the Bangs Control Program, and the installation of bulk tanks and pipe line.

The livestock committee assists in programs having to do with feeding management and marketing of beef cattle and hogs.

The agronomy committee assisted in planning and conducting extension work on all phases of agronomy. This committee has been

III. Type of Agriculture

Powhatan county was formed from Cumberland County in 1777.

Some of the earliest settlers were French Huguenots who arrived about 1700. The first courthouse was built in 1778 and the village that grew up around it was called Scottsville, but later became known as Powhatan. The present courthouse was built in 1848. The total population of the county, according to the 1960 census, was 6,747.

Powhatan county has a land area of 268 square miles (171,520 acres). The county lies in the lower Piedmont section of the state. The James river is the northern boundary of the county, and the Appomattox river forms the southern boundary. The county joins Chesterfield on the east and Cumberland on the west.

Agriculture is Powhatan's principal industry. The bottom lands along the James river are especially good, and some of the largest and best farms are found here. Many of the farms are part-time or operated by retired persons whose sale of farm produce is small. Acreage which grew tobacco has been decreasing each year, while pastures have increased and been improved to provide for the steady increase of beef cattle and dairy herds. Dairying has grown rapidly in the past fifteen years, and is the chief source of farm income, contributing over one million dollars from milk and cream sold. Tobacco still is widely raised. Other field crops include corn, small grain and hay. Cattle, calves, hogs and poultry account for a fair share of farm income

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ANNUAL NARRATIVE REPORT

**COUNTY
EXTENSION
WORK**

Virginia Agricultural Extension Service

H. W. HENRY

Name

COUNTY

Agent

Title

Assistant Agent

Assistant Agent

Assistant Agent



1961

POWhatan

County