

## POULTRY

## PLAN OF WORK

For

Calendar Year 1958

Major phases of project or subdivisions of project covered	Name of Worker*	Percentage of time devoted to entire project by each worker		
		PERCENT	MONTHS	DAYS
Poultry Schools & Tours	Bragg & Ringrose	11	10	
Work with County Poultry Committees	Bragg & Ringrose	6	6	
Agent & Leader Training	Bragg, Ringrose & Burtner	5	5	5
Commercial Egg Program	B. D. Bragg	38		
Broiler Program	A. T. Ringrose		26	
Turkey Program	Ringrose & Bragg	14	20	
4-H Activities	Burtner, Ringrose & Bragg	3	3	75
Miscellaneous:	Bragg, Ringrose & Burtner	23	20	20
Work with Pol. Organizations				
Farm & Home Development				
Inspectors Schools, etc.				
Prep. Subject Matter, etc.				

Date submitted: December 31, 1957Signed: Penwell D. Bragg

Project Leader

Date approved: \_\_\_\_\_ 1958

Signed: \_\_\_\_\_

Head of Department

Date approved: January 8, 1958Signed: W. H. [Signature]

State Director of Extension

Date approved: 2-26- 1958Signed: Olle FergusonAdministrator, Federal Extension Work  
U. S. Department of Agriculture

\* If phases of project are divided between two or more workers, indicate assignment to each.

## II. ANALYSIS OF THE GENERAL SITUATION

Poultry economics for 1971 to 1974 of the total value of all agricultural production in Virginia. It is estimated that in 1957 the gross farm income from broilers, farm chickens, turkeys, and eggs will amount to about \$92,000,000. In recent years, the number of broilers produced in Virginia has been rapidly increasing although not as fast as in some other states and with one or two exceptional years has been on a decrease each year in the total number of turkeys produced in the state. However, the number of laying hens in the state has been decreasing much rapidly up until this year when this downward trend appears to have been checked and an increase noted in the number of layers in the state compared to 1956.

The 1954 Census of Agriculture listed 5,210 or 7.4% of the 70,200 commercial farms (those selling at least \$1,200 worth of products) as poultry farms. Of all the 136,414 farms reported by the census, 3.1% sold broilers, 14.8% sold other chickens, 30.8% sold eggs, and 4.1% sold turkeys. As can be noted, these census figures indicate that only a relatively small proportion of farms, especially those classified as commercial, raise or sell any substantial volume of poultry or poultry products. According to reports from the Agricultural Economics Department, the average sales per farm selling eggs was about 13 dozen eggs per week for broilers, 19,114 per year, and for other chickens, 125 per year with the average number of turkeys raised per farm reporting amounting to 1920. Poultry is becoming more of a specialized business and the number of small farm flocks in the state are decreasing rapidly. Due to recent cost price increases, many poultry producers are undergoing financial difficulties and with their narrow margins of profit in all segments of the poultry business, it is reasonable to expect a trend toward larger and fewer enterprises with greater use of labor saving devices and equipment.

Indications are that the per capita consumption of chickens will be up about 2%, the per capita consumption of turkeys up about 12% and the per capita consumption of eggs down about 2% in 1957. Preliminary estimates are that each person in the United States will consume about 140 eggs, 23.3 pounds of chicken and 5.8 pounds of turkey during this past year.

**Key:** Virginia flocks ensure produce only about 2/3 of the eggs that are consumed within the state and it is estimated that about two million more layers are needed in order to supply this local consumer demand. According to a survey made by Paul Albert, of the Virginia Division of Marketing, of 41 egg dealers in seven different market handling 59,600 cases of eggs a week, one

out of every seven eggs wholesaled in these local or nearby markets came from out of the state. In other words, Virginia is supplying only about 15% of the eggs handled by these large wholesale companies. The bulk of the eggs coming to these dealers arrive in truck loads from Pennsylvania, New York, New Jersey and the mid-western states. According to Mr. Abbey, Virginia producers have lost these valuable markets because they are not producing the kind of eggs or the volume of eggs needed. These wholesalers get eggs from the places that can give them the volume and quality that they want. Up until this year, laying flocks in Virginia have averaged only about 60 hens per flock, which is too small for efficient production or marketing. Too many eggs are being put on the market in the spring and not enough in the fall, and these eggs in many instances are of variable quality with the cost of assembly running high. An effort is, therefore, being made to encourage larger flocks, uniform year around production and the right care and management with handling and assembly to maintain quality and reduce cost. Although the average number of eggs laid per bird in Virginia has increased from about 155 in 1946 to about 162 in 1956 and this year may be up to about 185, the production per hen in Virginia will probably still be 10 to 14 eggs less than the average for the nation as a whole. Several feed companies are making incentive contractual arrangements with producers for the production of quality eggs in quantity. This together with egg production and marketing improvement efforts of educational workers and the Virginia Egg Council is bringing about increased grower interest and we hope a rapid expansion and improvement of our commercial egg industry.

Indications are that we will have about 5% fewer potential layers on hand in the United States on January 1, 1958 compared to January 1, 1957. Total egg production in the United States the first half of this coming year will, therefore, probably be slightly below the first half of 1957 and egg producers will probably find themselves in a more favorable position, at least the first half of 1958, than they were in 1957. This coming year egg production in Virginia will probably show a substantial increase over previous years and local producers will probably put more emphasis on quality and attempt to supply a larger share of the eggs reaching Virginia markets.

Turkeys: Preliminary figures indicate that approximately 5% more turkeys were raised in Virginia in 1957 than in 1956 with heavier down a little and the lights up enough to show an overall increase. It is estimated that about six million seven hundred and ninety-two thousand turkeys will have been raised in the state in 1957 and Virginia will probably continue to be the third largest turkey producing state in the nation, a gain in 1957. Indications are that turkey production in Virginia, as well as in the United States, will increase in 1958 in spite of the low prices received this year. Incentive type contracts or feed company owned flocks with hired care-takers may encourage Virginia growers to produce at slightly above 1957 levels. More attention may be given to confinement raising to combat losses due to storm and predatory animals and certain diseases, and increase use of bulk feed and bulk feed handling equipment

for turkeys, and will do for layers and broilers, will probably be noticed.

**Broilers:** Broiler production in Virginia has increased rapidly in recent years, as follows:

Year	Millions Produced
1954	37,000,000
1955	55,000,000
1956	62,000,000
1957	65,000,000 (estimated)

Broiler production in 1958 will be up slightly from the record 1957 level. Impulsion by a smaller number of volume growers will more than offset the reduction in numbers made by growers of small flocks or those getting because of disappointing returns. The future of broiler production looks good, for the efficient operator. The trend toward increased size of operations, automatic equipment and quality control is likely to continue in 1958. Integration of hatching, growing and/or processing operations will continue.

The New Poultry Products Inspection Act will begin operation in 1958. It will place added emphasis on the quality of broilers produced. Processors will be more particular in the quality of broiler flocks purchased and will discriminate against any flocks that show presence of disease, improper feeding or poor feathering. They will also be more particular when they remove the flock from the broiler house and will cull and discard all nests or poorly feathered birds. They will not remove all birds from houses so summarily. The small flock broiler grower (3,000 broil flocks) will disappear because of unprofitableness due to state, may will be forced to integrate or discontinue.

Recent statistics show that in 1957 broilers contributed over \$40,000,000 to the farm income. A rap in agricultural income showing the important broiler producing counties in Virginia. A review of this map shows that there are 20 counties which had broiler sales of broilers from \$100,000 to \$7,536,000. These 20 important counties the major areas in which broilers are grown in Virginia. In 10 of these counties, only \$100,000 to \$400,000 broilers were produced. Five counties produced from one half to one million broilers in broilers and five counties produced from one million to seven and one-half million dollars worth of broilers.

Virginia now produces about 5% of the nation's broilers and ranks in eighth place among the states in broiler production. The top 100 counties in the United States produce 67% of the total broilers in the United States and Virginia had 6% of these top 100 counties.

The great expansion in production of commercial broilers is one of the outstanding phenomena of recent agricultural history. Virginia is keeping pace with broiler expansion throughout the nation. Although, there are some states which have had a more rapid expansion.

Production problems that confront broiler producers involve economic choices. The short life cycle and the technical limitations in broiler production impose special conditions. From 95% to 97% of all broiler production in Virginia is financed by the feed manufacturer or dealer and others, not farmers. Therefore, many of the economic choices or decisions are not necessarily made by the broiler growers on the farm, but are made by the financier. The major decision that a broiler grower makes on the farm is the decision with whom will he contract for financing of broilers. The strain of chicks, the feed, the medication and vaccination program and the time of selling, rest generally with the contractor and the grower has very little to do with determining these decisions. These facts have made for the development of a strong broiler industry in Virginia and is true of all other broiler producing areas in the United States.

Because of the nature of the development of broiler production in recent years through financing by major feed companies and/or others, the field service men of these organizations now make the management programs and practices used by broiler growers under contract with the company. The county agent, therefore, has been omitted from this picture and has not been able to recommend practices or encourage better management among growers. He, therefore, has lost confidence and has not been able to keep abreast of new developments. Therefore, a major emphasis of the Extension work must be directed to the one who holds the purse strings, namely the broiler financier. However, it is also necessary for Extension to give careful consideration to determine and interpret to the broiler grower his equitable return under contract financing and to evaluate all practices of management, feeding, etc. to maintain current and future development of the broiler industry.

Broiler production is becoming more efficient. Improved breeding, better feeding and reduction of mortality have gone hand in hand toward these goals. For example: in 1935-1939 it took 4.20 lb. of feed/lb. of broiler  
" 1940-1954 " " 3.14 lb. of feed/lb. of broiler  
" 1957 " " 2.44 lb. of feed/lb. of broiler

This is a 25% improvement in feed efficiency in 15 years from 1935-1939 to 1950-1954, but in last three years through 1957, another 10% improvement in feed efficiency in broiler ration has been gained by high energy and high fat rations. In 1954, production costs of broilers was approximately 24 cents per pound. Now in 1957 production costs are down to 17 or 18 cents per pound of broiler. This has been brought about primarily by 10% improvement in feed efficiency, but increased inherited growth rate also played an important part. One would naturally ask how efficient can it be, but there is no indication that

a stopping point has been reached.

Technical improvements arising from recent research in nutrition and preventive drugs and developments at broiler breeding farms indicate that more improvements in efficiency are coming.

**Personnel:** Dr. C. H. Howe, Professor of Poultry Husbandry, University of Maine, will become the new head of the V.P.I. Poultry Department to direct the activities of the research, extension service and resident teaching staff, February 1. Dr. A. T. Ringrose, who was employed in September, 1957, will be responsible for the broiler and nutritional projects and about half of the turkey work. Denver D. Noyes will be responsible for the commercial egg program, most of the work with county poultry committees and poultry organizations and will assist with the turkey program. E. H. Burton will continue to carry on the Junior Program until about September 1, 1958 when he plans to take a leave of absence to do work towards advanced degree. All specialists will assist with the carrying on of poultry schools, agent and leader training programs and the various miscellaneous activities as well as give assistance to each other whenever it is needed.

In thinking about the Poultry Extension Program of Work for 1958, it was decided it would be helpful if the specialist would contact the district and county extension workers and the V.P.I. Poultry Committee, made up of representatives from the poultry industry in the state, to get suggestions as to some of the things that should be worked on during the year. The suggestions received through these conferences and personal contacts have been given careful consideration in deciding upon this Plan of Work for 1958.

Each specialist responsible for a certain phase of the Poultry Extension Program, has prepared his particular section which is coordinated in this Plan of Work.

### III. MAJOR PROGRAMS

#### A. Adult Phase of Program:

1. To increase the county agents interest in poultry and keep him up to date on poultry production and marketing practices.
2. To find time to review and keep up to date on poultry literature and analyze it in such a way that the most practical recommendations can be given to agents and growers.
3. To maintain in the mind of flock owners the importance of good management practices and the need for personal attention to details regarding the amount of mechanization.

4. To improve disease control programs so as to reduce mortality in turkeys, layers and broilers.
5. To lower poultry and egg production costs through use of improved stock and better feeding and management practices.
6. To bring about more efficient assembly, processing, packaging and marketing of poultry and eggs in the state.
7. The acquainting of more people with poultry and egg quality standards and the increasing of consumer demand for more high quality poultry and eggs.
8. To improve the handling and movement of poultry from farms to processing plants.
9. To demonstrate and interpret to broiler, turkey, and egg producers what should be equitable returns under contract financing and package deals.

#### B. Junior Phase of Program

1. How to counteract the rapid turnover in personnel and the lack of poultry information and interest among workers carrying on county club programs.
2. How to secure adequate assistance from local 4-H club leaders and poultry project leaders.
3. How to maintain a high project work standards.
4. How to compete with non-basic agricultural projects which require less time, less expense and little or no risk on the part of club members, their parents or others concerned.
5. Finding ways, means and time to do:
  - a. Adequate planning, particularly at the local level.
  - b. Holding instructional periods to present subject matter to new agents, leaders and club members.
6. How to better adjust the junior work to the poultry trends. With poultry going big business and being dominated by fewer and fewer leaders annually, unless 4-H poultry work were hazardous and less

appealing to 4-H members and their parents because of the higher risk they have to take with smaller units. These small units yield less and less profits.

IV. WORK TO BE DONE AND METHODS OF PROCEDURE

Project or Activity	Results	Goals
	1957	1958
1. Poultry Schools and Tours (No.)	20	20
2. Work with County Poultry Committee (No. of counties receiving this type of assistance)	18	13
3. Agent and Leader Training (No. Mtgs.)		8
4. Commercial Egg Program		
(a) Increase in number of layers,		Work with (a) 21
(b) Increase in egg production per hen,		50 growers (b) 4 eggs/bird
(c) Increase in percent of Grade A eggs sold, through Federal State Grading Plants.)		in 8 counties (c) 31
5. Broiler Program		(a) 31
(a) Increased feed efficiency,		(b) 21
(b) Increased rate of growth,		(c) 11
(c) Reduce broiler mortality,		(d) 5% save up to 1b.
(d) Reduction of down grading in movement of poultry from farm to plant.)		
6. Turkey Program		(a) 20 - 21
(a) No. growers worked with and reduction in mortality,		(b) 11
(b) Increase feed efficiency		
7. Junior Extension Poultry Program (see write-up of 4-H work)		
8. Miscellaneous:		
a. Work with poultry organizations including out of state meetings.		
b. Record of Performance.		
c. Fairs and Home Development.		
d. Preparation of subject matter material, news articles, leaflets, circulars, letters, radio talks, etc.		
e. Assistance with Poultry Inspector Schools, F.F.A. Rally, or other such activities.		

1. County or Area Schools and Tours: Last year 20 county or area poultry schools were held in the state as part of the overall extension program and it is anticipated that about the same number will be conducted in 1958. In most instances

these schools will be sponsored by a county poultry committee, but a few may come about through efforts of the individual county worker after consultation with certain leading producers in the county. Some of these counties, especially those in the more important poultry producing areas may also ask for assistance with tours during the summer. Three or four of the schools will probably be conducted on an area basis and the other as an individual county activity. The counties around Gloucester will sponsor an area school at Urbana in January and later in the year counties around Winchester, Roanoke and Orange may also join together to conduct an area poultry school.

People from Animal Pathology, Agricultural Economics and Agricultural Engineering Departments at the college will appear on the program with extension poultry specialists at several of the schools.

A letter from poultry specialists was sent out to county agents in November, suggesting topics and available speakers for poultry schools and possibly due to this, the program and dates for a few schools have already been decided upon. Cost raising efficiencies in egg and broiler production, financing, disease control, housing and ventilation, outlook in production, egg, broiler and turkey cost estimates, the state poultry club program, and the care and handling of eggs to preserve quality will be principal topics discussed at these meetings.

2. Work with County Poultry Committees: There were at least 28 active county poultry committees in the state in 1937, compared to about 14 in 1935. These committees help with the extension personnel and helped to represent the "grass root" thinking in working out a program of work for the year. It is felt that these committees help to develop a better poultry program for the county and bring about more effective work on key subjects and that they help guide agents efforts into channels that bring best results as well as stimulate greater interest in the county poultry program. Extension Poultry specialists will, therefore, help organize new county poultry committees in some of the counties where they appear to be needed and will assist these committees and the county extension workers with the planning of poultry programs in 18 or more counties.

3. Agent and Laymen Training: Most county extension workers in the state have had little or no formal poultry training. For several years, certain members of the extension poultry staff have, therefore, worked for a poultry short course at the college or a series of district poultry training meetings which county agents could attend. Food service men have become increasingly important in passing on poultry subject matter information to growers and with the decrease in the number of farm flocks, the poultry leaders in Home Demonstration clubs have become less effective and fewer in number.

It is good to report that poultry training meetings have already been arranged for county extension workers in two districts of the state where poultry is a major source of farm income. Two poultry trainings for agents are to be held

in the West Central District and three in the Northern District of the state in January. It is also hoped that with the cooperation of the State Poultry Federation, the Poultry Industry and the State Division of Markets that two or three schools can be held for food service men. In addition two or three training meetings (in response to requests) will probably be held for poultry leaders in Home Demonstration Clubs.

6. Commercial Egg Program: Poultry specialists will join with the Virginia Egg Council, Feed Interests and the State Division of Markets in a program to help develop and improve the production and marketing of eggs from commercial sized units. The purpose of this program is to encourage economical sized flocks and the use of better management practices in both production and marketing. In addition to discussing egg production topics at county poultry schools and the writing of news articles about every other month for the Virginia Poultryman, and the carrying of articles on egg production in the monthly Extension Poultry News Letter, D. E. Huggs will work with the Virginia Egg Council and the State Division of Markets to prepare and print an attractive folder on recommendations for maintaining egg quality. Plans are for these folders to be distributed to producers, county extension workers, feed dealers, egg grading managers and hatcherymen.

Encouragement and assistance will be given county agents with the holding of a quality egg breakfast, luncheon, or dinner in cooperation with civic clubs to help acquaint dealers and consumers with egg quality standards. Continued assistance will be given the State Division of Markets with flock inspector and egg grader schools, and some field trials or demonstrations will probably be conducted on the drying of shell eggs to help prolong shelf life or preserve quality.

Several commercial egg producers who are willing to keep accurate records will be selected in each of three or four different areas of the state in cooperation with the county agents and county poultry committees. These flock owners will be asked to send in to the state poultry specialists through their county extension office, cost and performance records on their flocks once each month. These records will be analyzed with the help of Harold Walker and/or other members of the Agricultural Economics Department in hopes that some correct realistic data can be obtained on egg production costs. The poultry specialists or county agent will visit and advise with these flock owners at least three or four times during the year concerning their record keeping and poultry management practices. In addition to this, an effort will be made to contact the managers of most of the larger Federal State Egg Grading Plants to find out what producers may need help in bringing up their egg quality and as many visits as possible will be made with county agents to these farms to help correct mistakes. Talks will also be made to a number of poultry groups on egg production or marketing topics and probably some special tours made in connection with the carrying of the program.

72

5. Broiler Program: Twenty counties produce 90% of all broilers grown in Virginia (see map). Therefore, extension work on broiler production will generally be confined to these counties with major emphasis on the top 10 counties in which 76% of all broilers are produced. As mentioned under discussion of the situation, the rapid development of broiler production by contract financing with its inherent serviceman program has replaced many services to the broiler grower formerly performed by the county agent. However, he should not lose confidence in himself because there is greater need than ever for his competence to evaluate production methods and management practices to coordinate and supplement practices recommended by feed companies and servicemen. Who is going to determine and advise the broiler grower regarding his equitable share under contract financing? If he has no source of council or advice, he has little or no bargaining power. Formerly when broiler contracts were made on a 90/10 basis, the price of feed, chicks and all cash costs of broiler production were of major concern to the broiler grower when deciding upon a contract. Now the broiler contract is based upon feed efficiency and the cash costs of feed, chicks, fuel, etc. are of no concern to broiler growers under these contracts, but simply to receive a fair return for his labor and use of land, broiler house and equipment. A major problem then is to supply more training and assistance to the agent in order that he can keep abreast of broiler production methods in his county. He, then, can better evaluate management practices and contractual features in order to coordinate and supplement practices recommended by feed companies and servicemen.

The first endeavor will be to give the county agent greater confidence in the subject matter of broiler production in order to increase his interest. To point out to him ways in which he can serve the interests of the broiler grower and also of the contractor. This will be done in the following ways:

- a. Frequent personal contacts with agents and with the key growers and contractors.
- b. Arrange with selected contractors (at least 5) to obtain specific information on growth and mortality rates, feed efficiencies and strain of chicks regularly each month or bi-monthly for immediate analysis by agent and poultry specialist; analysis to be returned to contractor with suggested improvement. Summaries of these to be publicized and used by agent as a basis for establishing county goals for other producers.
- c. Supply agent with ample written material based on sound principles and research data for their use and/or dissemination.
- d. Encourage development and use of county broiler committees and key leaders among growers and contractors.

- e. Develop broiler servicemen's round table with agent and specialists to lead the program.

The feed manufacturer obtains much of his know-how for feed formulation from major research conducted at academic and commercial institutions, through national meetings and direct contact with these research centers and commercial field representatives. Their decisions concerning adaptation of research data and choice of products for incorporation in feed formulation determines the quality of their feed and thus the efficiency of broiler production. Such research information is available to specialists for evaluation and interpretation to feed manufacturers, agents and producers.

Contacts will be made with major feed manufacturers in principle broiler areas to determine sources they usually look to for research data. What national meetings they attend and what research centers they contact and the commercial products they use in the feed formulation. Thus through these contacts, practices specified to the contract broiler growers will be determined and evaluated. These means will also make it possible to become familiar with their operations and be prepared to evaluate and recommend improved practices or ideas when needed. It is planned also to obtain from many of these broiler contractors their actual broiler growing records in terms of market weight, feed conversion, mortality and type of broiler chicks in order to analyze them on the spot or to bring back to office for analysis and report back. Such a procedure will serve to give the contractor an impartial evaluation of his operation and serve to keep the agents and specialist informed of progress being made throughout the area.

The hatcheryman is a multiplier of breeding stock. He obtains such stock from specialized breeding farms, grows it out and makes the matings recommended by sources of his stock. This stock then serves as source for production of broiler chicks. The evaluation of strains and crosses for broiler production are his major concern because when he has decided on the source of stock his program is then set for at least 18 months.

The specialist can evaluate research information and data from broiler or layer tests for interpretation to hatcherymen to enable him to make his decisions. The use of improved breeding stock for broiler chicks has a great bearing upon improved efficiency in broilers grown.

Poultry processor purchases broilers, turkeys and fowl at the farm and moves them from farm to processing plant.

Rough and careless handling in movement of poultry to and through the plant causes downgrading, a cost of plant processing.

34  
72

Determination of causes of downgrading in this movement in order to reduce or eliminate it, can reduce plant operating costs and increase returns to producers and/or lower price to consumer.

The method to accomplish this will be through establishing contacts with processing plants, review and determine the practices used in moving poultry from farm to and through the processing plant, to determine the amount of downgrading occurring. Then established recommendations for reduction of rough handling and better loading facilities will be made to reduce such downgrading. This can save the processor nearly 4¢ per pound on poultry processed and result in savings to industry.

6. Turkey Program: The turkey program will be carried jointly by D. D. Bragg and A. T. Ringrose.

Fourteen counties produce 90% of all turkeys grown in Virginia. Therefore, extension work on turkey production will generally be confined to these counties with major emphasis on the top 6 counties in which 79% of all turkeys are produced. The 6 top turkey producing counties are also among the 10 top broiler producing counties with the exception of Greene and Frederick Counties. The situation in the relation of the county agent and the turkey producers is similar to that mentioned concerning broilers. Consequently, the method of approach in the turkey work will be the same as that mentioned for broilers.

The work of D. D. Bragg will be aimed mainly toward the reduction of mortality in turkey flocks. In cooperation with county workers 20 growers who have had a relatively high mortality in their flocks during past years will be selected to receive special help. These growers will be visited and given advice concerning management, sanitation and disease prevention practices, as well as, suggestions made on disease treatments after consultation with veterinarians at state or college diagnostic laboratories. In some instances, these growers will also be given help in the construction of better breeding and range shelter facilities.

With the assistance of Dr. W. E. Gross, a college veterinarian, a review will also be made of recent poultry disease research and usable information sent to county agents and growers in special letters or the form of news articles and radio broadcasts. A disease prevention leaflet will be prepared which will contain subject matter applicable to both turkeys and chickens based on procedures for vaccination and medication recommended by the poultry pathology department.

7. 4-H Club Work: E. I. Burtner, the 4-H Poultry Club Specialist, will have general supervision of the 4-H activities in the state during the year. His analysis of the situation and detailed plan for carrying on poultry club activities is given on the following pages. Each of the other poultry specialists, however, plan to devote some time to 4-H and other junior poultry activities. All poultry specialists will assist with poultry instructions at the 4-H Short Course and with judging activities at certain 4-H fairs or achievement days.

Analysis of our 4-H Poultry Program: The participation in 4-H poultry work continued to decline in 1957. However, the rate of decline has slowed down. 2,418 4-H members enrolled in 4-H poultry work and 1,450 completed their projects. The average size of all projects was 155.2. We are glad to see that there is an upswing in the size of projects. The quality of project work being done in poultry is superior to past years, and the demonstrations carried by 4-H members are having a greater influence on their communities.

Because of the continued broadening of the overall 4-H program, it becomes more difficult to work out training and instructional activities with the county personnel in any one project. In 1956, training opportunities for boys and girls in subject matter was well below par to the standards of previous years. We did score a large number of projects in the field dealing with our Junior Broiler Growers Project and the Sears-Roebuck Pullet Chain, as well as, a few special projects. We also gave quite a good number of training meetings in poultry judging, egg grading and demonstrations. The total of these meetings was 33 and 197 club members received training. The actual number subject matter meetings were not as great as we would like to have had them.

Our 4-H awards program is as good as anything I have found in the east. Thirteen 4-H poultry members received out of state trips in 1957 and eighteen 4-H members received a free trip to our State Poultry Convention. Virginia is the only state that sends two teams per year out to interstate poultry competition. The total cash awards for poultry contests and achievement programs now exceeds \$5,500 per year.

Our poultry industry states that it is very short of trained young men and women to fill positions in the industry requiring trained personnel to fill these positions. At the present time, we have fourteen students at our land grant college majoring in poultry. This will be far short of the number required to fill all professional jobs in connection with poultry industry.

Work to be Done and Methods of Procedure:Project or Activity

	<u>Results</u> <u>1957</u>	<u>Goals</u> <u>1958</u>
1. Instruction at 4-H poultry schools, special county 4-H get togethers, clubs, camps and short course meetings. (No. of meetings at which the 4-H specialists plan to give poultry instructions.)	11	25
2. Visiting 4-H result demonstration projects and scoring them in connection with county 4-H field day and 4-H special projects and Junior Broiler Growers Contests.	196	200
3. Poultry Judging, Egg Grading and Demonstration Contests. (No. of counties giving club members training for these contests and the number of meetings conducted by the specialist.)	24 (31)	30 (30)
4. Training meetings for co-workers and/or local leaders.	1	5
5. Animated newsletter. (No. copies distributed.)	3,370	3,300
6. Special projects and contests. a. Special brooding and rearing or breeding flock project. (No. accounted.)	8	12
b. Junior Broiler Growers Contest. (No. counties participating.)	14	15
c. State Poultry Achievement Contest. (No. of club members entering achievement records in state competition.)	29	35
7. Miscellaneous Poultry Activities:		
a. Fairs, conferences, program planning activities, committee work, help with farm and home development program, etc. (No. of specialists days.)	50	50

Project or Activity

Results

Goals

1957

1958

b. General correspondence, reports, preparation of teaching material, radio programs, news articles and other office routine. (No. of specialists days.)

60

60

Method of Procedure:

1. Instruction at 4-H Poultry Schools, Special County 4-H Get Togethers, Club Camp and Short Course Meetings: The 4-H specialist will assist county personnel in subject matter instruction at four or five camps, 4-H get togethers, five to seven 4-H schools, and club meetings. He expects to have the privilege of giving instructions to at least two 4-H camps and at state short course. The type of instruction will deal with approved production and marketing practices that can most benefit our 4-H members and their families. He will use flannel board material, slides, charts, demonstrations and live birds and eggs will be also used to the best advantage. The instructions will be divided up between class room and field work. We hope to implement as many county tours with our 4-H poultry members as possible to point out the good and bad practices of these club members. We will ask for assistance from some of our other specialists, our county personnel and have some of our adult and junior leaders to give part of the instruction.

2. County 4-H Poultry Field Days and the Visiting and Scoring of Projects: A number of our contest will call for home visits to score projects of the individual club members. Specialists in charge of 4-H work will be expected to do a great deal of this. In fact, he plans at the moment to score all the Sears Projects and as many of the Junior Broiler Growers Projects as time will permit. He hopes to do most of this scoring in the summer time when children are out of school and we can work with them individually and instruct them how they might improve their projects and to encourage them in fine practices that they are carrying. In addition to the visits mentioned above, we would like to visit in other counties where they do not have a special program to become better acquainted with the type of work there and to help the county personnel strengthen their program.

3. Poultry Judging and Demonstration Activities: Contests such as poultry judging, egg grading and demonstrations help very much to motivate boys and girls willingness to learn new practices. Therefore, the specialists will take as much time as required and as many meetings as necessary to train boys and girls in these contests. It is hoped that we can have two to three counties working together in these traveling sessions so the specialists time will be better utilized. For this reason, we are not figuring more than one meeting

per county, even though we may instruct club members from a county more than one time. In these meetings we will attempt to teach the basic poultry subject matter on culling, breeding, selection, breed identification, egg quality as to U. S. Grades and live and dressed market birds quality as to U. S. standard grades. During our meetings on demonstrations we will try to demonstrate how best to give a demonstration and have boys and girls prepare a simple demonstration and give it. We feel that demonstrations are one of the most effective tools to teach subject matter.

4. Training Meetings for County Workers and/or Local Leaders: We hope to attack this problem very vigorously this year. We got very little done on it last year and yet it is definitely one of our big problems. We plan to try to hold at least 5 training meetings this year. At these meetings, we will emphasize the following:

1. What the total opportunities for 4-H members are.
2. Training in subject matter so that the leaders will be able to assist the 4-H members with their work.
3. Suggestions on how they can help 4-H members to take advantage of the awards program.

5. Animated Poultry Newsletter: Specialists will prepare eleven animated newsletters for county agents to distribute to 4-H poultry members and others. These letters will deal with subject matter and reports on 4-H club activities.

6. Special Projects and Challenges: These contests are set-up for the purpose of encouraging club members to do a good job with poultry projects. They differ from other projects in that they definitely have a specific sponsor and a local contest for the given county or immediate area, depending upon the nature of the program. We like to encourage this type of program because we have more control over it than the average 4-H project. In order to be selected for these projects, club members must meet certain requirements and perform certain duties. The fact that there is a special award for them on a local basis, it helps a child to feel important and want to do a better job. In addition to this, industry is pulled into the program and have a very specific roll to play in such projects. In many cases they will help supervise their project and off they go with us when we score the projects.

Our Junior Broiler Grower Contest is one of the best examples of local sponsorship that we have. It has the strongest support of any of this type of project. The reason for this is that it cuts across the entire industry involving the hatcheryman, the feed dealer, the financier, the processor and other agricultural workers. This specialist feels that when this many people can be pulled together on a project, that the maximum amount of knowledge will be gained.

The specialist will work quite closely with agents to encourage them to have their better poultry boys and girls to enter achievement record books for state competition by April 1. We plan to send out one letter relative to this subject and then call it to the attention of agents as we go around through the state. We feel that we need around 40 achievement books to adequately award all trips that are available to 4-H members without having to select some of our better poultry judges, demonstrators and egg grading team members.

### 8. Miscellaneous:

a. Work with Poultry Organizations and Out of State Meetings: Cooperation will be given our State Poultry Federation, the Virginia Egg Council, the State Turkey Association, and other such groups. Extension specialists will serve as members of committees or on the boards of directors of all or most of these organizations. News articles will be written at least every other month for publication in the Virginia Poultryman, the official magazine of the State Poultry Federation. Specialists will attend one or more national meetings of his selection as follows: The Southern Agricultural Workers Meeting, Southeastern Poultry and Egg Association Meeting, The National Turkey Federation Meeting, The Fact Finding Conference, The Poultry Science Association Meeting, and The American Poultry and Hatchery Federation Meeting.

b. Preparation of Subject Matter Material, Leaflets, News Articles, Etc.: Plans are to prepare a news article every other month for publication in the Extension Service News, seven or eight radio tapes that are broadcasted over 35 or more stations will be prepared each month and members of the department will probably participate in one or two T.V. broadcasts during the year. In addition to this, a monthly poultry news letter called "Poultry Pellets - Food for Thought for Virginia Poultrymen" will be put out by the Poultry Extension Staff, and it is planned that leaflets on "The Care and Handling of Eggs to Preserve Quality", "Disease Prevention", and "Bulk Feeding" can also be prepared. In addition to this, the 4-H poultry specialist will complete a demonstration hand book, revise the "Brooding and Rearing" record book and write script to go with some 4-H slides.

Recommendations from the Animal Pathology Department will be used in the preparation of the disease leaflet and from the Agricultural Engineering Department in the preparation of the leaflet on bulk feed and feeding equipment.

c. Record of Performance: Record of Performance work has been decreasing in the state and consideration is being given with doing away with it in favor of random sample testing. However, two or three breeders still want to continue to carry on the work in 1958, and it may be necessary for one of the Extension specialists to assist with this project.

d. Farm and Home Development Program: The Farm and Home Development Program is being emphasized in several counties in the state. Poultry specialists will visit quite a few of these farms and give advice concerning poultry production and management practices. Specialists may also be called upon to prepare special written material and/or participate in some meetings pertaining to this work.

e. Assistance with Activities of Other Departments: Poultry specialists will probably assist the State Division of Markets with schools for poultry inspectors and egg graders. A member of the staff will also help with the FFA Rally held at the college in June. The 4-H poultry specialist will work closely with the State 4-H Club Department and will participate in several planning meetings or conferences with them in carrying out the program. In addition poultry extension specialists will coordinate their work and cooperate with specialists in the Agricultural Economics, Agricultural Engineering, Poultry Pathology Departments.

#### V. RESULTS EXPECTED AND METHODS OF MEASUREMENT

A. Adult Work: The carrying through of projects mentioned in this program of work will bring greater poultry knowledge to county agents and increase their confidence in serving the poultry industry. Changing attitudes and action on their part coupled with attitude changes among growers, contractors and servicemen will be a measure of these results. Likewise an increase in size of commercial egg flocks, reduced poultry mortality, improved production and marketing of better quality eggs, and lowered cost of production in broilers will also be measurements of results. Through the junior work and work of county poultry committees and other organizations, better record keeping should also come about and more people become interested in improving the production and marketing of poultry and poultry products.

B. Junior Work: The following results are expected from the Junior Program. (1) There will be no further decrease in poultry enrollment in junior work. (2) Increase in size and quality in project work. (3) An increase in junior and adult poultry leaders. (4) An improvement in efficiency in production and marketing with particularly a better job done in marketing. (5) In our breeding and hearing projects, we hope to get our boys and girls to select higher production bred birds where commercial eggs are concerned and a better meat type bird where meat is concerned.

C. Evaluation of Both Adult and Junior Work: Some ways of evaluating or measuring results will be the increase in number of broilers, turkeys and layers in the state. The average number of eggs produced per hen per year, the increase in the percentage of the number of eggs being marketed as Grade A, as well as, reduction in production costs of turkeys, broilers and layers will also evaluate results. In the junior work, the profit made on projects, the increase in egg production (one dozen per hen in special layer or breeder projects)

the better feed efficiency and better carcass yield, improvement in record keeping and the rating in out of state competition are some of the ways of measuring the results of the training received.

#### VI. PROJECTED PROGRAM NEEDS

In order for Virginia to continue as an important poultry producing state, increased efficiencies are needed in several phases of the production and marketing program. For example, egg producers will have to increase egg production per hen so as to approach or exceed the national average which is twelve to fourteen eggs above the Virginia average at the present time. Broiler growers in the state are finding that producers in other areas due to various reasons are producing more economically. Larger enterprises with the use of bulk feed and feed handling equipment to save labor and use of improved strains or crosses will all be needed. Likewise, considerable work will also have to be done on the care and handling of eggs to maintain quality.

The college will need to continue to work closely with the poultry industry, more students trained in poultry sciences are needed in the state, county workers will continue to need up to date subject matter and the time required to get information from research work to growers should be shortened wherever possible.

There is a great need for a better system of reporting market prices on poultry. In general marketing facilities and organization are at hand, however, the bringing together of buyer and seller is of major concern for the welfare of the industry. Market information on prices is adequately distributed, but frequently such information on prices is not too reliable.

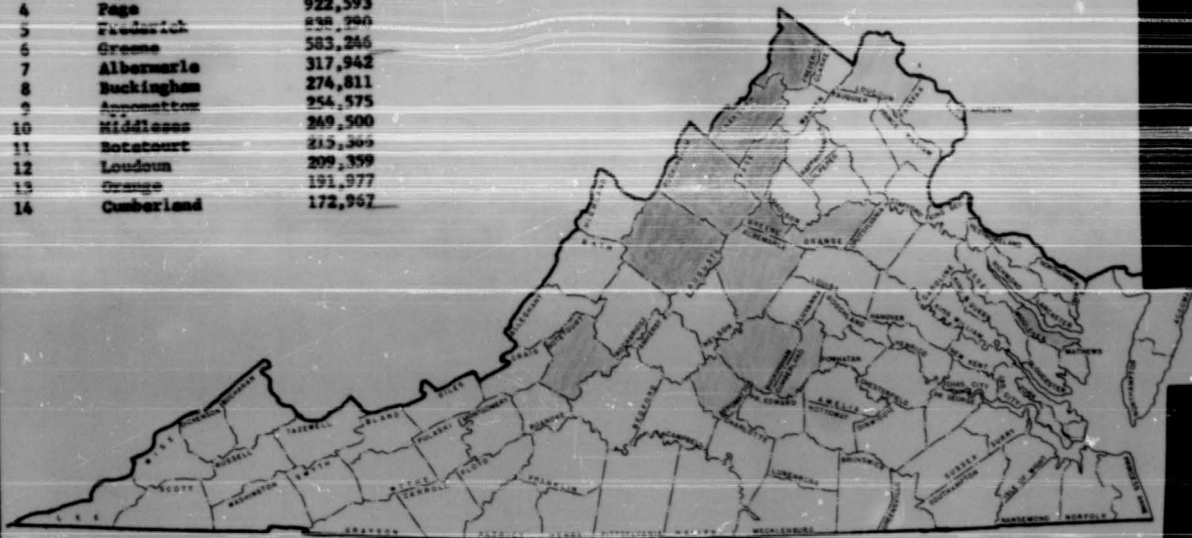
This is recognized as a problem of great importance to the industry. It is thought that auction methods are ways of improving the reliability of market prices. They have been tried and failed, but there must be a way of getting auctions started, so they will succeed. This will require considerable coordinated effort on the part of the industry itself, extension specialists in poultry and economists and State Department of Agriculture.

This will be discussed with several phases of the industry and economists and marketing specialist to this objective.



IMPORTANT TURKEY PRODUCING COUNTIES

<u>Rank</u>	<u>County</u>	<u>Dollar Sales</u> (thousands)
1	Rockingham	8,369,310
2	Shenandoah	2,030,447
3	Augusta	1,387,413
4	Page	922,593
5	Frederick	838,260
6	Greene	583,246
7	Albermarle	317,942
8	Buckingham	274,811
9	Appomattox	254,575
10	Middlesex	249,500
11	Botetourt	213,369
12	Loudoun	209,359
13	Orange	191,977
14	Cumberland	172,967





IMPORTANT BORDER PROVINCING COUNTIES

Rank	County	Roller Sales (Thousands)	
1	Rockingham	7,536	
2	Accomac	2,791	
3	Augusta	1,935	-RED
4	Shenandoah	1,670	
5	King	1,183	
6	Hanover	940	
7	Duchingham	854	
8	Warren	694	
9	Warren	655	-BLUE
10	Westmore	473	74% of 633
11	Cumberland	451	74% of 612
12	Frederick	412	
13	Rockbridge	357	
14	Freshie	349	
15	Warrenton	324	-GREEN
16	Albemarle	301	
17	Warrenton	292	
18	Warrenton	292	
19	Orange	101	
20	Washington	100	99% of 111

State Total - 24,937

