4. By getting adult leaders to take pictures of all happenings and events of 4-H work in their community.
   To get more reporters of 4-H clubs to send in news and pictures of their club meetings and activities.
5. Encourage more interest in individual club projects by personal visits.
   More community and county contests, demonstrations, and field tours.
6. By the use of radio, newspaper, personal contact, tours, demonstrations, and a ribbon or prize for everyone that will enter a contest.
7. By displaying scrap books of past winners as many times and places as possible.
   News stories, articles and pictures, and have members of winning club give talks on their club and community.
8. Encourage boys and girls to attend camps by use of slides, letters telling of past experiences of other club members attending camp.
   Publicize camps by use of pictures and news articles.
9. Encourage members and leaders to participate in events by the use of movies, pictures, personal experiences, showing prizes, displays and news articles.
10. Use ribbons, tours, judging schools, trips, visit packing companies and see dressed carcass.
    Personal contact, Senior Banquets, meat schools and recognition of members.

B. Objectives for Farm Woodlot Owners

1. Inform woodlot owners of assistance available from State Forest Service, Soil Conservation, and Stabilization Conservation Service.
2. Encourage forestry management - fencing, culling, marketing, and spot planting.
3. Ask assistance from Sawmill Operators in good cutting practices.
4. Encourage marketing lumber by grade.

C. Teaching Methods

1. Work through Community Improvement clubs and 4-H clubs on community projects.
2. Publicize importance of forestry practices through letters and news stories.

IX. 4-H Clubs

A. Objectives

1. To get larger percent of boys and girls of the county enrolled in 4-H club work.
2. To train and interest more adult leaders in helping with 4-H programs and activities in their communities.
3. Have a much larger participation in county, area and district fairs.
4. To have more publicity of 4-H news and events.
5. Encourage parents to take more interest in their childrens' care and development.
6. To encourage 4-H members 14 years old or older to enter county and district contests, such as, forestry, sheep shearing, public speaking, tractor, livestock and dairy judging.
7. Encourage more 4-H clubs to enter the W.S.L.S., TV Community Improvement Contest.
8. Have more boys and girls attend county, district and senior camps.
9. To plan and have every club in the county taking part in National 4-H Week, County 4-H Fellowship Dinner, Achievement Day, and Share-The-Fun Contest.
10. Encourage more sheep, swine, dairy and beef projects.

B. Teaching Methods

1. By the use of newspaper, radio, county contests with prizes and more interest of parents and adult leaders.
2. Get more adult leaders to attend the State Adult Leaders' Conference and more sponsorship. Hold more adult leaders' meetings and get-togethers.
3. Show films, use more pictures, newspaper articles, to call to the attention of members and leaders, the great opportunities, prizes, and scholarships offered for District, State and National Contest.

3. Individual assistance will be given those who participate in this or swine feeding operations.
4. Results will be published through all communication media.
5. Recommendations and information presented by Roie Godsey, Extension Swine Specialist, at the feed and nutrition meeting in Roanoke, will be followed.

VII. Poultry Production and Marketing

A. Situation

The 1954 statistics show 46,860 chickens on farms, from which thirty-eight thousand eight hundred and eight were sold, valued at $14,000 for 21,000 broilers and $14,000 for other. Eggs sold amounted to approximately 170,000 dozen, valued at $72,477, making a total income for chickens of $107,477.

The poultry producers are inactive or becoming so due to low prices. There is some chance for egg production to supply local demand, but this has also become less profitable in the last two years.

B. Objectives

1. Assist producers who supply local markets in producing uniform volume and quality.
2. Determine demand of local market and inform prospective producers of market needs and possibilities of supplying demands.

C. Teaching Methods

Poultry Pellets, bulletins and news stories.

VIII. Forestry Production and Marketing

A. Situation

Value of forest products sold decreased from 47,000 in 1949 to 15,000 in 1954, probably due to other employment becoming more profitable.

Average of farm land in forest - 25,011 pastured
Average of farm land in forest - 20,860 not pastured
Total - 45,871 Acres
Percent of farm land in woods - 32.1
109.500 seedlings were planted in 1959.

C. Teaching Methods

1. In January a Sheep Production meeting was held and all producers invited. G. A. Allen, Extension Sheep Specialist discussed management practices that have been found to increase production.

   The report on dog control and damage to sheep flocks of the County was given by the Dog Warden.
2. In February, a letter was written all sheep producers encouraging participation in the "Returns-Per-Ewe" which promotes good management.
3. In May, a circular letter and news articles will be published on marketing to coincide with lamb market opening day at the local auction market.
4. The wool marketing committee will be assisted in selling, pooling and shipping the annual wool clip.
5. Demonstrations in sheep shearing will be conducted for custom shearers, flock owners and club members who shear their own flocks.
6. The Annual Ram Sale will be ehld in cooperation with the Extension Animal Husbandry Sheep Department, and the local auction market, in July.
7. In July also, a circular letter and news article will be published on parasite control, including the schedule of 4 Phenothiazine treatments and dipping with the most effective material for tick control, in the portable dipping vat.
8. Work with committe members and local auction market on marketing facility improvements to prevent long waiting line on market days.
9. Give individual assistance to those desiring to make improvements in managements practices.
10. Assist producers in securing or keeping replacement ewes and lambs.

VI. Swine Production and Marketing

A. Situation

   Swine producers are dormant at present due to current low point in price cycles.

   Objectives

B. To fit swine into all suitable farming operations as a supplemental source of income - either as feeder pig production, contract production or an individual breeding, feeding, butchering, curing and marketing enterprise.

C. Teaching Methods

1. At a joint meeting of sheep and swine producers, Dr. C. C. Brooks, Professor of Animal Husbandry at V.P.I. gave the outlook on swine and commented on developments in swine breeding and marketing.
2. Mr. Emmett Williams, representing a feed company explained a contract feeding proposition being offered farmers in the Roanoke Area.

make improvements as a result of these teaching activities.

7. A cattle feeder's meeting has been scheduled for March 3, at Christiansburg, with assistance from K. C. Williamson, Extension Beef Cattle Marketing Specialist. All cow and calf owners, yearling producers and cattle feeders will be invited. Bankers and other lending agencies will be asked to cooperate, along with representatives of packing companies who buy in the area.
8. A survey to determine the number of cattle that will be fed will be conducted and a feeding school will be arranged prior to the fall feeder calf and yearling sales for the benefit of those who intend to feed cattle.
9. Publicize advantages of feeding in news articles for press and radio.
10. Arrangements for a special consignment sale for all cattle fed will be worked out at the March feeder cattle meeting.
11. Packer buyers will assist in setting dates that will best suit their market demands.
12. Cattle will be graded according to plans at the meeting as a demonstration in marketing according to quality.
13. Study pedigrees of purebred herds and assist owners in purchase of clean animals.
14. Demonstrate fitting of animals for show and sale.
15. Assist breeders in getting cattle consigned to sales.
16. Publicize advantages of selling through Breed Sponsored Sales.
17. Give individual assistance to breeders who either sell or purchase herd bulls through purebred sales and need assistance in carrying out other recommended practices.

V. Sheep Production and Marketing

A. Situation

In 1959, 202 sheep producers sold 40,000 pounds of wool, at which 5 pounds of wool per fleece would indicate 8,000 ewes and lambs kept for replacement. Statistics for 1954 show 3,960 shorn and 21,306 pounds of wool.

The majority of wool produced in the county is sold through the local pool, while most lambs are sold at Dublin or Roanoke Livestock Auction Markets. A few are sold privately

B. Objectives

1. Increase numbers to 8,000 breeding ewes.
2. Produce 125% lamb crop grading good, choice or prime.
3. Pool 100% of wool crop or 40,000 pounds.
4. Control parasites, diseases and dogs.
5. Improve marketing facilities at local market.

and herd replacements. There are approximately 500 head of steers fattened on an average for market. There are 10 purebred breeders representing all three breeds.

About 1,000 calves and yearlings are sold through special graded consignment sales, largely at Dublin, Virginia. At least 3 purebred breeders consign calves to special breed promoted sales. Fat cattle are usually sold direct to packers privately at the farm.

B. Objectives

1. To improve efficiency of production to give a 100% calf crop averaging 450 pounds and grading good or better.
2. Purchase herd sires of best type.
3. Reduce expenses with labor saving equipment.
4. Adjust yield and quality of feed to size of herd.
5. To increase volume of calves marketed through special sales.
6. To provide adequate space and facilities for handling larger volume.
7. Give statistical information on previous sales to all producers to encourage more to consign.
8. Assist producers to secure more control of markets by deducting larger fees to make necessary additions and improvements to local yards.
9. Market lighter yearlings.
10. Utilize suitable cropland for grain for fattening cattle.
11. Hold meeting with K. C. Williamson on graded fat cattle sale.
12. Purchase or carry over feeder calves for fattening.
13. Profit by nearness to fat cattle markets.
14. Eliminate dwarfism from pedigrees.
15. Sell purebred animals through Breed Association Sponsored Sales.

C. Teaching Methods and Activities

1. A feeder calf producer field day will be held in cooperation with the agents of Bland, Pulaski and Giles counties at the George Litton farm in Pulaski County in April, where all recommended calf production practices are carried out and calves marketed, reach the above specifications.
2. Dehorning, castrating and other management practices will be demonstrated and C. C. Mast and K. C. Williamson, will comment on production and marketing. John Shoulders will discuss forage production. A barbeque of 4-H baby beef from the Roanoke Fat Stock Show is planned.
3. All consignors to special graded feeder sales in the area aill be invited, as well as, other producers, purebred breeders, market operators and livestock graders, press, TV and radio, and Chambers of Commerce.
4. Additional demonstrations will be conducted and producers encouraged to build labor saving and safe handling equipment.
5. The practices demonstrated at the field meeting and other outstanding accomplishments will be publicized in news stories in local papers and radio.
6. Specialist assistance will be obtained for those desiring to

Agronomist, and E. S. Smith, Extension Farm Machinery Specialist, will analyze and discuss problems and decisions involved in securing the proper balance with cows and production with forage and other feed supplies and the optimum amount of machinery.

Every effort will be made to get all dairymen to attend. Bankers, Feed, Seed and Machinery dealers will be asked to help by encouraging these dairymen, customers and patrons to attend. Members of the Agronomy and Dairy committees will be notified and asked to contact dairymen in their communities. Local press and radio will be given news stories before the meeting. The meeting will be followed by letters to all agencies asked to participate requesting assistance in maintaining interest. News media will be given a report of the meeting. Other follow-up procedures recommended by the specialists will be adopted.

2. An educational program on mastitis control will be initiated by placing control recommendation posters in all dairy barns in the county.

   Information will be included on new approved disinfectants being made available. Circular letters will be sent to all dairymen and spot checks will be made to determine the effectiveness of the program.

3. June Dairy Month will be observed by cooperating with feed dealers, milk distributors, and the local papers and radio stations. The Dairy Nutrition committee will be asked to help emphasize milk as a food throughout the year to help increase sales in the area.
4. The Mastitis Prevention Survey form will be used to assist in determining causes of mastitis.
5. Tours, news articles, pictures, meetings and visits will be employed to develop interest and greater efficiency by manufactured grade milk producers who will be encouraged to adopt efficient time and labor saving methods. Pictures have been taken of a 4-cow elevated milking parlor in Craig County.
6. A trip will be organized in cooperation with milk manufacturing and cheese companies to see this installation in operation.
7. Plans will be distributed to those interested and assistance given those who decide to build.
8. Publicity will be given outstanding accomplishments.
9. "C Grade" milk producers will be invited to the management meeting for all dairymen.

IV. Beef Cattle Production and Marketing

A. Situation

There are 228 beef cattle producers in the county who produce approximately 3300 feeder calves from 3700/ 90%. Approximately 1,000 steers and heifers are kept as feeder and grazer yearlings

take 1,000 gallons of milk per day from approximately 15-20 new producers.

Forty-eight producers are now selling milk to distributors in Radford, Newbern and Roanoke City.

Approximately 200 farms produce "Grade C" or manufactured milk which they sell to plants in Christiansburg and Riner, and a Cheese Plant at Lusters Gate.

B. Objectives for New Producers

1. To assist 15-20 new producers to meet requirements for "Grade A" milk production.

C. Teaching Methods

1. Get assistance in selection of new prospective producers from other agencies.
2. Secure field man from cooperative to explain requirements.
3. Secure farm building specialist to visit those who plan to build .
4. Conduct a tour to Droogs" farm for interested farmers in Campbell County with assistance of Charles Ellis to see a complete layout of loafing and feeding areas, and milking parlors.
   Additional trips will be taken as other farmers exhibit and desire information.
5. In March a schedule will be arranged with the Extension Farm Building Specialist for those building, for a discussion period to assist with their construction problems.
6. Visits will be arranged as necessary to assist in completion of buildings as quickly as possible.
7. Appropriate news articles will be published on this new milk market at the most opportune times to encourage all those farmers who are properly situated to adopt this new enterprise.
8. Assistance and advice will be offered in procuring new cows needed and the new dairymen will be encouraged to become members of the Dairy Herd Improvement Association, improve quality of their cows through artificial breeding, and adopt approved farm management practices.

B-1 Objectives for Present "Grade A" and "Grade C" Producers

1. Improve quality of cows.
2. Imrpove efficiency of production.
3. Promotion and advertising.
4. Disease Control.

C-1 Teaching Methods

1. A meeting will be held March 18, for this group and others interested, at which a panel composed of Dr. V. L. Baldwin, Extension Dairy Specialist; J. F. Shoulders, Extension Forage

6. Virginia Bankers' Association meeting, Natural Bridge, March 6-9.
7. Annual meeting Montgomery County Agricultural Extension Service Board meeting, March 15, 7:00 P.M. (Place to be determined).
8. Annual meeting of Council of Community Improvement clubs. (Date and place to be determined).

II. Agronomy

A. Situation

Hay, pasture and silage are the three main sources of farm produced feed for all livestock. Production per acre and per farm are inadequate for maximum meat and milk production per animal unit.

B. Objectives for forage producers

Increase forage production to optimum per acre yields to support optimum production of meat, milk and wool as follows:
20,000 Animal Unit Fed 25 pounds forage hay equivalents per day =250 tons per day @ 365 days = 91,250 tons.

Present averages of forage produced are as follows:

Pasture	acres	per	animal	unit	3.9 (1955 census)
Hay	"	"	"	"	.8
Silage	"	"	"	"	.1
Total	"	"	"	"	4.8

C. Teaching Methods

1. The Agronomy and Dairy committees will be assisted by the Farm Machinery, Dairy and Forage Specialists, in a meeting for all dairy farmers, including "A" and "C" grade milk producers and livestock producers on the subject of balancing machinery to crop and forage acres, and number of animal units of dairy cattle.
2. Information developed at the meeting will be published in news letters, press and on radio stations.
3. Individual assistance will be given participants in recommended adjustments in acreages, animal units and machinery.
4. Demonstrations will be publicized and used for field meetings.
5. Weed and forage pest control- current information on forage weed insect pests will be published. News letters, articles, and radio scripts will be prepared and published to keep forage producers abreast of latest control measures found effective by Experiment Stations.

III. Dairy Production and Marketing

A. Situation

A cooperative milk marketing organization has agreed to establish a new "Grade A" milk route in the county beginning July 1, to

Income from farm products sold in 1954 was with a breakdown as follows:		$2,329,871
All crops sold		196,061
Field crops	$128,000	
Vegetables	11,108	
Fruits	46,225	
Horticultural Specialty	10,000	
All livestock and livestock products		2,118,016
Dairy products sold	1,123,285	
Poultry & products	103,245	
Livestock and products other than dairy and poultry	891,486	
Forest products sold		15,794

The comparatively small number of operators in all categories of farming in the county provides a proportionately small number of leaders to plan and carry out large scale changes in practices and methods. Response to most Extension methods is smaller than where large numbers of farmers are producing a large volume of a given product.

However, a greater opportunity exists for rendering individual assistance to a greater percentage of those engaged in each phase of farming, to accomplish desirable changes through farm and home management.

With the assistance of committeemen representing all important phases of farming including agronomy, dairy, livestock, poultry and forestry, the County Agricultural Program has been set up, on which to base the Extension Plan of Work for 1960 as follows:

In order to bring about more participation in programs designed to get farmers to change practices, more field meetings, field days and tours have been planned for the benefit of all farmers representing each important phase of farming in the county.

1. Extension Organization and Program Planning

   A. Objectives

      To become familiar with latest trends in agriculture in order to be in a position to offer a progressive and timely Plan of Work for the year.

   B. Learning experiences participated in in order to obtain needed information.

      1. District Communications School, Roanoke, January 26-28.
      2. Virginia Hereford Breeders Association meeting and sale, Richmond, February 11-12.
      3. Annual Virginia Dairymens' Association meeting, Roanoke, January 22.
      4. Virginia Beef Cattle Association meeting, Natural Bridge, February 29.
      5. Roanoke Milk Producers Association Annual meeting, Roanoke, March 1.

1960 PLAN OF WORK

T. M. HEPLER
COUNTY AGENT

T. E. TABOR, III
ASST. COUNTY AGENT

MONTGOMERY COUNTY

General Agricultural Situation

Montgomery County has a population of approximately 30,000 people, including the incorporated towns of Blacksburg and Christiansburg. In 1955, there 1447 farms averaging 98.7 acres each and 477 were classified as commercial with incomes as follows:

Class	I	farms,	value	farm	products	sold	over	$25,000	17
"	II	"	"	"	"	"	-10,000	to 24,999	42
"	III	"	"	"	"	"	- 5,000	to 9,999	40
"	IV	"	"	"	"	"	- 2,500	to 4,999	116
"	V	"	"	"	"	"	- 1,200	to 2,499	131
"	VI	"	"	"	"	"	- 250	to 1,199	131
Total									477

Of 252,800 acres of total land area, 142,784 acres were in farms.

The most important farm enterprises are 50 "Grade A" dairy farms with approximately 1,700 cows, 200 manufactured grade dairy barns with 5,000 cows; 10,000 beef cattle; 5,000 hogs; and 4,000 sheep. There were 970 other farms, many of which were operated by part-time farmers, 1289 of which worked more than 100 days off the farm and 1494 workers who have off-farm incomes exceeding that grossed by their farms.

Work off the farm is available at the Powder Plant, Lynchburg Foundry, V.P.I. and even in the City of Roanoke, in addition to numerous smaller industries in the county that employ both men and women from all rural areas.

As a result, farm people are not anxious to participate in contract farming enterprises, but prefer to persue independent private enterprises either on a full-time basis or supplemented by the most satisfactory off-farm jobs available.

Most of the 50 "Grade A" dairymen are full time operators, as well as, a majority of the larger manufactured milk producers and larger livestock producers. These categories include a majority of the commercial farms.

From the above it is apparent that the agricultural income is largely from milk and meat, and this is produced to a large extent from pasture, hay and silage.

Minor sources of income are poultry, fruits, vegetables, tobacco and forest products.

Upholstering	29	Making Braided Rugs	31	Total Special Interest Workshops	50 different Counties
Refinishing	35	Hooked Rugs	5	Total Workshops	132
Slip Covers	17	Making Draperies	16		

MONTGOMERY COUNTY

PLAN OF WORK

1960

T. M. Hepler, County Agent

T. E. Tabor, III, Assistant County Agent

Ext. Form 16

Negro Special Interest

Ext. Form 16

House Furnishings White Counties 83

Ext. Form 16

Negro House Furnishings 24 Counties

Ext. Form 16

Lighting 16 Counties Method Demonstration 10 White and 6 Negro

6 Counties hope to have an Open House