

VIRGINIA AGRICULTURAL EXTENSION SERVICE

Extension Animal Husbandry PLAN OF WORK
(Name of Project)

for

Calendar Year 1959

Major phases of project or subdivisions of project covered	Name of Worker*	Percentage of time devoted to entire project by each worker
Department Head	G. W. Litten	one-third
Project Leader and Beef Cattle Production	C. C. Mast	Full-time
Sheep Production	G. A. Allen, Jr.	Full-time
Swine Production	R. M. Godsey	Full-time
4-H Club Projects	C. R. Cooper	Full-time
Record of Performance	H. H. Dickenson	Full-time

Date submitted: 3/16/59 . 1959 . Signed: C. C. Mast
Project Leader

Date approved: 3/18/59 . 1959 . Signed: G. W. Litten
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Date approved: 3/20 . 1959 . Signed: W. H. Dingler
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Date approved: MAY 4 1959 . 1959 . Signed: Sam Taylor
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* If phases of project are divided between two or more workers, indicate assignment to each.

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PERSONNEL

1. G. W. Litton - Department Head - one-third time general Extension work.
2. G. A. Allen, Jr. - Full-time Sheep Production and Marketing.
3. C. R. Cooper - Full-time 4-H Club Livestock Projects.
4. H. H. Dickenson - Full-time Beef Cattle Record of Performance.
5. Rois M. Godsey - Full-time Swine Production and Marketing.
6. C. C. Mast - Full-time Extension Project Leader and Beef Cattle Production.
7. K. C. Williamson - Full-time Extension Beef Cattle Marketing AMA Project 25-9898.

GENERAL LIVESTOCK PROGRAM

Situation

1. All counties have livestock planning committees to assist in formulating extension programs. Performance of livestock committees varies from excellent to poor.
2. Farm and Home Development work hasn't been assisted as much as would be desirable.

Work To Be Done

1. (a) The specialist staff will send each county agent a list of suggested projects which may be used in solving county problems. The suggestions can be used to stimulate thinking among county committees.
(b) A contest will be started among county agents to encourage better planned livestock programs.
2. (a) Assist county agents with Farm and Home Development problems by helping solve problems as they occur on the farms. Farm visits will be used to the maximum.
(b) Material in Farm and Home Development Handbook will be revised as necessary.

Expected Accomplishments

1. Livestock Planning Committees
(a) All county livestock committees will do a better job of assisting the county agent in formulating livestock programs.

- (b) County agents will re-examine the livestock economy within their counties.
2. (a) We hope to get county extension personnel to use specialist help more on special Farm and Home Development problems.
- (b) The Farm and Home Development Handbook will always have up to date material.

BEEF CATTLE

Situation

1. In 1950 beef cattle made up 40% of the total cattle population. In 1959 beef cattle represent 55% of the total cattle population.
2. Beef cow numbers have decreased slightly in the last three years, but interest in cows is now being renewed.
3. The market for good quality feeder calves will be good in the foreseeable future.
4. The market for yearling feeder steers is gradually moving toward lighter weight cattle and management and production methods have not changed to meet the trend.
5. Beef cattle have improved greatly in conformation, but have not improved in ability to gain, in feed efficiency, or in carcass quality.
6. Virginia has relatively high priced feed and high priced feeder cattle which puts cattle feeders at a disadvantage.
7. Some heavy grass steer producers are at present considering changing their system of production.
8. The Virginia Beef Cattle Improvement Association is now well organized and needs numbers to be more effective.

Major Problems

1. Bulls are not available in quantity of the kind feeder calf producers need, such as fast growers and of good quality.

- 2. Many purebred cows are not capable of producing a bull which will transmit productive qualities to his offspring.
- 3. Too many cows in Virginia are of low quality and not capable of producing a high quality feeder calf.
- 4. A large percentage of our yearling feeder cattle are too heavy for the present demand.
- 5. Too much time is required to feed and care for cattle, both breeding herds and feed lot cattle.
- 6. Some new cattle feeders are starting into business without the necessary feeding knowledge.

Work To Be Done

1. Record of Performance

The Virginia Beef Cattle Improvement Association will be used as a tool to get purebred producers to concentrate on growing bulls that will improve commercial feeder cattle, and to emphasize the importance of cow culling in all commercial herds.

- (a) County agents will be informed of the possibilities of this new method for improving cattle by supplying reports, printed information and interviews.
- (b) Attempts to organize local Beef Cattle Improvement Associations will be made where county livestock committees think feasible.
- (c) All purebred herds and large commercial herds will be asked to participate in a Record of Performance Program through the County Extension Personnel.

- (d) Breeders participating on the R.O.P. Program will be given assistance in interpreting herd records and breeding programs.

2. Work With Cattle Associations

- (a) Purebred cattle associations will be worked with closely to get more of the better kind of bulls produced for the feeder cattle business.
- (b) A bull grading program will be carried out in cooperation with the association.
- (c) The specialist will assist associations with planning various sale programs and field days.

3. Feeder Cattle Production

- (a) Educational programs must be started to get more light weight calves used for stocker steers in the yearling feeder cattle programs.
- (b) County agents will be furnished information on the relative economic merits of light weight cattle to be used in newspaper and radio work.
- (c) Field days, meetings, newspapers and radios will be used to get information to the public about the demands for feeder cattle and methods of producing them.

4. Cattle Feeding

- (a) County agents will be met with and given latest data on feeding cattle.
- (b) Field days, meetings and county tours will be used to spread information on feeding.

(c) Special feeding meetings will be held where county livestock committees request them.

(d) Demonstrations will be given showing use of stilbestrol implants.

5. Management

(a) Work will be done toward getting information to county agents and farmers on improved methods of management, feed preparation and feeding methods.

(b) Field days and tours, meetings, radio and news articles will be used.

Results Expected and Measuring

1. Record of Performance

(a) It is expected that half of the purebred cattle can be enrolled in a Record of Performance Program. This can easily be measured from the BCIA records.

(b) Half of the bulls going into the commercial cattle business will be coming from R.O.P. herds within three years. BCIA records will measure this.

(c) Many large commercial herds will be enrolled in the R.O.P. Program and small herds will feel the effects of the program through tested bulls that will be available. BCIA records will again measure this.

2. Work With Purebred Associations

- (a) By working closely with associations their help will be secured in fostering 4-H Club livestock programs and beef cattle extension programs in general.
- (b) The cattle associations will conduct quality programs of their own if extension gives assistance.
- (c) It will tie all cattle organizations to a common program of cattle improvement.

3. Producing Yearling Feeder Steers

- (a) An influence can be made on the production patterns of feeder cattle to up income on farms.
- (b) Production of this type cattle most likely will increase if promoted and guided in right directions.
- (c) Feeder cattle sale records can measure progress.

4. Cattle Feeding

- (a) County agents will become aware of the possibilities of feeding and will spend more time on feeding projects.
- (b) Cattle feeders will increase as more meetings, field days, and printed matter is directed toward the subject, progress can be measured by surveys.
- (c) Meat packers will assist the Extension Service more in its program as more feeding work gets underway.

5. Management

- (a) Cattlemen will gradually adopt new management programs as they are demonstrated to improve efficiency.

- (b) New equipment will be put to work by cattlemen as soon as it is demonstrated to save labor.
- (c) Changes toward better management will be practically impossible to measure except by observation.

6. Projected Program Needs

- (a) Overhead cost will mount--more information and more research is needed to keep operating cost down.
- (b) Equipment for economical preparation of complex cattle rations is needed.
- (c) More knowledge directed toward increasing feeding efficiency of cattle is needed to make feeding profitable for Virginia feeders.
- (d) Better bred cattle for economical gains, improved feeding efficiency, and equipment that contributes to efficiency and reduced cost will be the trend and need.

SHEEP SITUATION

Commercial Sheep Production

1. Census report show there are a total of 328,000 sheep in Virginia.
2. The Average gross return per ewe is approximately \$20.00 per year.
3. The main source of replacement ewes other than ewe lambs kept on the farm where they are raised are
 - (a) late, low grade ewe lambs sold as yearlings and
 - (b) western yearling ewes
4. Approximately one-third of all commercial lambs are sired by a registered ram.
5. About one-third of the lambs graded in Virginia go into the top grade.
6. About sixty-five percent of the lambs are docked and castrated.
7. Most of the wool is sold through independent county wool pools and through the United Wool Growers' Association.

Purebred Sheep

1. Purebred sheep numbers have remained about the same for several years.
2. Approximately three thousand new rams are needed each year.
3. Very little improvement has been made in purebred rams available to commercial producers in recent years.
4. The Eastern Stud Ram Sale and Bred Ewe Sale provides a place to buy and sell stud quality rams and ewes.

Feeder Lambs

1. The number of lambs being fed has increased considerably in recent years.

2. Death losses are rather high with feeder lambs.
3. A feeder lamb project was started in Augusta County this year with one of the major packers supplying the feeders and paying the farmer for the gain.

Problems

1. More farms need sheep to better balance their present livestock operation and increase their farm income.
2. Income per ewe is reduced on many farms because
 - (a) poor producing ewes
 - (b) low quality rams
 - (c) lack of adequate parasite control measures
 - (d) poor feeding
 - (e) low percentage of adequate docking and castrating
 - (f) foot rot
3. Quality and price of lambs is reduced because of the low percentage of registered rams used.
4. Further research information is needed on handling late, low grade lambs as feeders with particular emphasis on reducing the death rate.

Work To Be Done And Methods Of Procedure

1. Help to acquaint farmers with the earning ability and place for sheep.
2. Encourage more selection in sheep flocks based on production.

3. Help dealers and county groups secure good quality replacement ewes.
4. Management information will be publicized in news articles, radio, meetings, field days and county demonstrations on the following:
 - (a) Internal and external parasite control
 - (b) Proper feeding
 - (c) Proper method and time to dock and castrate
 - (d) Latest methods of foot rot control
5. Assist and encourage purebred breeders to produce the proper kind of rams and assist them in holding commercial ram sales.
6. Work with experiment station in feeder lamb tests.
7. Further investigation of contract lamb feeding.

Results Expected and Methods of Measuring

1. A one percent increase in Virginia Sheep numbers.
2. An increase in the number of sheep producers keeping flock production records.
3. Bring in 10,000 western ewes
4. A three percent increase in the number of farmers following better sheep management practices.
5. Assist purebred breeders in holding 12 commercial ram sales of higher quality rams.
6. At least four lamb feeding tests by the experiment station.
7. Work with contract lamb feeding test of at least 600 lambs in Eastern Virginia.

Results will be measured by census reports, reports from county agents,
and dealers and farm sale records.

HOG SITUATION

Commercial Swine Production

1. Census reports show there are a total of 678,000 hogs in Virginia.
2. Virginia farmers produce approximately 205,000,000 pounds of pork each year that is worth 35 to 50 million dollars. Virginia has a very favorable market, our packers have the capacity to slaughter one-third more hogs and our people consume considerably more than this amount of pork each year.
3. Approximately two-thirds of all pigs ferrowed are not sired by a registered mest-type boar.
4. Swine management and feeding practices are poor on a large number of farms.
5. Approximately 35% of all market hogs are sold on a state graded basis.
6. Confinement feeding of pigs from weaning to market on concrete has increased throughout the state and there continues to be tremendous interest.
7. A source of good quality, thrifty and healthy feeder pigs has been in short supply in Virginia, but organized feeder pig sales has encouraged interest in feeder pig production which in years to come will tend to level out supply.
8. Diseases and parasites are still a problem to swine producers but are becoming less troublesome now that antibiotics and new drugs are on the market, along with more licensed veterinarians throughout the state.

9. Adequate housing has improved in last 12 months, but still not what would be desired.

Purebred Hogs

1. Number of purebred hogs have increased in the past two years and the demand for good meat-type boars with certification records has been good.
2. The purebred breeders sell their best quality boars and bred gilts through the organized purebred hog sales sponsored by the Virginia Purebred Swine Breeders' Association. There has been an increase of hogs sold through sales with certification records, but there is still room for more quality breeding stock.
3. Two of the state breed associations, Hampshire and Yorkshire, are now conducting summer and winter sales.
4. Several purebred producers are now on the certification program and many others are becoming interested.

Problems

1. More farms need hogs to better balance their farming operation. Hog production on many Virginia farms is not matched to the best capabilities of the farm from a feed and management standpoint.
2. More attention needs to be paid to production registry and certification records when commercial hog producers are selecting breeding stock.
3. There are still far too many hogs raised in Virginia that are not of meat-type quality.

4. Production of feeder pigs in counties that are not big grain producing counties has not yet been developed to its potential.
5. Many commercial producers in the state are finding the source of healthy, meat-type feeder pigs inadequate.
6. Income from hogs is reduced on many farms because
 - (a) Lack of adequate parasite and disease control measures.
 - (b) Poor feeding.
 - (c) Low quality boars and sows.
 - (d) Raising too small litters due to poor facilities and not keeping good prolific lines of sows.
 - (e) Marketing at too light or too heavy weights.
 - (f) Selling hogs twice a year rather than throughout the year.
7. More research information is needed on hog facilities and feeding hogs in confinement on concrete. Also, feeding sows properly and cheaply.

Work To Be Done And Methods Of Procedure

1. Matching hog production to grain and pasture production on Virginia farms:
 - (a) Encourage feeding out market hogs in many of the cash grain counties, supplying them with up to date know how.
 - (b) Encourage production of feeder pigs on farms that produce small amounts of grain and have pasture.
 - (c) Organize one feeder pig sale in center of tobacco counties and work closely with county agents in the efficient production of feeder pigs. Hold county meetings and tours to educate

farmers on the advantages of organized feeder pig sales and proper management also selection of breeding stock. Work closely with the two sales which were organized last year, Courtland and Tappahannock.

- (d) The specialist will work closely with those counties interested in developing feeder pig programs. Circular letters, field days, radio and county meetings will be the media used.

2. Quality of hogs improved:

- (a) Conduct a good quality gilt selection program in Southeast Virginia counties and then encourage the use of a purebred meat-type boar on them.
- (b) Conduct grading demonstrations throughout the state pointing out the difference between grades and the dollar and cent value of producing better quality pork.
- (c) Continue to act as secretary of the Virginia Purebred Swine Breeders' Association and encourage them to FR litters and adopt the certification program.

3. Management information will be publicized in news articles, radio, meetings, field days, tours and county demonstrations on the following:

- (a) Proper feeding
- (b) Efficient feeder pig production
- (c) Advantages of topping out hogs at correct weights
- (d) Internal and external parasite control

4. Encourage purebred breeders to only sell breeding stock that will improve the quality of hogs produced in Virginia.
5. Assist purebred breeders with certification programs by setting up cutting stations for certification and selecting breeding stock.
6. Work closely with Experiment Station and Agricultural Engineering Department in finding answers to many questions pertaining to feeding hogs on concrete and proper facilities.

Results Expected and Methods of Measuring

1. A ten percent increase in Virginia hog numbers.
 2. A substantial increase in the supply of good quality meat-type feeder pigs available to commercial feeders.
 3. Fifteen percent of purebred breeders using production registry testing and certification as a guide to improve the quality of hogs produced in Virginia.
 4. Assist purebred breeders in holding 13 sales to supply commercial producers with high quality seed stock.
 5. A ten percent increase of producers improving facilities to make for more efficient hog production.
 6. One additional organized feeder pig sale in state.
 7. Assist with 25 community and county meetings promoting production of good quality of feeder pigs and increased numbers.
 8. Sixteen county swine schools covering all phases of hog production.
 9. Prepare circulars on selection, certification, organization of feeder pig sales and revise swine bulletin, "Succeed With Hogs".
- Results will be measured by census reports, reports from county agents, a complete record from purebred breeders on PR and certification.

4-H CLUB ACTIVITIES

Analysis of Project Situation

1. The number of projects now being sponsored is all that one person can work with and in many instances requires assistance of other specialists in the department.
2. Enrollment in livestock projects varies between 4,000-6,000; and animals involved varies from 8,500-10,000.
3. Completion varies from 65-70 percent in livestock projects.
4. Beef projects at present are Baby Beef, Purebred Heifer, Market Beef, and Beef Herd.
5. Sheep projects are Farm Flock and Market Lamb Projects.
6. Swine projects are Breeding Pig, Sow and Litter, and Market Pig.
7. There are at present 18 shows for 4-H Club steers, seven for purebred heifers, seven for market lambs, and nine for market pigs.
8. Livestock producers, civic organizations, 4-H Club members, breed association, and others encourage, support, and request that these various shows be held for exhibiting 4-H Livestock Projects.

Major Problems

1. Conducting and financing livestock shows for 4-H Club members in livestock work.

2. Lack of participation in livestock projects by 4-H Club members based on the total livestock program in the state.
3. Giving assistance to county workers. Many counties do not have personnel trained in 4-H Livestock Program.
4. Livestock of suitable quality for 4-H livestock projects is difficult to find in certain areas of the state.

Work To Be Done And Methods Of Procedure

1. Conducting and financing livestock shows:

- (a) Enlist the financial support of the breed associations and businesses connected with or interested in agriculture.
- (b) Impress upon county workers the need for and advantages of local sponsorship and buying of the livestock.
- (c) Plan and supervise or assist in the planning and supervision of 18 baby beef shows, seven each heifer and lamb shows, nine market hog shows, and various county shows.

2. Increase participation in 4-H livestock projects:

- (a) Assist in establishing a scoring contest of county livestock projects in at least five more counties to stimulate interest.
- (b) Increase the participation in the Livestock Conservation Demonstration Contest by letters to agents, meetings, and radio tapes.
- (c) Maintain the present interest and stimulate more by conducting the various shows.
- (d) Hold county and area livestock judging clinics and fitting and showing demonstrations.
- (e) Conduct district and state livestock judging contests and enter

the state team in the Atlantic Rural, Eastern National, and National Judging Contests.

- (f) Hold sheep shearing classes and district and state contests. Enter the National Sheep Shearing Contest.
- (g) Prepare stories and radio tapes on outstanding 4-H livestock work.

3. Assisting county personnel:

- (a) Give training to county workers on selection, feeding, and management through meetings and demonstrations.
- (b) Revise 4-H livestock publications as needed.
- (c) Hold judging, fitting, and showing clinics in counties where needed and requested.
- (d) Give technical advice and assistance in planning 4-H programs and on livestock project problems.

4. Improve the quality of 4-H livestock:

- (a) Locate suitable livestock and inform county personnel where this livestock is available.
- (b) Work with breed associations to have good quality animals made available.
- (c) Encourage county personnel to aid more 4-H Club members in buying high quality breeding stock.
- (d) Work through breed association, county personnel, and breeders to obtain purebred sire services for 4-H livestock.

Results Expected and Methods of Measuring

1. Conducting and financing livestock shows:
 - (a) Eighteen steer, seven purebred heifer, seven market lamb, and nine market hog shows will be held.
 - (b) Breed associations to support shows financially.
 - (c) Chambers of Commerce and civic clubs will sponsor and support club activities.
 - (d) Local businesses and individuals will give sponsorship and buying support to shows and other activities.
 - (e) Financial returns will be adequate.
 - (f) Club members will learn responsibility, sportsmanship, etc., which is hard to measure and is more valuable than financial returns.
 - (g) Club members will gain considerable knowledge of selecting, feeding, management, exhibiting, fitting, and marketing livestock.
2. Increased participation in 4-H Livestock Projects:
 - (a) Forty or more county livestock judging teams in the six district contests.
 - (b) Better trained teams in the state livestock judging contest.
 - (c) At least ten livestock conservation demonstrations and state winner will enter national contest.
 - (d) State team will participate in Atlantic Rural, Eastern National, and National Judging Contests.
 - (e) At least six judging, fitting, and showing clinics will be conducted.

- (f) Five more counties will begin project scoring contests.
 - (g) Twelve shearing clinics will be held, nine district and state contests will be held, and the national contest entered.
3. Assistance to county personnel:
- (a) Four 4-H livestock publications will be revised.
 - (b) Twelve sheep shearing, six judging, and six fitting and showing clinics will be conducted.
 - (c) Eighty county workers will be assisted with, advised on, and trained in 4-H livestock projects and programs.
 - (d) Twenty-five county personnel will be given assistance with shows.
4. Improved quality of 4-H livestock:
- (a) Three cattle, one swine, and two sheep associations may assist club members in securing livestock of improved quality.
 - (b) Twenty counties will be aided in locating better quality livestock.
 - (c) Seventy agents will advise and assist club members in buying livestock.
 - (d) Five breed association, fifty county agents, and thirty breeders will assist in obtaining purebred sire services.

Projected Program Needs

1. The Pony and Light Horse Project is expected to create considerable interest in the future.

- (a) If this interest materializes, there will be a shortage in the state of suitable animals for this project.
- (b) Extension personnel will need training to work with this project.
- (c) The long-term objective of this project is to provide a means for the educational, recreational, and stimulating use of the leisure time of suburban and rural farm and nonfarm youth.