

ANNUAL NARRATIVE REPORT

COUNTY EXTENSION WORK

Virginia Agricultural Extension Service

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Spencer
County

I. ANNUAL NARRATIVE REPORT OF FAUQUIER COUNTY
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YEAR -- 1958

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III. COUNTY ORGANIZATION

The Extension Organization in Fauquier County has been developed through Commodity Committees and other Extension formed groups; namely; Agronomy; Dairy; Livestock; 4-H Clubs; 4-H County Council; 4-H Honor Club, and Junior Fair Board. As needed, special sub-committees were established to work on various problems and programs.

The Key Banker; Professional Workers Group, comprising of representatives of ASC, FMA, NFLA & PCA, and Vocational Agriculture, serve on certain of these committees in an advisory capacity. All of these Commodity Committees and other groups have met one (1) or more times during the current year.

The Extension Program has been supported by and through the Fauquier County Farm Bureau, Inc.; Dairy Herd Improvement Associations; Fauquier Artificial Breeding Association, and four (4) active Ruritan Clubs, all working for the betterment and advancement of the county and their respective communities.

The paid personnel of the Extension Service during the program year consisted of the County Agent, Samuel Sutphin, Jr.; Assistant County Agent, John W. Mayhugh, and the Extension Secretary.

IV. TYPE OF AGRICULTURE

Fauquier County lies on the eastern slope of the Blue Ridge and varies in formation from mountains in the Northern end to flat and poorly drained in the Southern end of the county. The long axis of the county cuts at right angle to the geological formations and, therefore, this county has practically every soil represented in it which appears in the Piedmont section. Naturally, different soil types have different levels of fertility, and those represented in Fauquier range all the way from very good to very poor in fertility - naturally, this has an effect upon the type of farming.

Census data for 1954 show there are 1,513 farms in the county. Of this number, 813 are miscellaneous and unclassified, of which 530 sold less than \$250 of farm products. The commercial farms - 756 - fall in the various economic classes as follows: Class I, 40; Class II, 160; Class III, 132; Class IV, 149; Class V, 160, and Class VI, 115.

In general, Fauquier is a livestock county, producing dairy cattle, beef cattle, hogs, sheep, horses, and poultry. The chief crops are pasture, corn, small grain, and hay. During the past few years, a number of farmers have turned to "Grassland" farming with many reducing their corn and small grain acreages in favor of pasture and hay, while others have completely shifted from crop rotation farming to a strictly grass program.

Fauquier County produces approximately one-tenth of all fluid milk consumed on the Washington Milk Market, and in addition there is a small amount of milk produced for manufacturing.

The beef cattle industry is conducted along two general lines; the beef cow herd and the feeder cattle industry. Among the beef cow herds in the county are some of the most outstanding individual beef animals in the nation, and the presence of such blood lines within the county has greatly increased the quality of home raised cattle during the past ten (10) to twelve (12) years.

The beef cow herds have also influenced the feeder cattle industry, formerly based on the importation of calves, stocker and feeders, from Southwest Virginia; Tennessee, and as far west as Texas. In addition to the reduction in numbers of cattle shipped into the county as a result of the change to beef herds, more calves raised in the county are being fed here. This trend is expected to continue and increase considerably in future years.

The sheep, poultry, and hog industries are not among the major agricultural operations of the county, although they contribute largely to the total farm income.

The farming population in the county varies more widely than do the soil types, and it is not uncommon to find a large farm of several thousand acres owned by a millionaire, such as Mellon or Chrysler, side by side with a small subsistence farm of fifty to seventy five acres, on which the farmer is barely making a living. This type of variation makes it rather difficult to develop any real community spirits in the different areas of the county.

V. PROJECT ACTIVITIES

A. Agronomy

1. Situation: There are approximately 46,000 Animal Units involving Beef, Dairy, Hogs, and Sheep in the county. Farmers produce slightly over 71,000 tons of hay equivalent from hay and silage crops, or an average of 3,102 pounds of hay equivalent per animal unit. In addition, there are 3.06 acres of pasture per animal unit, making a total of 4.12 acres per animal unit from pasture, hay and silage. The pastures produce per acre 1,634 pounds of hay equivalent per animal unit.

There are approximately 5,500 acres of alfalfa in the county, yielding on the average about 2 tons per acre. Other grass and/or legume mixtures average about 1 ton per acre.

The Fauquier County Soil Survey shows that there are 125 soil types and phases in the county ranging from very high to very poor in inherent fertility. Therefore, the soil types affect the forage and cropping programs, fertilizer and liming, etc. on individual farms in the county.

Approximately 13,000 tons of commercial fertilizer are used annually, involving 32 analyses. Most of these are the lower analyses grades.

In view of the above situation, the 1958 Agronomy program was developed to get farmers to increase yields per acre of all forage crops, to produce alfalfa on land adapted to it, increase acreages of grass-legume mixtures to insure year-round feed supply, to use more high grade fertilizers, use better harvesting methods to produce high quality forage and to learn more of the soils and their capabilities.

2. Goals For 1958: To increase pasture and forage crop yields; demonstrate 12 month year-round feed program; to demonstrate proper grass-legume mixtures on land not suited to alfalfa production; to increase alfalfa acreages; to promote weed and insect control in forage crops; to supply soils maps to individual farmers; to set-up three (3) new TVA Pilot Demonstration Farms, and to get farmers to use latest research information in developing their agronomy programs.

3. Methods Used: In addition to the specific Agronomy Committee activities, the Dairy and Livestock Committees assisted in carrying out the objectives for Agronomy. Assisting also were V.P.I. specialists; professional workers; local machinery, seed and fertilizer dealers; the local radio, and newspaper and individual farmers. The following were the principal methods used and how they were conducted:

(a). Field Meeting and Demonstration on TVA Pilot Demonstration Farm: The owner of this farm is a member of the Agronomy Committee and a Grade A dairyman whose herd has made over 500 pounds of fat the past two years. The cooperation of four machinery dealers who demonstrated their hay making equipment, such as; mowers, rakes, balers, and hay conditioners, was secured. The twilight meeting began at 6:00 P.M. on Thursday night; however, the hay cutting and conditioning was begun on Tuesday morning, attended by farmers during this period of time. Again, the machinery was demonstrated at the twilight meeting. Stage of maturity, use of conditioners, drying time, etc. were demonstrated in making high quality forage.

In addition to this phase of the program, the 5-year program developed on this farm was discussed showing the results of the use of high analyses fertilizers; rotation system on land not suited to alfalfa; grass-legume mixtures used, and yields obtained. V.P.I. specialists discussed pasture and forage mixtures and the economics of forage production. About 140 people attended this meeting and demonstration.

(b). D.H.I.A. Tour: On this tour, samples of alfalfa hay were exhibited and compared to U.S. Grades. Records were also analyzed to show the value of high quality forage in milk production. Pasture on one (1) D.H.I.A. farm showed that pasture alone had produced \$169.00 worth of milk per acre. Therefore, heavy fertility, grass-legume mixtures, and proper curing and harvesting was demonstrated. Thirty five (35) farmers participated in this tour.

(c). Holstein Delight Meetings: The agronomy portion of this program, attended by 100 dairymen, involved the discussion of experimental work at Beltsville on the results of calf and heifer raising with high quality forages. Information was given on the different forages used, grain feeding, and the results from each type of forage. Also, the dairymen discussed their calf and heifer raising program which involved forages. Some of the experimental work in forage feeding was being used on this dairy farm.

(d). Weed and Insect Control in Forage Crops: Two (2) meetings, attended by 20 farmers, were held on the subject of weed control. Information was given on weed control in corn, chickweed in alfalfa and the control of troublesome weeds, such as; Canada Thistle, Wild Onion, Johnson Grass, etc. In addition to the meetings, dealers were supplied with information and farm visits were made relative to control of chickweed in alfalfa. Information on control of the alfalfa weevil was supplied to dealers, in newspaper articles, radio, and individual contact.

(e). Ruritan Program: Two (2) outstanding dairymen from an adjoining county were secured for the June meeting for a panel discussion on forage programs. Their program involved corn and grass silage, alfalfa hay, and pasture. Many questions were asked by the 40 present and the result showed that these two dairymen had used the latest research information in developing their programs, which, undoubtedly, had effect on local dairymen.

(f). Soil Maps and Soil Analyses: A local appropriation was secured to obtain Soil Survey Map overlays in order to supply farmers with individual soil maps of their farms. These maps will be made available when proper equipment can be secured to handle them in the office. Soils information has been supplied a young farmers club of 20 members and individuals on various farms. Soil types are also taken into consideration when recommendations for lime and fertilizer are made in various crop rotations. Rotations for individual farmers have been worked out according to soil types.

(g). Experiment Station Field Days: Fifteen (15) farmers attended Experiment Station Field Days at Middleburg and Orange. Information showed results on pasture and forage mixtures; management and cutting of alfalfa; the 12-month feed program; experimental work on two soil types--liming and fertilizer practices and value of mixtures in grazing cattle--beef and dairy.

(h). Farm Visits: Sixty five (65) farms were visited relative to forage crop mixtures; crop rotations; weed control; insect control; fertilization, and harvesting.

(i). ASC Program: The Agent met regularly with this Committee to assist in the development of the county program; made lime and fertilizer recommendations on specific practices; explained the various practices to farmers which would fit their individual operations. Approximately \$95,000 was used by farmers for agronomic practices with about 350 farmers participating.

4. Accomplishments: The following accomplishments are listed to show the effect of the methods used in promoting the agronomy program during 1958:

(a). An additional 500 acres of alfalfa was seeded as determined by specific recommendations to farmers, and sign-up through ACP. Also, 800 acres of Sudan and 1,500 acres of winter pastures (small grain) were seeded in the fall of 1957 for use as grazing. It is further estimated that 50 percent of the alfalfa growers used their first cutting for silage. With the increase and utilization of these crops, the 12-month feed program has been developed on more farms.

(b). Control of chickweed in alfalfa increased considerably in 1958. A survey of dealers showed that material sold to spray 1,340 acres as compared to 450 acres in 1957. An increase of 520 acres of corn and pasture was sprayed to control weeds.

(c). An additional 35 farmers were supplied copies of the Fauquier County Soil Survey. Individual farm soil map was supplied to one. At least 75 other farmers were supplied soils information.

(d). Soil analyses and recommendations were made for 231 farmers on 850 fields. These recommendations were made on the basis of soil type, cropping history, analysis, and fertilization history. High analyses fertilizers were recommended for these farmers.

(e). At least 50 farmers used better harvesting and curing methods to produce high quality forage. Following the demonstration (labeled as method "a"), one dealer reported he had sold 22 hay conditioners.

(f). Three (3) new TVA "Pilot" Demonstration farms were established with complete cropping and rotation plans worked out.

5. Orchard Grass Seed Marketing

Saturnia, Fauquier and Loudoun produce approximately 40 percent of the U. S. production of Orchard Grass Seed and 55 percent of the Virginia production. The seed is an important supplemental income crop, particularly, to the beef producers in the county. However, seed producers are completely at the mercy of seedsmen as each is an independent marketing agent of his own. There are several factors that work to the disadvantage of orchard grass seed producers, namely:

(a). Some States discriminate against Virginia grown seed since it contains some wild onion, and seedsmen use this to beat down the prices.

(b). The USDA production report is published after the seed crop is harvested and the dealer carry-over report a month later than this. Therefore, the producer does not know what the carry-over is and cannot adjust his acreage to harvest.

(c). There is little, if any, competition among buyers as they all seem to pay about the same.

In view of this situation, a Committee of producers was formed in each county that met together to map some course of action. Following several meetings, the Joint Committee encouraged and approved the plan of an existing cooperative to act as marketing agent for seed producers. As a result, this cooperative was able to influence the market to some degree by handling about a million pounds which it had not formerly done. This action had an effective influence on regular buyers.

B. Dairying

1. Situation: Dairying ranks second in total agricultural income in the county, the larger proportion of which comes from 145 Grade A farms. Shippers of manufactured milk number at present about 66, as a result of the cost-price squeeze and higher health requirements.

Two D. H. I. A. 's are in operation with 50 herds on test and 5 herds on the Weight-Day-4-month program. There is room for considerable expansion in these programs.

Approximately two-thirds of the Grade A dairyman use artificial breeding to improve their herds with about one-fourth of the cows being bred under this program.

The Agronomy program has been explained in detail which was developed along the lines to improve feeding in dairy herds.

Herd management is a big problem among dairymen and in many cases low production is the result. Therefore, the record keeping program, artificial breeding and feeding programs of outstanding dairymen, have been used to influence this phase of the Dairy program.

2. Goals For 1958:

- (a). To improve and increase production through better feeding, better breeding, and better management programs.
- (b). To increase participation and expansion of the D.N.I.A. program to other dairymen and get present members to use this information in their dairy operations.
- (c). To expand the artificial breeding program, and in general better breeding of dairy cattle.
- (d). To promote purebred dairy cattle raising and get grade cattle owners to use purebred animals as replacements.
- (e). To promote dairying in general during "June is Dairy Month".
- (f). To recognize outstanding dairymen in their accomplishments in increasing production.

3. Methods Used: In addition to farm visits; personal contacts; radio, and newspaper articles, the following major activities were conducted in carrying out the program of the Dairy Committee. Also, V.P.I. dairy specialists, artificial breeding technicians, D.N.I.A. supervisors, and dairy field men have contributed to better dairying.

(a). Tour of D.N.I.A. Farms: Two (2) outstanding D.N.I.A. herds were visited at which their calf and heifer raising programs, dry cow and milk cow feeding, breeding and management programs were discussed and analyzed by specialists. Exhibits were shown of high quality forage, methods of feeding, feeding of grain according to production records, value of pasture in milk production emphasized and analyzed. Comparisons were also made of AB heifers as compared to other animals in the herd. A talk was also made on "Why Milk Tests Vary", and a report on the Beltsville calf raising program was given.

(b). D.N.I.A. Herd Book Clinic: Two days were spent by the Agent and Dairy Specialists in analyzing with 22 dairymen their D.N.I.A. records in the presence of the D.N.I.A. Supervisors. In addition to the analysis, information not in books was listed and the supervisors instructed to complete these herd books. This clinic has brought about a better understanding of the importance of a complete set of dairy records, assisted the supervisor in working closer with the dairymen, stressed the importance of treating each cow individually and feeding her according to her production. Culling procedures were also outlined according to the record of each cow.

(c). D.N.I.A. and AB Association Meetings: About 85 attended the Annual D.N.I.A. meeting, where an excellent talk on "Dairy Cattle Nutrition" was presented. This program covered calf raising, heifer raising, dry cow

program and feeding for milk production. Many management suggestions were also emphasized which are essential if proper feeding is to be effective. In addition to the program, the business of the association was conducted. Also, the Board of Directors of the Associations have met five (5) times during the year of operational and business affairs of the Association.

Dairymen also attended the Annual Meeting of their AB Association to conduct the business and explain the benefits of the program. The "Importance of Breeding to Better Proven Sires" was discussed.

(d). Twilight Meetings - Breed Associations: About 110 farmers attended two breed association twilight meetings at which fitting and showing demonstrations, type demonstrations and an exhibit of a classified cow family to emphasize progress through breeding was given. In addition, feeding and management programs were discussed for calf and heifer raising, dry cow and the milking herd. These herd owners use artificial and natural breeding.

In addition to these programs, the Agent assisted the Fauquier and Prince William purebred Holstein breeders to organize a Bi-County Club which now has about 25 members. Programs have been held by this club on Analysing Bull Proofs and Pedigress, milk marketing, and the selection of sires.

(e). Other Activities: (1). A plaque was awarded to the D.H.I.A. member by the Bealeton-Hendington Ruritan Club having the largest increase of 4 percent fat corrected milk over the previous year. This dairymen's increase was 2,600 pounds of milk. This program has stimulated and assisted in the expansion of the D.H.I.A. program. Newspaper, radio, and other publicity by individual contact has been given this activity. (2) Window Display - "June IS Dairy Month". This program was also sponsored by the same Ruritan Club. The display showed production and consumption figures for the U. S. and other countries, production information for the county, and compared the value of milk nutritionally and price-wise to other foods. It is estimated that approximately 300 people viewed this exhibit, which was intended to promote the consumption of dairy products. (3). In addition to general newspaper articles on all phases of dairying, a monthly report is published for each D.H.I.A. showing five (5) high herds in production and listing the ten (10) highest cows completing 305-day lactations. This information further emphasizes the importance of records and gives individual herds publicity.

4. Accomplishments: The dairy program conducted during the year has resulted in progress being made in promoting better feeding, better breeding and better management practices. It is evident that more dairymen are using the latest research information and recommended practices to improve their herds and produce milk more economically. The following accomplishments are listed:

(a). Two (2) D.H.I.A. Associations with 50 members were maintained with approximately 2,400 cows on test. The #1 Association showed an average production of 10,287 pounds of milk and 388 pounds of butterfat. The #2 Association showed 10,328 pounds of milk and 411 pounds of fat. Both associations showed an average of 10,300 pounds of milk and 398 pounds of butterfat. This is an increase of 766 pounds of milk and 31 pounds of butterfat over the previous year. (1957 over 1956; 1958 figures not available for this report). Twenty five (25) D.H.I.A. herds made 10,000 or more pounds of milk or over 400 pounds of butterfat. Therefore, the record keeping program, better breeding, and better management have resulted in this increase in production.

(b). A third D.H.I.A. comprising of 10 herds and 409 cows, has been

organized, further expanding the D.H.I.A. program. Three (3) members previously on Weigh-A-Day enrolled in the new Association.

(c). The Fauquier-Prince William Holstein Club was organized with about 25 members to promote purebred cattle, better breeding, feeding, and management. Much expansion can result if this group proves to be progressive. Their activities supported the 4-H and FFA programs.

(d). Approximately 3,000 cows were bred by the three AB Associations, through regular and special semen programs. Line breeding has been practiced among purebred breeders in the Fauquier A.B.A. since this program uses Frozen Semen entirely and can supply any bull desired on a specific day.

(e). More complete D.H.I.A. records in all herds have resulted due to the Herd Book Clinic. Through October, 1,500 lactation record cards have been reported by the D.H.I.A. Supervisors, this is 3 to 4 times more than has been reported in previous years.

C. Livestock (Beef, Sheep and Swine)

1. Situation: There are 323 livestock farms in the county according to the U. S. Census. Of this number, there are 75 purebred herds, 156 commercial and 102 steer operations. There are approximately 14,000 head of cows in the purebred and commercial herds. In addition to the steers produced and raised on the farms, 10,000 to 12,000 head are imported into the county annually. The trend has been toward steer operations, however, most of the commercial herd owners are holding on an up-grading them by strict culling. Steer owners have realized that they must produce more finished cattle, but at the same time utilize pasture and forage to the maximum to get cheap gains. Better marketing is essential in all phases of the livestock program.

There are 122 farmers owning sheep consisting of approximately 5,000 ewes. An increase in sheep numbers and flocks is desirable. Cooperative marketing of wool is essential to the program.

About 400 farms carry sows and gilts with an average of 5.6 pigs per litter. With better management, swine could be more profitable on these farms.

The production of high quality forage and pasture is essential to all phases of livestock. More grain is also needed to finish cattle and experience needed by new feeders. It is also important that calf producers and cattle feeders recognize the different grades of cattle.

2. Goals For 1958:

(a). To get more farmers to up-grade their commercial herds and sell through cooperative feeder-stocker sales, using sale requirements to get other cattlemen to improve their herds. Basically, to use the sales as demonstrations for cattle improvement and marketing.

(b). To get producers to consign pens of five (5) calves to the Feeder Calf Show held in connection with the fall feeder sale. These cattle to be shown to be used as demonstrations to promote quality and management practices and provide a supply of calves for 4-H, FFA and feeders for show

purposes.

(c). To assist and promote cooperative fat cattle sales and on-the-farm grading.

(d). To get commercial breeders to patronize purebred sales and purchase high quality sires.

(e). To conduct cooperative wool marketing program.

(f). To get farmers to produce and utilize forage crops and pastures to maximum in livestock production.

3. Methods Used: The Livestock Committee planned and assisted by the Feeder Calf Sales, Wool Marketing, Feeder Calf Show Committees, carried out the program with the aid of the Agent by farm visits; personal contacts; radio; newspaper articles; circular letters; V.P.I. Specialists and Researchers, and State Department of Agriculture representatives. The following are specific activities:

(a). Feeder Calf and Yearling Sales: Feeder cattle producers in this county market through five (5) cooperatively organized feeder-stocker sales, which are actually marketing demonstrations as a small percentage of cattle produced are sold through them. These sales are handled by a Sale Committee which establishes requirements and standards for quality. Calves are inspected on the farm, tagged, castrated, and dehorned by the producers, and at sale time weighed, graded, and penned according to grade and weight. Health requirements must be met so that the cattle can be shipped to any state. Work with this Committee on developing regulations, promotion and farm inspections require considerable time. The results of these sales effect price to non-consignors and also have greatly improved quality in other herds.

(b). Feeder Calf Show: Fourteen (14) pens, or 70 head of cattle were shown in this show, which was judged by an out-of-state feeder. These cattle were selected for high quality, good breeding, grading, and proper preparation for show and sale. Most consignors were purebred breeders which demonstrated the part and responsibility of the purebred business to the commercial cattlemen and the cattle industry. About 200 attended the show; trophies and prizes were awarded and most of the pens were sold to 4-H, FFA and feeders who will feed them for next fall shows. Prices were about \$5.00 above the average of the sale.

(c). Fat Cattle Sales and On-The-Farm Grading: In cooperation with the Tidewater Beef Cattle Association and the Virginia Division of Markets, the Agent has arranged for cattle feeders to have their cattle graded on the farm and to sell in the fat cattle sales. The purpose being to develop a market for small feeders and to teach them the various grades and whether or not they are ready to be marketed as finished cattle. With such a program, more orderly marketing has resulted and feed saved on already finished cattle. This work has further influenced the activity of other buyers and favorably affected prices to the feeder.

(d). Field Day and Beef Cattlemen's Short Course at Front Royal Research Station: Specialists from V.P.I., USDA, and the Beef Cattle Research Station conducted various phases of the program, attended by approximately 50 farmers from the county. The programs dealt with Research at the Station in Record of Performance and Breeding Selections, Future Pattern of Beef Production in Virginia, Types of Cattle Production in Virginia, Improvements Made From Selecting Fast Gaining Bulls, Use of Drugs in Growing and Fattening Beef Cattle, Present State of Dwarfism in Beef Cattle, Control of Pests, Beef Cattle Marketing, etc. In view of the many developments in feeding research and other problems in beef production, these field days were very valuable. Information received here has been further disseminated through personal contacts, radio, and newspaper.

(e). Purebred Sales: Annually, there are a large number of purebred sales in the area selling purebred sires and females that would up-grade many commercial herds. The Agent through radio, and personal contacts, has informed farmers of these sales and urged them to attend and select individuals that would improve their herds and flocks. In addition, many individuals have been referred to various purebred herd owners in the county where sires have been selected.

(f). Marketing of Wool: A meeting of wool producers was held for the purpose of organizing the Marketing Committee to conduct the wool pool in 1958. At this meeting, a V.P.I. Specialist spoke on sheep production practices. In addition to this, the wool marketing committee met two (2) times in arranging for the sale of the 1958 clip which was successfully conducted.

(g). Tidlight Meeting TVA "Pilot" Demonstration Farm: Although this meeting was held on a dairy farm, the machinery demonstration, pasture and fertilizer practices, mixtures, etc. were equally applicable to beef producers. Of the number attending, approximately 40 were beef producers. (Reported in more detail under Agronomy). Also, as reported under "Agronomy", the programs on Weed and Insect Control, Experiment Station Field Days, Soils Maps and Analyses, etc. were directed to beef producers.

4. Accomplishments: The following results were obtained through the livestock program during the current year:

(a). Thirty eight (38) different producers through 69 consignments marketed 1,274 head of calves and yearlings through the five organized cooperative sales--one (1) in the spring and four (4) in the fall.

(b). Six (6) producers marketed through these sales for the first time. Some of the old consignors have changed operations. This is evidence that these sales have demonstrated quality and more producers have improved their herds accordingly.

(c). Six (6) pens of show calves, an increase of two (2), out of the total of fourteen (14), were exhibited from the county. The Champion Hereford Pen, which was the Reserve Champion Pen of the Show, came from Panquier.

(d). Eleven (11) producers had their cattle in feedlot graded on-the-farm. Out of this number, four (4) sold through the organized fat cattle sale.

(e). Through the wool marketing pool, one hundred eleven (111) producers sold 24,382 pounds for a gross of \$10,755.12.

D. Other Project Activities:

1. Agricultural Engineering: Engineering problems have been handled on an individual basis through farm visits by the Agent and Specialists; a meeting on building and labor efficiency, attended by 40; personal contacts; supplying building plans, and radio and newspaper articles. Results are as follows:

(a). Farmers, 4-H, and FFA members have been supplied 106 building plans from the V.P.I. Engineering Department. These plans have resulted in new structures or improvements in existing ones. In addition, builders and contractors have been supplied with plans to be used in farm structure improvements and new buildings.

(b). With the assistance of the V.P.I. Building Specialist, farm building layout plans were made for two (2) farmers -- one each of beef and dairy. Efficient labor-saving arrangements were made for four (4) other farms.

(c). The use of plastic film for silo covers has greatly increased as a result of a demonstration held on a beef and dairy farm that showed the small silage loss and inexpensive costs of storing per ton.

(d). Thirty (30) farmers have been given direct assistance in constructing farm ponds and drainage problems.

2. Wildlife: In cooperation with county officials, local Health Department, Game Warden, and the Fish & Wildlife Service, twenty (20) Fox Trapping Demonstrations were held for the purpose of thinning out the grey fox to eliminate Rabies infestation. Thirty dozen traps were sold to farmers and others. As a result, a bounty was paid on 487 foxes by the local governing body.

3. Poultry: Work done with poultry raisers has been done on an individual basis. With the help of the Virginia Division of Markets, marketing and grading information was supplied a commercial egg producer with 2,000 layers. Information on diseases and parasites, sources of baby chicks, etc. was supplied home flock owners.

4. Forestry: Work in forestry has been primarily to encourage farmers to contact the Sub-District Forester of the Virginia Division of Forestry for assistance in planting, timber management, timber cruising, and marketing forest products. Thirty (30) farmers have been assisted in this manner. In addition, personal contact and radio has been used to promote good forestry practices.

5. Horticulture (Fruits, Vegetables, Ornamentals and Lawns): Work in horticulture has been conducted through personal contact, newspapers, radio and circular letters. Monthly garden letters have been sent to 100 gardeners covering phases of production, fertilization, insect and disease control, etc. In ornamental horticulture, information has been supplied garden clubs and individuals totaling about 75 home owners. With the assistance of a Landscape Specialist and a Ruritan and Garden Club, a long time plan was worked out for a high school. The work has been started on this project and in addition the same Ruritan Club has assisted an elementary school on a similar project which was the outgrowth of the original project. The Agent is a member of this club and assisted in the initiation of the project.

6. Work With Cooperatives and Other Businesses There are approximately thirty (30) cooperatives and business concerns in the county through which the Agent disseminates research information and Extension programs. These include banks and other lending agencies; seed, fertilizer, lime, feed, and marketing cooperatives, and dealers. Also, the service cooperatives, such as; A. B. Associations, etc. These organizations were assisted in the following ways:

(a). Upon request, met with Boards, committees, and members in an advisory capacity.

(b). Recommended and secured information and speakers for membership meetings and other activities.

(c). Informed groups of changes and trends affecting their programs and operations in order that they might adopt policies to meet the changing conditions.

(d). Assisted officers in filing reports as required by the State Corporation Commission.

(e). Assisted in promoting good relationships among members and employees, and between various cooperatives and other businesses.

As a result of the work with these cooperatives and businesses, these organizations have:

(a). Provided members to serve on commodity committees in developing the county program.

(b). Provided free services, prizes, and awards and finances to support the 4-H Club and other Extension programs.

(c). Passed on the latest information and stocked recommended varieties and other materials for use by farmers.

VI. 4-H CLUB WORK

4-H Club Work in Fauquier County is an important part of the over-all County Extension Program. This county is primarily an agricultural county and the future of this agriculture is dependent upon the proper training of the youth who will be the farmers and leaders of tomorrow. In our county there are a number of organizations which provide entertainment and education for our young people. However, the Agent believes that our county 4-H Club program, through clubs and project work, is doing the best job of developing our boys and girls into becoming useful and desirable citizens. The agricultural industry in this county is built around dairy and beef farms. Therefore, we have organized our 4-H Clubs and projects in order to strengthen our dairy and beef enterprises. Organized group projects which apply directly to the home and farm have been provided for club members in urban areas. To strengthen our County 4-H Club program during the current year, we have attempted to apply the latest scientific research along with good management practices to our 4-H Club projects.

During the current year, the objectives of the 4-H Club program and 4-H Club project work have been as follows:

1. To encourage the youth of the county to enroll in a 4-H Club and to participate in club and county 4-H, and community activities which will help them become useful and desirable citizens.
2. To have 4-H members enroll in projects adapted to farm and home situations.
3. To instruct and teach 4-H members basic subject matter about the project in which they are enrolled.
4. To have sufficient Adult and Junior leaders to carry out project and organizational meetings.
5. To have the club members complete their projects and turn their record books in.
6. To recognize 4-H members and leaders for their achievements and accomplishments.
7. To have club members exhibit their projects at the Fauquier Junior Fair and to encourage members to participate in out-of-county fairs.
8. To train dairy and livestock club members in judging.
9. To select two (2) club members to the 4-H All-Star Organization.
10. To expand the 4-H Club Program through good project work and well-organized 4-H Clubs.
11. To have four (4) club members submit records for State Achievement Awards.

12. To recognize the achievements of outstanding 4-H Club members and Volunteer Leaders, and to keep the public well informed of all 4-H Club activities in the county and state.

During the current year, the following goals have been achieved through the County 4-H Program:

A. GENERAL ACCOMPLISHMENTS

1. To reach the rural youth of our county, twelve (12) 4-H Clubs were organized in the county. Three (3) of these clubs are community clubs which are located in the northern, central, and southern areas of the county. These community clubs meet in the evenings and have been very successful since we have more room than in the school clubs. Also, we have been able to conduct project work more satisfactorily in the evenings.

2. Through the twelve (12) 4-H Clubs, one hundred and sixty (160) club members were enrolled in agricultural projects and one hundred and eighty seven (187) enrolled in homemaking projects. There was a total of three hundred and forty (340) 4-H Club members in the county.

3. Of the one hundred and sixty (160) club members enrolled in agricultural projects, eighty six percent (86%) completed their projects. Project accomplishments will be discussed later in this report.

4. Most of our 4-H County activities are conducted by the 4-H County Council. The purpose of this organization is to plan, develop, and coordinate activities of all 4-H Clubs on a county-wide basis. The membership is composed of officers of 4-H Clubs, membership of Honor Club, 4-H All-Stars, and Leaders. This organization holds two meetings a year. During the current year, the County Council has sponsored the following activities:

- (a). **4-H Achievement Program:** At this program, forty four (44) club members received county medals for doing outstanding club work. Recognition was given to club members who submitted state achievement records and to Volunteer Leaders who worked with the organizational and project phases of the program. This Achievement Night Program was attended by one hundred and fifty (150) parents and club members.

- (b). **National 4-H Club Week:** During this week, the County Council encouraged each 4-H Club to put on a demonstration or display in their school or community. Eleven (11) of the twelve (12) clubs put up exhibits and the local newspaper ran a detailed story on 4-H Club activities in the county. Spot announcements were made over the local radio stations concerning the observance of the week. The highlight was the county 4-H Show-The-Fun Contest. Forty (40) club members participated in the contest and six (6) winners were chosen from the junior and senior sets. Local businesses supported this contest through giving awards to the winners. The senior dinner represented the county in the state contest. Approximately 400 parents and club members attended this event.

- (c). 4-H Rural Life Sunday: This day was observed in the month of May. In three (3) designated churches, 4-H'ers acted as ushers and presented favors to the congregation. Some of the ministers developed their sermons around Rural Life Sunday and the Heart Development of 4-H Club members through 4-H Club work was stressed.
- (d). County 4-H Yearbook: A committee from the County Council planned and mimeographed a Yearbook which was given to every club member and leader in the county.
- (e). 4-H Float: In a county parade which had approximately one hundred (100) entries, the County Council entered a 4-H Float.
- (f). County 4-H Picnic: This was an all-day picnic which was held at the Middleburg Community Center. Approximately one hundred and fifty (150) club members, leaders, and parents attended the county-wide picnic. The picnic was most successful and it was a real opportunity to get all of the clubs together for swimming, softball, and a picnic dinner.
- (g). The 4-H County Council has also helped to pay the expenses of delegates to State 4-H Short Course; State 4-H Conservation Camp, and part of transportation costs for members attending 4-H Camp.
- (h). The 4-H County Council has purchased two (2) 4-H road signs which say, "Fauquier County 4-H Clubs Welcome You To Fauquier County". These signs will be placed on the major highways entering the county. Two (2) other signs just like these have been purchased by the Senior clubs and will be put up on incoming roads.
5. From Fauquier County, twelve (12) club members attended the State 4-H Short Course at V.P.I. in Blacksburg. One (1) Extension Agent from the county also attended this Short Course.
6. From Fauquier County, three (3) Club members attended the State 4-H Conservation Camp at Virginia Beach, Virginia.
7. Forty three (43) of our 4-H Club members attended our three county 4-H Camp. Three (3) local leaders assisted with this camp and this Extension Agent served as Camp Director.
8. One (1) boy and one (1) girl from the county were taken into the Virginia 4-H All-Star Chapter.
9. Three (3) 4-H Club members under the supervision of the Agent submitted 4-H Achievement Records for state competition in Boy's Agricultural, Dairy, and Meat Animal Awards. These records placed in the blue, red, and white award groups.

10. Approximately twenty five (25) 4-H Club members were trained in dairy and livestock judging. The dairy and livestock teams were entered in the district contests. In the contest, the dairy team placed second in the district, and we had the high scoring individual. This team went on to the state contest and again placed second in the state. One (1) member of this team was on the state dairy judging team and participated in the National Contest at Waterloo, Iowa. The livestock team placed fifth in the district contest and did not enter the state contest. This judging training has been an interesting part of the work and club members enjoy this phase of the Extension Program.

11. The Fauquier Junior Fair was a most successful event this year. The quality of the exhibits was above normal and there was much enthusiasm between exhibitors. Approximately one hundred and fifteen (115) 4-H, FFA, and FHA members exhibited their projects. Of the exhibitors in the Fair, ninety (90) were 4-H Club members with their projects. Thirty (30) top awards were presented with 4-H Club members winning twenty two (22) of these awards.

12. At our neighboring county fair, Prince William, and at the Virginia State Fair, approximately forty three (43) different club members exhibited their projects.

13. A total of sixteen (16) Adult and Junior Leaders assisted in conducting the over-all 4-H program during the current year and a large number assisted in conducting special events, such as the Fauquier Junior Fair.

B. PROJECT ACCOMPLISHMENTS

For the past few years, club members in this county have been doing outstanding work with their livestock projects. This has been especially true with the dairy, beef, and swine projects. These projects are especially emphasized in the county because most of the farm income comes from one of these enterprises. The Agent has always encouraged the club members to start with registered or well bred stock and to feed and manage the projects according to recommended practices. During the current year, more youth in the county participated in these three major projects, and the quality of the work compiled was outstanding. For the boys on rural non-farms and in urban areas, the electric project has been most successful. Through well-planned workshops and good demonstrations, we have been able to have our most successful year with the electric project. In conducting all our project work, we have used visual aids, lectures, demonstrations, organized tours, and a personal visitation program by the Agent and leaders. Regardless what the project may be, the Agent believes that visiting the club member and checking the project is the most satisfactory teaching method in making the program successful. Of the two hundred and eighty three (283) projects supervised by the Agent, two hundred and fifty three (253) projects manifested for an eighty nine percent (89%) project completion.

1. Livestock Projects

(a). There were thirty one (31) 4-H Club members enrolled in the beef projects; such as, baby beef, purebred heifer, and beef herd.

Of this number, thirty (30) completed their project on fifty three (53) animals. The most popular project was the baby beef project. All of the club members with purebred heifer projects or baby beef projects had registered animals or steers out of registered cows. As usual, these beef projects were extremely popular among club members. After the calves had been on feed for a few months, we held an all-day beef tour. This was attended by club members, breeders, leaders and other interested personnel. The club members explained to the group how they were feeding and fitting their project and any unusual events concerning their project. Leaders and parents assisted in conducting fitting and showing demonstrations before the fair season. Some of the animals exhibited and the winnings are as follows: Spring Shows, approximately 40 head which won 4 Grand Championships, and 4 Reserve Championships; Out-of-County Fairs, 14 head which won 2 Grand Championships; Virginia State Fair, 38 head which won 2 Grand Championships and 2 Reserve Championships; Eastern National Livestock Show at Maryland, 9 head, second place group of 5 steers out of 14 groups, and at the Fauquier Junior Fair, approximately 42 head were shown by 4-H Club members. This fall one of the local civic clubs held a banquet for beef project winners of the Fauquier Junior Fair.

(b.) There were twenty two (22) club members enrolled in swine projects; such as, market hog; sow and litter, and breeding hog. Of this number, nineteen (19) completed their project on thirty four (34) animals. Each year in the county, the Sears Roebuck Company in cooperation with the Extension Service, has conducted a very successful pig chain. The Sears Company provides five (5) registered gilts to club members in a selected community. The chain is judged and a banquet is held at the end of each year for the members of the chain. The Agent has charge of supervising the chain which was very successful this year. This chain has been the basis for most of the swine projects in the county. One of the problems has been to keep the club members breeding registered animals once they have completed the chain. However, by having the club members carry out good management practices, they have realized a good profit this year from their swine projects. Now more club members are continuing to breed registered animals and are keeping the quality of the project work high. At the Fauquier Junior Fair, this year, nine (9) club members exhibited their swine.

(c.) There were six (6) club members enrolled in the market lamb project. Of this number, two (2) club members completed on two (2) animals. Some of our club members had trouble in securing quality lambs to put on feed, and this has been one of our problems. Also, we lack a good market in which to sell our lambs after they have been fattened. The Agent feels that these problems can be overcome, and that more and better sheep projects can be conducted in this county.

2. Dairy Projects

There were twenty nine (29) different club members enrolled in dairy projects; such as, calf, heifer, and dairy production. Of this number, twenty seven (27) club members completed their projects on sixty seven (67) animals.

Our 4-H dairy club program is running in a cycle and during the current year, the number of club members with dairy projects has been low. We have lost a number of our good dairy club members which are now in college.

The dairy program in the county looks good though, because most of our club members are young, and the young animals which they own are of excellent quality and type. For the coming year, a number of new boys and girls have enrolled in the dairy project.

During the current year, managing, feeding, and selection of animals were taught throughout the year at regular 4-H Club meetings. The Agent helped several club members select and purchase purebred animals. All of the club members were visited at least twice during the year by the Agent and whenever assistance was needed. One (1) adult leader and two (2) junior leaders have assisted with the dairy program, especially in dairy judging training.

At the Fauquier Junior Fair, seventeen (17) of the club members exhibited forty (40) animals. At the Northern Virginia Dairy Show, champions were won in the Guernsey and Milking Shorthorn classes. Four (4) of our club members participated in the Prince William County Fair and won blue ribbons in the Holstein and Guernsey classes.

For the coming year, club members will improve the quality and number of dairy projects. A number of new boys and girls are planning to purchase registered heifers.

3. Tractor Maintenance Projects

There were nineteen (19) 4-H boys enrolled in the A, B, C, and D units of the Tractor Maintenance project. Of this number, seventeen (17) completed the project on twenty two (22) tractors or machines.

During the current year, this has been a most interesting project for farm boys. Two (2) adult leaders and two (2) junior leaders have worked very close with the project. The adult leaders along with the Agent attended the District Training School. In this school we learned valuable information on how to make this project successful. Our main problem this year was the bad weather on the nights when the project meetings were scheduled. This cut down our attendance and enrollment number.

The implement dealers of the county have given their full support to help us in this program. The classes on maintenance, safety, and etc. were held at six different dealers' shops.

For the club members who completed the course, a tractor driving contest was held at our Fair. Nine (9) club members entered this event and the Junior and Senior winners were awarded a trophy.

Last year's winner of the tractor contest represented the county in the District Operators' Contest this year. This contestant placed seventh in the District.

4. Electric Projects

There were ninety two (92) club members enrolled in the Unit I and Unit II phases of the Electric project. Of this number, eighty (80) completed their project and made approximately 320 articles.

This project has worked well with rural non-farms and urban club members. Also, it is an excellent supplementary project for farm youth.

The Agent has received full support in this project from the local power company. Together, we planned all-day workshops and every club member attended at least two of these workshops. In the workshops, training was given which would enable the club members to build and maintain the electrical equipment found in their homes.

At the regular monthly 4-H Club meetings, the club members made at least one article, such as a lamp, under the supervision of the Agent. At the meetings, club members also gave talks and demonstrations on their projects to the club or class.

At the completion of the project, the record books and work were judged and the boy and girl winners represented the county at the State 4-H Electric Congress.

5. Safety Project

The Safety Project was carried by six (6) club members and completed by five (5). This was a supplementary project to other projects and certainly made club members safety conscious. In the club meetings, safety demonstrations were given by the club members.

6. Looking Your Best Project

In one club, six (6) boys enrolled in this project and all six (6) completed the project. This club is in a small county school and the club members were interested in improving their clothes and caring for themselves. The school principal worked close with the Agent on the project and it was used as a school project. At the end of the year, we could see the results of the project as the club members had improved their posture and developed self-confidence.

7. Cron, Garden, Poultry, Entomology, and Forestry Projects

During the current year, these projects have played a minor role in our county 4-H Club program. There were seven (7) club members enrolled in these projects and there were six (6) of this number completing their project. The majority of the club members completing exhibited some phase of their project at the Fauquier Junior Fair.

8. Junior Leadership

There were seven (7) club members participating in the Leadership Project and all seven (7) completed the project. These junior leaders took part in both project and county activities, such as; the tractor maintenance project; beef project; dairy project; recreation; 4-H Camp; 4-H Short Course; 4-H County Picnic; 4-H Junior Fair, and 4-H County Council. They visited younger club members and helped them with their record books and fitting and showmanship problems.

In evaluating the 4-H Club Work accomplished in the county this year, the Agent feels that a most successful job has been done. The number of project completions is higher than it has ever been and most of the club members are learning by doing the work which is required. In making the program successful, we used our 4-H Club meetings; personal visits by the Agent and Volunteer Leaders; 4-H County Council; result demonstrations; public programs; radio broadcasts; newspapers to include local success stories; 4-H Yearbook; 4-H Judging training contests; specialists; socials, and church programs. Certain phases of the program were successful through the cooperation of local businesses; banks; machinery dealers, and power companies.

For the coming year, new club members must and have been enrolled. Now that our project completions are up, we can start to expand our club program. There is a need for an Honor Club, and we will work to reorganize ours. An effort will be made to secure and train more leaders in order that we can continue to give project instruction in small groups.

VII. COOPERATION WITH OTHER GOVERNMENT AGENCIES

During the current year, the Agent has cooperated with the following Government Agencies by keeping informed of their programs and passing this information on to farmers and others through personal contact, newspaper and radio:

A. Agricultural Stabilization and Conservation Service

1. Met regularly with the County Committee as an ex-officio member in conducting the program and recommending changes in program operations and practices which would make the program more effective.
2. Headed the County Election Board to select Community Election Boards through which nominees are selected from which farmers elect community and county committeemen.
3. Made lime and fertilizer recommendations for practices requiring soil analyses.
4. Assisted the County ASC Committee in establishing Production Indexes for thirty six (36) farms signed up under the 1959 Soil Bank Conservation Reserve.

B. Farmers Home Administration

Advised with the workers and Local FHA Committee on farmers eligible to participate in the program. Recommended to State Office names of farmers who were capable of serving on the FHA Committee.

C. State Department of Agriculture

1. Secured Division of Markets personnel to get livestock scales checked.
2. Sent in samples of seed for germination test and weed seed content.
3. Sent in samples of hay and silage for protein and TDN analyses.
4. Secured livestock graders for on-the-farm cattle grading demonstration.
5. Advised farmers of analyses reports on commercial feeds, seeds, and fertilizer, etc.
6. Secured Division of Markets representative to advise commercial egg producer on grading and marketing.