

November

4-H Club Meetings.

Awards Luncheon of Community Improvement Club - attend with delegates from county.

Fruit Growers' Meeting - Willow Hill. Growers' discussion relative to problems encountered during 1960 season. Panel discussion.

Annual report.

General routine, office, field work.

Carroll-Grayson Chamber of Commerce.

Organize 4-H clubs - acquaint new members with 4-H club work.

County Fair - Assist in general routine at fair.

County wide dairy meeting - informative in nature.

Community Club Meetings.

Participation in Feeder Calf Sales.

Yearling Steer sale.

General Routine, office, and field work.

October

Rural Development Committee.

Carroll-Grayson Chamber of Commerce.

Harvest Sale for 4-H club members - Hillsville.

Annual Hereford Breeders' Association Sale.

Yearling Steer Sale at Galax.

Regular 4-H Club Meetings.

Hold county council.

Community Improvement Clubs will be judged.

Participate in Feeder Calf Sales.

Area Community Improvement judging - assist in arranging schedule and go with judge on tour.

County ASC Committee Meeting.

Tobacco Sale (Turkish).

Harvest Hybrid Corn (test plot) - record data on yields.

District Extension Agents' Conference - Abingdon.

General routine, office, and field work.

Arrange for delegates to attend Holiday Lake Forestry Camp.  
Arrange for delegates to attend Senior 4-H Resource Development Conference.  
Rural Development Committee.  
Carroll-Grayson Chamber of Commerce Meeting.  
Hold County Wool Pool.  
Fruit Growers' Meeting and tour - Willow Hill.  
General routine, office, and field work.

July

Institute of Rural Affairs.  
Arrange for delegates to attend State 4-H Conservation Camp.  
Rural Development Committee.  
Carroll-Grayson Chamber of Commerce.  
Fruit Growers' Meeting - Willow Hill.  
General routine, office, and field work.

August

4-H Camp.  
Annual Extension Conference.  
State 4-H Electric Congress.  
YMW Camp - Camp Farrar, Virginia Beach.  
Rural Development Committee.  
Carroll-Grayson Chamber of Commerce.  
Fruit Growers' Meeting at Willow Hill.  
Preparation for fall cattle sales - inspection tour.  
General routine, office, and field work.

September

Rural Development Committee.

Hold County 4-H Council Meeting.  
District 4-H livestock and dairy judging contests.  
Southwest Agricultural Association Meeting.  
Purebred calf sale at Galax for 4-H club members.  
Carroll-Grayson Chamber of Commerce.  
Fruit Growers' Meeting and demonstration.  
4-H sheep shearing school at Emory.  
Monthly meeting of Community Clubs.

May

Meet 4-H club - take up record books, give information on summer 4-H activities.

Twilight meeting for Fruit Growers.  
Rural Development Committee meeting.  
Carroll-Grayson Chamber of Commerce.  
Community Club meetings.  
Seed official hybrid corn test plots.  
Judge Sears Roebuck Pig Chain Project.  
4-H Share-the-Fun program.  
Wool Pool Committees meet at Sparter, North Carolina.  
4-H District Contests at Abingdon.  
Rural Ministers' Institute.  
General routine, office, and field work.

June

4-H Camp.  
4-H All-Star Conference.  
Forestry Camp at Holiday Lake for 4-H Members.  
State 4-H Short Course.

Carroll-Grayson Chamber of Commerce.

Dairy School at Galax, Virginia.

**Poultry** meeting (county wide).

Poultry tour.

Community Club meetings.

March

Rural Development Meeting (Advisory).

Carroll-Patrick Fruit Growers' Meeting.

Community Club meetings.

Regular 4-H meetings.

4-H tractor school meetings.

Training of 4-H Dairy and Livestock Judging Teams.

National 4-H Club Week.

Extension Program to Civic Club.

Tri-State Milk Producers' Regional Meeting.

District Wool Growers' Meeting.

Carroll-Grayson Chamber of Commerce.

4-H Camp planning meeting.

Radio Training School for County Staff - Galax.

Soil and Water Conservation Needs' Meeting.

Virginia Bankers' and Farmers' Meeting, Natural Bridge.

Vegetable Growers' Meeting - Gladesboro.

General routine, office, and field work.

April

Meeting of Rural Development Committee.

Preparation for seeding official hybrid corn test plot.

Partial Calendar of Work for the Year 1960

January

Meeting of County Agronomy Committee.  
Annual Fruit Growers' School at Mt. Airy, N. C.  
Annual meeting and election of officers for DHIA.  
Rural Development - Planning meeting for 1960.  
Regular 4-H club meetings project work.  
ASC County Committee meeting.  
Soil and Water Conservation Needs' Meeting.  
4-H tractor program meeting.  
County Forestry Committee Meeting.  
Forestry Demonstration and field meeting.  
Dairy Production.  
Carroll-Grayson Chamber of Commerce meeting.  
County Wide Dairy meeting.  
District Extension Agents' Conference.  
Livestock Committee meeting.  
General routine, office, and field work.

February

County-wide tree planting program - tree planting demonstration  
Two-day Farm Management School at Hillsville, Virginia.  
Poultry Meeting and tour.  
Rural Development meeting - County Projects.  
Christmas Tree meeting.  
Meeting of Carroll Dairy Committee.  
Meeting of County Fruit Growers' Committee.

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Regular 4-H club meetings project work.  
ASC County Committee meeting.  
Soil and Water Conservation Needs' Meeting.  
Tractor program meeting.  
County Forestry Committee Meeting.  
Forestry Demonstration and field meeting.  
Dairy Production.  
Carroll-Grayson Chamber of Commerce meeting.  
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County-wide tree planting program - tree planting demonstration  
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Rural Development meeting - County Projects.  
Christmas Tree meeting.  
Meeting of Carroll Dairy Committee.  
Meeting of County Fruit Growers' Committee.

11. Will encourage potential members to attend conservation camp.
12. Will recommend eligible members for scholarships to forestry camp.
13. Talk to 4-H clubs about 4-H camp. Show slides on 4-H camp in the past. We will take deposits for 4-H camp.
14. We will encourage one or more young men and women to attend YHSW Camp.
15. We will send eligible delegates to State 4-H Electric Congress.
16. We will encourage adult leaders to attend leaders' conference at Natural Bridge.
17. We will encourage more 4-H members to bring some of their best 4-H work to the County fair and exhibit it.



13. Have 40 4-H club members attending 4-H Camp at Southwest Virginia 4-H Center.
14. Have a man and a woman attend YMW Camp.
15. Send delegates to State 4-H Electric Congress.
16. Send adult leaders to leaders' conference at Natural Bridge.
17. Have more 4-H members entering exhibits and livestock at the County Fair.

#### Objectives

1. To give rural young people the opportunity to improve and develop into desirable citizens.
2. Give rural young people the opportunity to learn and practice the modern methods used in agriculture and home economics.
3. To teach young people the importance of conservation, responsibility, management, and improvement of their home resource.
4. Recognize those young people who are talented and challenge them to go forward.

#### Methods - (Listed in order of goals)

1. Talk to 4-H officers in their club and encourage the importance of their attendance at County Council meetings.
2. Personal contacts with prospective leaders. Ask them to assist with 4-H club work.
3. Work with farm implement dealers. Ask them to assist with the program. Have the tractor leader to attend the tractor school at V. P. I. Assist leader with teaching material, visual aids and etc.
4. Explain to 4-H members the tree planting program. Have members to discuss the project with parents. Have parents and members to fill out order blank. Give demonstrations on planting with the assistance of extension forester. Visit club members to see what they actually did.
5. Locate sites for the signs with the assistance of resident road engineer. Have club members in the locality where signs are erected to assist with the erecting of the signs.
6. Explain to 4-H members the 4-H Share-the-Fun program. Have contest in their club. The winning act from each club will compete in the County Contest. Winners in the county contest will go to V. P. I. for the State Contest.
7. We will have those 4-H members doing the best job in their projects to compete in the District Contests.
8. Place pigs from members of 1959 pig chain in hands of new members in another part of the county.
9. Any 4-H members who are eligible for All Stars will be recommended.
10. Will encourage outstanding members to attend Short Course.

### Goal

1. To establish at least one additional club this year.

### Methods

1. Meet with people in the community who have shown interest in community clubs. Later have community-wide meeting explaining community clubs and their function. Proceed according to wishes of people.

## K. 4-H Club Work

### Situation

With the consolidation of schools, enrollment has increased considerably over the past years. At the present there are over 1,500 4-H Club members enrolled in fifty-one (51) 4-H clubs.

The County 4-H Council feels that the combination of boys and girls into a club has its merits and club members like the system.

One of the major problems in our 4-H club work is the lack of 4-H club leaders. With the large enrollment, the agents do not find time to give as much individual help to members as they should.

The entire County Extension Staff devotes part of their time to 4-H club work and have a regular schedule in meeting the fifty-one (51) clubs throughout the county.

The assistant county agent and the assistant home demonstration agent do most of the 4-H club work.

### Goals

1. Have at least two county council meetings.
2. Recruit five new leaders to assist with 4-H club work.
3. Establish a 4-H tractor program.
4. Plant 80,000 white pine tree seedlings.
5. Erect county 4-H road signs.
6. Have a 4-H Share-the-Fun program.
7. Have 4-H members competing in District Contests.
8. Conduct Sears 4-H Pig Chain.
9. Recommend eligible members for All Stars.
10. Have county quoto attending 4-H Short Course.
11. Have county quoto attending Conservation Camp.
12. Recommend all eligible members for forestry camp at Holiday Lake.

### Objectives

1. To help create better living on the farm and in the home.
2. Establish additional farm and home units to present participating families.
3. Search out possible source of income for part-time operator.

### Methods

Assist in analyzing their situation in order to see what can be done to raise the standard of living. Encourage more efficient methods.

Offer assistance when and where opportunity presents itself. Inform people through press and other means, real purpose of program.

#### I. Extension-TVA Unit

##### Situation

Four Extension-TVA Unit Test Demonstration Farms have been established to date in the county. These farms were selected by the people in the community in which they are located.

These farms were established to demonstrate sound practices on the farm and in the home. These farms are typical of the farms in the area where located.

##### Objective

1. To demonstrate most advanced effective farm practice.

##### Methods

Give on-the-farm assistance. Use farm as demonstration unit. Hold field meetings and demonstrations on farm.

#### J. Community Improvement Clubs

##### Situation

There are now three active Community Improvement Clubs in the county. There is one other organized community club near the Carroll-Patrick line whose membership is made up of families from both Carroll and Patrick Counties. This particular club is in the Roanoke area of Community Improvement Clubs. There should be several more community clubs in the county.

The community club is considered to be one of the best tools an extension worker could have.

## Methods

Industrial expansion to be encouraged by:

1. Cooperation - Area Rural Development Committee to work in close harmony with local and area industrial development organizations such as the Carroll-Grayson Chamber of Commerce.
2. Surveys and Studies - Continue to conduct the necessary resource surveys and studies and make the information available to the industrial development organizations, local and area newspapers, etc. Specifically, the "water resources study" should be continued for a period of five consecutive years. (Soil Conservation Service personnel are expected to assist with the study.)
3. Trade-Technical School - Continue efforts to establish a "Trade-technical school in the Carroll-Galax-Grayson area. The establishment of such a school would enable worthy students to learn a specific skill---and thus qualify for a higher-type position in industrialized urban centers. Also, such a school in the area would aid materially in attracting new industry. (The Carroll-Grayson Chamber of Commerce---in cooperation with local school officials---is expected to take the lead in developing this project).
4. Community and Town Improvement - Efforts are to continue to secure desirable improvements such as street and sidewalk construction; beautification programs; school development projects; and a host of other projects that must come from local efforts. (Civic Clubs; Home Demonstration Clubs; Town and City Councils, etc. will need to spear-head such projects).

## H. Farm and Home Development Program

### Situation

The program is designed to help farm families with problems relating to their economic welfare both on the farm and in the home. Some of the families with whom we are assisting realize that the farm alone cannot support the family. Some have secured off-the-farm employment to supplement the income. Full-time farmers have requested assistance in farm management and homemaking problems. Some of these families are full-time farmers while others are part-time operators.

We have attempted to analyze the situation and study a possible supplementary income. One of the problems involved when intensive farming projects are considered is finances. At present we are investigating the possibility of financial assistance where families desire to expand their operation or consider a project such as production of commercial eggs or feeder pig production and finishing which has proven successful on many farms to the south of us. Approximately one-half of the families we are now assisting are part-time farmers.

Enrollment to be confined to 15 to 20 farmers per session so intensive assistance can be given. Follow-up on-the-farm assistance to be given by County Agents and other County Agricultural Agency personnel.

2. Intensification of Farm Operations - Farmers will be encouraged to intensify and expand the size of their agricultural operations. Cooperation is expected from commercial farm supply companies and the Agricultural Extension Specialists. Demonstration or "pilot" units to be established when needed to test the practicability of specific intensive enterprises.
3. Land-Use and Cropping Systems - Encourage greater use of higher yielding forage crops on suitable land areas. (Soil Conservation Service personnel to assist as to developing farm plans and cropping programs).
4. Woodland Management - Establish one or more woodland management plots in county to demonstrate approved forestry management practices. Secure wood-using industry to locate in area, if possible, to supply market for low-grade hardwood timber. (Forestry specialists to assist with project).
5. Marketing - Continue study of agricultural marketing problems in the county and area in an effort to find workable solutions. (Extension Service personnel to assume leadership in this particular field of activity).

#### Industrial Situation

Currently, there are six (6) industries in Carroll County that employ approximately 700 individuals. In addition, there are twenty-four (24) in the City of Galax, Virginia. These industries provide employment for approximately 4,000 men and women in the Carroll-Grayson area. Also, a large number of Carroll Residents are employed in Mt. Airy, North Carolina, Pulaski, and Radford, Virginia.

A labor survey of Carroll and Grayson Counties and the City of Galax was conducted by the Galax Employment Office in June, 1958. The survey revealed an existing, available labor force of more than 2,000 in the area. Job applications are running about 160 monthly.

A definite need for the area is industrial growth. The Carroll-Grayson Chamber of Commerce is working to secure additional industry, along with private individuals.

#### Long-Range Objectives

Secure additional industry in the area so as to provide employment opportunities for a large segment of the population in the Carroll County area.

On January 29, 1960, the Carroll-Grayson planning and Economic Development Commission dissolved for the formation of a new work group---the Carroll-Grayson Chamber of Commerce. This reconstruction was deemed advisable so as to provide the group with some working capital for Industrial Development. The Board of Directors of the Chamber consist of 18 members---three each from the counties of Carroll and Grayson, three from the towns of Hillsville, Independence, and Fries, and three from the City of Galax.

The Board of Directors of the Chamber are assuming increased responsibility for the over-all development of the economy of the Twin County area. Therefore, it can be assumed that in 1960 the Carroll-Grayson Chamber of Commerce will be expected to carry additional responsibility in the area development program. It is also assumed that the professional workers in Carroll and Grayson Counties will assist the Chamber in every way possible.

#### Agricultural Situation

The 3,757 farms in Carroll County average about 62 acres in size. More than 69 per cent of the farms are classified as part-time or residential farms. The average age of the farm operators is about 58 years. Rural youth are rapidly leaving the farms and migrating to urban and industrial centers in search of employment.

The rapid growth in the field of agricultural development toward intensive mechanization and specialization in having its effect on Carroll County farmers. It is forcing some of the younger farmers to seek non-farm employment. Others are seeking to expand the size of their farm operations by adding a few more milk cows, a few more acres of land, etc. Some are shifting from beef cattle and sheep to intensive agricultural enterprises such as: commercial laying flocks and dairy operations. This trend is expected to continue---and will probably be accelerated by such developments as "Contract" farming and "vertical integration" of commercial companies.

#### Long-range Objectives

Develop more stable and efficient farming units in the county.

#### Methods

Greater stability and efficiency to be secured by:

1. Education - Special farm management schools to be scheduled during winter period for benefit of the full-time commercial farmers.

if the truck crop producers expect to attract buyers on the market in the area variety and quantity must prevail. There are three local produce markets in the area (Fancy Gap - Gladesboro) that serves as outlets in addition to the city markets south of the county in neighboring state of North Carolina.

Quality of produce must be improved. Local operators say they always have sale for quality produce. It is believed that if a greater quantity or volume of produce was produced, a stronger market could be established. Variety in truck products also would have its advantage.

#### Objectives

1. Produce wider variety of truck crops.
2. Improve quality of produce.
3. To study possible market outlets.

#### Methods

1. Encourage growers to plant greater variety of crops which normally sell good on the market. Encourage timed planging. Contact growers through meetings and visits to give timely information.
2. Stress quality and adapted varieties. Work for better control of insects and diseases. Cull out inferior produce before marketing. Secure services of State Marketing Division in carrying out educational program.
3. Hold meetings for growers, advising on all phases of production.

#### G. Rural Development Program

##### Situation (Organizational):

The Rural Development Program in Carroll County began functioning on an organized basis on April 11, 1957. Initial organizational procedures followed were those recommended by the State and National Rural Development Committees. This procedure resulted in a county committee of 35 members---and an advisory group of 24 members. The committees functioned with varying degrees of success during 1957.

On November 7, 1957, an area development group was organized and adopted the name of the Carroll-Grayson Planning and Economic Development Commission. Equal representation---three each---on the Commission is had by the counties of Carroll and Grayson, the towns of Hillsville and Independence, and the City of Galax. The area approach was deemed necessary because the economy and development of the two counties is closely interwoven and dependent upon the economy and economic development of Galax.

The growers have made rapid progress in production, but the marketing problem has grown. The lack of a central grading and storage unit has been discussed as a possible solution in solving some of the problems. A processing plant located in the area seems to have some merit.

Approximately 117 fruit growers are located in the Fancy Gap District of Carroll County. Only five of the producers have cold storage facilities. Thus, the majority of the small volume producers are forced to market their apple crops at harvest time regardless of price conditions. In addition, the small individual producers do not have a sufficient volume of fruit of specific grades and quality to attract the larger chain store buyers.

#### Objectives

1. Continue efforts to improve quality of fruit.
2. Study ways to cope with problems relating to the marketing of the fruit crop.
3. Establish satisfactory marketing outlet.
4. Secure storage facility in area if determined feasible.

#### Methods

1. Hold educational meetings once a month, giving growers information on timely subject matter. Tours and demonstrations will be held during summer and fall months. Assistance will be given by Extension Horticulturalists.
  2. Through growers committee, secure basis information needed to work on marketing problems. Secure services of State Marketing Service and V.P.I. Extension Specialists.
  3. Work through fruit marketing committee in contacting fruit processing companies and potential chain stores who buy in large volume.
  4. A detailed study will be made on the feasibility of establishment of a cooperative storage in the area. This study is now under way. Extension and State Departments will cooperate on this study.
  5. Hold fruit growers' school and bring timely information to growers.
2. Truck Crops

#### Situation

According to the latest figures, there are 800 acres of truck crops produced for sale. At present cabbage and gree beans dominate the truck produce offered for sale. Of course a greater variety of truck crops can be grown and it appears that



farm operation. Will secure assistance of V.P.I. Extension Forest Service and Cooperation of the Virginia Forest Service. Hold field meeting for professional agricultural workers.

County Forest Committee will work with Extension Foresters and County Extension personnel in investigating possible establishment of a post peeler and treating plant for the area. Work with local cooperative on this proposal.

In order to get more participation of tree planting through ASC, efforts will be directed toward bringing to our farmers the sound conservation practice involved and give publicity through all media to this effect. Give assistance to County ASC Committee in promoting the forestry program.

The 4-H Forestry Program will be carried directly to the club. Program will include forest appreciation, tree identification, forest conservation, tree planting demonstration, and the actual planting of trees by the club members.

Futher investigation will be made on the possibility to the location of a Charcoal plant in the area. A follow up on work in this direction will continue. Assistance from Extension Service will be sought.

#### F. Horticulture

##### 1. Fruit Production

###### Situation

Some progress has been made over the past year in the over-all marketing program; however, the general situation remains very much the same. An attempt has been made to bring about an awareness among the growers of their situation regarding the marketing trends. This has been accomplished to a great extent and more interest is being shown in trying to meet the problem of the marketing angle.

The production of apples and peaches bring in considerable income to growers in the southern part of the county. In a normal season, 275-300 thousand bushels of apples are produced in the area. This past year there was an estimated 65 per cent yield. Peaches are produced to a less extent; however, several growers are considering expanding their peach acreage.

The commodity group is well informed on all phases in the production of apples. They meet monthly and have specialists from the Horticulture Department give timely information to their group. Tours are arranged during the summer and fall months to study the insect and disease control program.

## E. Forestry

### Situation

There is approximately 33% of total acres of 103,765 acres of woodland in the county. White pine makes excellent growth and is naturally suited to the soils and climatic conditions. There are many acres of land which are neither suitable for crop or pasture that needs to be planted into white pine. Many acres which would come in to good production of timber is hampered by undesirable hardwoods. A study is now being made to determine how we can approach the problem of eradicating these undesirable hardwoods in order to release the white pines.

It is the thinking of the forestry committee, that the progress could be made in this direction if some means was found to utilize the undesirable trees. A study is now underway on this phase.

A better knowledge among the average farmer on woodland management is needed, and efforts will be made to carry out an educational program to bring about the desired change. Carroll County planted 500,000 seedlings in 1959. The 4-H Clubs planted 130,000 of this total.

### Goals

1. Plant at least 300,000 trees this year.
2. Set up one woodlot demonstration.

### Objectives

1. Investigate possibility of post peeling and treating plant for farmers.
2. Encourage more participating in tree planting through ACP.
3. Strengthen 4-H Forestry Program.
4. Continue to explore the possibilities of locating a charcoal plant in area.
5. Investigate possibilities of producing Christmas trees as a possible source of income.

### Methods

The program for planting more trees will start in January. Farmers and 4-H club members will be encouraged to get orders for seedlings in early. Wide publicity will be given to tree planting program through all media, pointing out value of such a program.

Use woodlot demonstration to best advantage. Interested farmers will be contacted. This demonstration will be part of over-all

2. Assist in locating sires and informing producers of sales in area. Assist producers at sales in selecting replacements. Use press, radio, personal contact and all other means in promoting the livestock improvement program. Use organized and Extension sponsored sales in demonstrating quality livestock.
3. Make individual analysis of situation regarding livestock production.
4. Give publicity as to how sheep fit in the livestock program. Make available information where sheep may be purchased cooperatively at the lowest cost. Analyze individual livestock program, to determine if sheep would be profitable. Point out through all media advantages of this area in sheep production. Use livestock committee in promoting sheep program. Continue to market wool cooperatively. Give publicity to all sales.
5. Work with organized groups in getting holding chutes constructed in community which will serve as demonstration. Assist those who construct chutes. Hold tour in community making stop at demonstration. Encourage all Ext-TVA unit farms to construct chutes as part of demonstration.
6. Encourage participation in feeder calf and yearling steer sales in local area.

#### D. Poultry

##### Situation

The production of poultry and poultry products remains at about the same level over the past few years. Laying flocks are small and only a few efficient size flocks are to be found in the county.

Production of eggs for hatching has been profitable for a few. Most of these flocks range from 150-200 hens. Five commercial laying flocks (1,000 birds) have been established since January 1, 1959.

##### Objectives

1. Continue to study if it would be feasible to develop commercial laying flocks in the county.

##### Methods

Contact all potential egg producers, inviting them to meetings where a discussion can be held on the feasibility of the program. Visit with them; some of the farms who have already established laying flocks. Study their over-all farm program to see if poultry would fit in their program. Arrange for organized tours. Give publicity through press and radio.

Sheep numbers remain steady at around 2,500 head. There is still more need for sheep on many farms throughout the county.

Many herd sires and heifer replacements are brought locally through the annual sales sponsored by the Carroll-Grayson Hereford Breeders Association. Facilities for handling livestock are still lacking on many farms. This situation has existed over a period of years. It is a difficult job to treat, test, vaccinate, and dehorn livestock without good facilities. At present we do not have any organized feeder calf sales. All feeder calves over the past three or four years have been sold at nearby livestock markets. Two yearling steer sales were held at Galax this past fall. Some of the feeder calf producers have suggested that another attempt to organize a feeder calf sale be made for Carroll and Grayson Counties. Attempts heretofore have failed to get enough calves consigned to justify a sale. It seems there are too many livestock producers who do not vaccinate for Blackleg. Several cases were reported in the county last year.

A good many farmers are now beginning to realize that beef production on smaller farms may have to be replaced with a more intensive enterprise. Swine production is being considered. The production and finishing of feeder pigs has already made its appearance in the county.

The cow and calf herd is still popular and profitable on the large or efficient size farms. Some farmers are now winter feeding and grazing out steers which are bought through local organized sales.

Although an effort has been made to encourage more sheep in the county, numbers remain about the same. On the smaller farms a dairy animals have replaced sheep and too on the more efficient size farms, sheep have been dropped from the program. According to farmers, dogs have been influential in this trend. Favorable beef prices have been one of the real causes for declining sheep numbers over the past few years according to the livestock committee. Sheep numbers on county farms may rise slightly during 1960.

#### Objectives

1. Continue efforts to improve quality of livestock.
2. Encourage feeder cattle instead of the cow and calf herd on farms where feasible.
3. Increase sheep number in county.
4. Increase construction on as many farms as possible facilities for handling livestock (holding chutes).

#### Methods

1. Cooperate with Bangs Eradication program in getting as many heifers vaccinated for Bangs as possible. Livestock committee will cooperate in getting work done. Purpose of the program will be given wide publicity in the county.

quality hay and ensilage is needed despite the progress made in this direction in the past few years.

#### Goals

1. Increase membership in DHIA by addition of at least five new members.
2. Breed artificially 2,000 or more cows this year.
3. Vaccinate at least 45% of all eligible heifer calves for Bangs.

#### Objectives

1. Strive for more efficient production of milk.
2. Make available breeding stock through cooperative buying.
3. Increase acreage of high-quality silage and hay where feasible.
4. Feed for maximum milk production.
5. Work with dairymen in procurement of replacements and breeding stock.

#### Methods

1. Assist supervisor in encouraging those who have shown some interest in the program. Have present members contact potential members. Invite other dairy farmers to attend annual DHIA meeting.
2. Give publicity through all media to the value of artificial breeding in herd improvement. Assist local association in promoting the program. Work through organized groups such as; dairy and community clubs. Hold tour making stops where artificial breeding has been practiced for several years.
3. Hold educational meetings using services of local veterinarian. Give publicity to this health program through press and radio. Secure cooperation of dairy commodity groups.
4. Encourage more silage and good-quality hay. Improved pastures, by used adequate fertilizer applications. Higher producers through better herd managements and breeding. Invite dairymen to two-day farm management school in February.
5. Work with dairymen in locating and selecting breeding stock. Get assistance from Extension Dairy Specialists.
6. Hold one-day dairy school for all producers.

#### C. General Livestock

##### Situation

The general livestock remains very much the same over the past year. According to the latest census, 37.6 per cent of the total income from livestock and livestock products. Cow and calf herds are still the trend; however, some are wintering calves where fed made on the farm is adequate.

4. Have corn fertilizer demonstrations. Hold community tours. Sponsor group to tours of test work at Experiment Station. Give publicity to importance of proper analysis and rate of application of fertilizer. Stress use of high analysis fertilizer. Have as many farmers as possible attend one day Agronomy school.
  5. Give general publicity to importance of high quality forage milk production. Work with groups in promoting more ensilage on the farm where feasible. Work with dairy commodity group in promoting forage crop program. Hold farm management school, include feeding on program.
  6. Establish weed, insect, and fertilizer demonstrations on two alfalfa plots in county.
- B. Dairying

Situation

Approximately 31.7 of all agricultural income is derived from dairying. There are now 87 Grade A dairies and well over 1,000 Grade C herds producing manufacturing milk. Milk routes are well established throughout the county. Approximately 50 per cent of the Grade A producers are members of the Tri-State Milk Producers Association, which operates under a Federal Order. These members report they have certain advantages under the Federal Order, which gives protection in the marketing and prices received for their milk. Those who are not members are shipping to a North Carolina processing plant which at present does not operate under a Federal Order.

Grade C producers are well served as to marketing. Grade C producers are now receiving incentive payments on having better facilities and increased fall and winter production of milk.

Dairymen in the county still have a long way to go in the dairy herd improvement program. First there are many dairy farmers who do not avail their herd to the Carroll Artificial Breeding Program. The DHIA membership is still very low despite continued efforts to interest more dairymen in the program. The weigh-a-day-a-month program now underway offers some encouragement toward record keeping on the herd.

Although we have had no serious outbreaks in Bangs, there are far too many heifers going past the age limit for vaccination against this disease. Carroll County was declared a Modified Bangs Free County as of January 1960.

Cost of production in milk still is too high. Better breeding and more efficient production of feeds, especially forage crops is a must if some of the dairymen are to stay in business. More high

the county. Following the corn harvest, only 25 per cent of corn acreage was seeded to winter cover crops. Three-fourths of the land acreage was exposed to erosion hazards during the winter period. The problem is "How to get the farmers in Carroll County to seed cover crops on cultivated acres?"

Corn yields in the county were approximately 60 bushels per acre according to the latest census report. There are too many farmers who are not using adapted hybrid varieties. Carroll County families are having difficulty in selecting corn hybrids that will perform satisfactorily at high elevations; however, this is being overcome with some promising varieties.

Increased yields and greater acreage of high quality hay and improved pastures are needed. Although alfalfa acreage has increased from 840 acres in 1949 to approximately 8,000 acres in 1960, there is still more room for this high-yielding and high-quality crop. Reports indicate that less than six per cent of the total permanent pasture in the county is being fertilized annually. Application rate was 307 pounds per acre on pasture land. Less than 500 pounds of fertilizer per acre was being applied on corn land. These rates should be increased substantially.

#### Goals

1. Increase total acres to winter cover crops by 5%.
2. Seed at least 300 acres of alfalfa this year.
3. Increase average corn yields in county to 60 bushels per acre.
4. Increase application rate of fertilizer on corn from approximately 800 pounds to 900 pounds per acre, or more.
5. Increase corn silage acreage by 15%.
6. Maintain more adequate control of insects on forage crops.

#### Methods

1. Encourage this practice through ASC payments. Give publicity as to importance of cover crops. Use Ext-Tva unit farms as demonstrations for good farm practices.
2. Tours in community which include stops at newly seeded and established stands. Encourage participation in ASC program which will assist farmer up to approximately 80% cost of establishing alfalfa. Give general publicity to importance of alfalfa in our livestock and dairy enterprise. Give assistance in field when requested. Use soil tests for making recommendations.
3. Give publicity through all media on more adequate fertilization. Encourage use of adapted hybrids. Work through community clubs in striving for greater yields. Work closely with dealers in getting right analysis of fertilizer and adapted varieties to farmers. Continue for fourth year official hybrid corn test plot. Have at least one farmer in each magisterial district demonstrate an adapted hybrid. Hold tour to these plots. Give publicity.

### Needs and Problems of County

The marketing of apples and truck crops is still a major problem. Dairy, livestock, and crop production have made rapid improvement, and along with this progress have come marketing problems.

Better herd management and increased quality and quantity of forage crops for adequate winter feed supplies need to be met. High feed costs still remain a problem on many of the dairy farms. There are still a great majority of dairymen who do not avail themselves to the artificial breeding program; however, there has been an increase in membership over the past year. Milk production records are needed on many herds in the county. The local DHIA needs to be strengthened along with an improved breeding and feeding program.

The livestock, disease, and parasite control program still need to be improved.

Facilities for handling livestock on the farm, with regard to chutes, is still a need.

Winter cover crops are still a need. Crop yields have room for improvement, especially corn, which averages about 60 bushels per acre. More adequate fertilizer applications on a great many farms are needed.

The production of apples brings in considerable income; however, income from this 250,000 to 275,000 crop yield could be increased if storage facilities or possibly a processing plant was established in the area. Marketing the crop is a problem especially for the small grower without proper facilities.

Truck farming could be a profitable enterprise if possibly a greater variety of truck crops other than cabbage and beans were produced. Small fruits should be considered on many of these truck crop farms. On many of the smaller farms or part-time farms, small fruits could serve well in increasing the total income. Marketing of the truck crop continues to present a problem, as ready markets are not available.

Many farms are too small for an efficient operation. There are many part-time farms (69%) in the county, which presents a problem---that is, seeking sources for additional income.

### Activities

#### A. Agronomy

##### Situation

Our situation at the beginning of the year, according to the latest census (1954) a total of 7,928 acres of land was planted to corn in



VI. 4-H County Council

President - Betty Largen, RFD 2, Box 205, Hillsville, Virginia  
V. President - Veda Vass, RFD 2, Box 114, Hillsville, Virginia  
Secretary - Gaye Iroler, Fancy Gap, Virginia  
Treasurer - Rebecca Bond, RFD 1, Box 361, Fries, Virginia  
Reporter - Brenda Jones, RFD 4, Galax, Virginia  
Song Leaders - Rita Burcham, RFD 2, Box 99, Woodlawn, Virginia  
- Eva Lou Easter, RFD 1, Box 230, Cana, Virginia

VII. Carroll-Grayson Chamber of Commerce

President - Dr. R. C. Bowie, Galax, Virginia  
V. President - Raleigh Cooley, Hillsville, Virginia  
Managing Secretary - Russell Farnsworth, Galax, Virginia

VIII. Rural Development

Chairman - Ray Felts, Route 5, Galax, Virginia  
Vice Chairman - Raleight Cooley, Hillsville, Virginia  
Secretary - O. W. Cundiff, Hillsville, Virginia

IX. Community Improvement Clubs

A. Fancy Gap  
B. Island Creek  
C. Mitchell Cross Roads  
D. Belspur

X. Cooperating Agencies

A. Carroll County Farmers Cooperative  
B. Farm Bureau - Duell Bowman  
C. Farmers Union

XI. Key Banker

John Fulcher, Carroll County Bank, Hillsville, Virginia

Each of the special interest groups or representatives of the groups listed above will meet at least once during the year. Several of the commodity groups will meet as many as six times a year. The fruit growers meet monthly as do the community improvement clubs. Therefore, good contact can be had with the different groups or representatives of the group. The combined thinking and planning of these groups is incorporated in the 1960 Plan of Work.

B. Carroll DHIA

President - J. L. Harmon, Hillsville, Virginia  
Secretary/Treasurer - Russell Branscome, Woodlawn, Virginia  
Supervisor - Clyde Edwards, RFD, Hillsville, Virginia

C. Carroll Artificial Breeders Association

President - John Messersmith, Woodlawn, Virginia  
V. President - Ed Hampton, RFD 1, Hillsville, Virginia  
Secretary/Treasurer - J. L. Harmon, Hillsville, Virginia

III. General Livestock

A. Livestock Committee

1. S. W. Cole, RFD, Galax, Virginia
2. Brooks Edwards, Woodlawn, Virginia
3. Willie Cruise, RFD, Willis, Virginia
4. S. H. Collins, Route 3, Galax, Virginia
5. Marvin Jennings, Route 4, Hillsville, Virginia

B. County Wool Pool (Wool Pool Committee)

1. John Banks, Laurel Fork, Virginia
2. Raymond Horton, Dugspur, Virginia
3. Brooks Edwards, Woodlawn, Virginia

IV. Horticulture

A. Fruit Growers' Committee

1. Edd Douglas, 342 W. Pine Street, Mt. Airy, N. C.
2. Dewey Boyd, RFD, Ararat, Virginia
3. S. R. Levering, RFD, Ararat, Virginia
4. C. C. Lovill, Mt. Airy, North Carolina
5. Clarence Coulson, Ararat, Virginia
6. Harvey Leonard, Ararat, Virginia
7. Willie Vernon, Route 5, Mt. Airy, N. C.

V. Forestry

A. Forestry Committee

1. P. E. Puckett, RFD, Hillsville, Virginia
2. E. E. Gardner, RFD, Hillsville, Virginia
3. John Messersmith, Woodlawn, Virginia
4. J. L. Harmon, Hillsville, Virginia

Dairy farmers (1,000 - 1,200) Grade C and (86) Grade A are concerned over the future of the dairy business; however, at present they seem to be holding their own. Number of producers have not decreased and some Grade C are even considering moving up to a Grade A operation. These producers are asked to study the situation very carefully before making the decision.

With the exception of livestock and dairy marketing outlets for agricultural products, especially apples and truck crops are far from adequate. Assistance in studying the marketing situation is being requested.

#### Development of the County Extension Program

Carroll County is one of the more diversified counties in the Southwest Virginia area. There are a number of commodity and special interest groups. The leaders of these groups comprise the County Agricultural Council. Due to the county being a "Pilot" County in the Rural Development Program, joint meetings of the County Agricultural Council and the Executive Committee of the Rural Development Program seem feasible.

Following is a list of commodity and special interest groups which have contributed to the over-all County Extension Program and Plan of Work for 1960:

#### I. Agronomy

##### A. Agronomy Committee

1. Alonzo Quesenberry, RFD, Hillsville, Virginia
2. Rufus Bunn, Fancy Gap, Virginia
3. Howard Turner, Route 2, Hillsville, Virginia
4. D. B. Hawks, Jr., Lamsburg, Virginia
5. Fred Lawson, Shorts Creek, Virginia
6. John Messersmith, Woodlawn, Virginia
7. Hardin Higgins, RFD, Galax, Virginia

#### II. Dairying

##### A. Dairy Committee

1. Earnest Gardner, RFD, Hillsville, Virginia
2. Dyer Smythers, RFD, Woodlawn, Virginia
3. Ed Hampton, Woodlawn, Virginia
4. Freddie Currin, RFD, Hillsville, Virginia
5. J. B. Frazier, Laurel Fork, Virginia
6. Poe McGrady, RFD, Hillsville, Virginia
7. James Branscome, RFD, Woodlawn, Virginia

## Carroll County Agricultural Program

### Type of Agriculture

Agriculture employs more people than any other industry, but in recent years the value of products added by manufacturing has exceeded the value of farm products sold. Farm income is derived from many products, the most important of which are milk, cattle, apples, chickens, eggs, and vegetables. Milk production has increased rapidly and in 1954 was nearly five times as large as in 1939. Some of the most productive apple orchards in the State are located on the slopes of the Blue Ridge Mountains.

In 1954, about 69 per cent of all farms were classed as part-time or residential farms. The former are those with value of products sold of \$250 to \$1,200 and the operator either reporting 100 days or more off-farm work or reporting other income exceeding the value of agricultural products sold. Residential farms sold less than \$250 of farm products. There were 480 farms, or 13 per cent of the total, with less than ten acres. In contrast, there were 68 farms of 260 or more acres, and 62 farms sold \$5,000 or more of farm products.

The average age of the farm operators is about 58 years. Rural youth are rapidly leaving the farms and migrating to urban and industrial centers in search of employment.

The rapid trend in the field of agriculture toward intensive mechanization and specialization is having its effect on Carroll County farmers. It is forcing some of the younger farmers to seek non-farm employment. Others are seeking to expand the size of their farm operations by adding a few more milk cows, a few more acres of land, etc. Some are shifting from beef cattle and sheep to intensive agricultural enterprises such as: commercial laying flocks and dairy operations. This trend is expected to continue---and will probably be accelerated by such developments as "contract" farming and "vertical integration" of commercial companies.

### Trends Which Have Influenced 1960 Plans and Activities

The price-cost ratio has made farmers to become more aware of the importance of efficient production of livestock and crops. Farmers continue to seek additional sources of income. The part-time farmer is finding it more difficult to produce on an efficient basis; some are leaving the farm to work in industry or public works.

Feed cost is the main concern in the county where a major portion of the total farm income is derived from dairying and livestock.

CARROLL COUNTY EXTENSION AGRICULTURAL PROGRAM

and

PLAN OF WORK

1960

G. C. Price, County Agent  
Hubert S. Widener, Assistant County Agent  
O. W. Cundiff, County Agent-at-Large