

NORTH CAROLINA AGRICULTURAL EXTENSION SERVICE

ANIMAL HUSBANDRY PLAN OF WORK
(Name of project)

for

Calendar Year 1956

<u>Major phases of project or subdivisions of project covered</u>	<u>Name of Worker*</u>	<u>Percentage of time devoted to entire project by each worker</u>
In Charge	Jack Kelley	100 Per Cent
Beef Cattle & Sheep	J. S. Buchanan	100 Per Cent
Beef Cattle & Sheep	A. V. Allen	100 Per Cent
Beef Cattle (Performance Testing)	J. W. Patterson	100 Per Cent
Meats	J. A. Christian	100 Per Cent
Swine	J. R. Woodard	100 Per Cent
4-H Club Work	D. C. Henderson	100 Per Cent

Date submitted: December 8, 1956. Signed:

Jack Kelley
Project Leader

Date approved: _____, 195 . Signed:

State Director of Extension

Date approved: _____, 195 . Signed:

Administrator, Federal Extension
Work, U. S. Department of Agriculture

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

1960 PLAN OF WORK
FOR
ANIMAL HUSBANDRY EXTENSION
IN
NORTH CAROLINA

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I. INTRODUCTION

The old saying "A change for the better never hurt anyone" is not altogether true for our livestock farmers. Today, in North Carolina a minor revolution is taking place in our systems of raising livestock. Livestock enterprises are becoming larger and more efficient. The margin of profit per animal unit is decreasing. Hence, many of our smaller, less efficient producers are being forced out of the business. This is a change for the better - yet the small farmer is getting hurt. Efficiency will be the keyword in 1960.

There is an increasing trend toward specialization. This is evidenced by the increased interest in the eastern section of the State in buying feeder calves and feeder pigs and feeding them for market. Other farmers are increasing their brood sow and brood cow herds to supply pigs and calves to meet this demand.

Increased emphasis on production testing fits right into the scheme of things when efficiency is stressed. A great deal of time and effort will be devoted to expanding the production testing of beef cattle and swine.

These programs are being promoted to help develop superior strains of breeding animals with better performance - i.e., better mothering ability, better rate of gain, better feed efficiency, and better carcass quality.

The increase in size of both swine and beef enterprises will require Extension Specialists to work with County Agricultural Agents and farmers in planning the type and size of unit which would best fit each farm. Assistance would be given in planning a sound program of operation, proper housing, pasture, buildings, and equipment. Sound management, sanitation, and disease and parasite control will be stressed.

Sheep have continued to make slow but steady progress. The tendency here is the exact reverse of the trend in beef cattle and swine. Most of the sheep expansion has been in small flocks of breeding ewes added to farms in the piedmont and mountain sections. Improvement in lamb crop and a more effective parasite control program will be emphasized in

1961
1960.

Marketing will continue to take a great deal of the Specialists' time. Expansion in beef, sheep, and swine breeding herds have stimulated the demand for better breeding stock. The increased emphasis on quality and production tested breeding stock have also helped create this demand. Both commercial and purebred breeders are working to improve their animals. Assistance will be given in culling and replacing with better breeding stock.

Feeder pig sales, feeder calf sales, lamb pools, wool pools, and fat cattle sales will be used to provide better markets for our livestock and livestock products.

After working to get a quality product produced and marketed, consumer education work will be done on proper selection and preparation of meats. Demonstrations on cutting, curing and storage will also be used as an educational tool. Increased emphasis will be placed on working with freezer locker plants and packing plants to improve buying, processing, and storage of meats.

This will be a year of change for our livestock farmers. Growing pains, specialization, emphasis on quality, low profit margin, and production testing -- all promise to keep our farmers on their toes. The progressive ones will meet the challenge -- others will not. It is the duty and responsibility

of Extension Specialists to help North Carolina farmers keep up-to-date in their methods and technology. We must not fail them.

II. BEEF CATTLE

A. Breeding

The number one problem in the breeding of beef cattle is to breed animals that will produce more pounds of desirable meat in a shorter period of time and on fewer pounds of feed. The best tool available to help solve this problem is performance testing. Every effort will be made to familiarize producers in all counties with this program. Method demonstration on culling using performance records will be given in some counties and the entire program stressed in our county workers conferences and state-wide educational program. This program should result in an increase in beef cattle production by increasing calving percent, weaning weights, and quality.

B. Feeding

The main feeding problem this year is getting the maximum use of silage, roughage, cheap grain and accumulated pasture in the feeding program.

Emphases will be on feeding according to grade and quality of cattle on hand. The possibility of producing more stocker cattle for spring sale will be

outlined. The use of grain and grass method of finishing cattle will be stressed along with the use of hormones and other additives designed to increase the efficiency of feed utilization. Creep feeding all calves to be sold directly from the cow will be stressed.

Educational material will be furnished County Agricultural Agents and published through mass media. Method and result demonstrations will be conducted and county programs will be outlined in county workers conferences.

The maximum use of cheap feeds, feed additives, and recommended feeding systems will result in more cattle being fed with a larger profit.

C. Management

The main problems in this field are controlled breeding, parasite control, record keeping and failure to castrate and dehorn.

Controlled breeding and record keeping will be a requirement in the performance testing program; therefore, much attention will be given to this problem area through all available means and media. Parasite control, castrating and dehorning demonstrations will be featured at all field days and educational meetings.

Their value will be stressed in news articles, radio and T. V. shows.

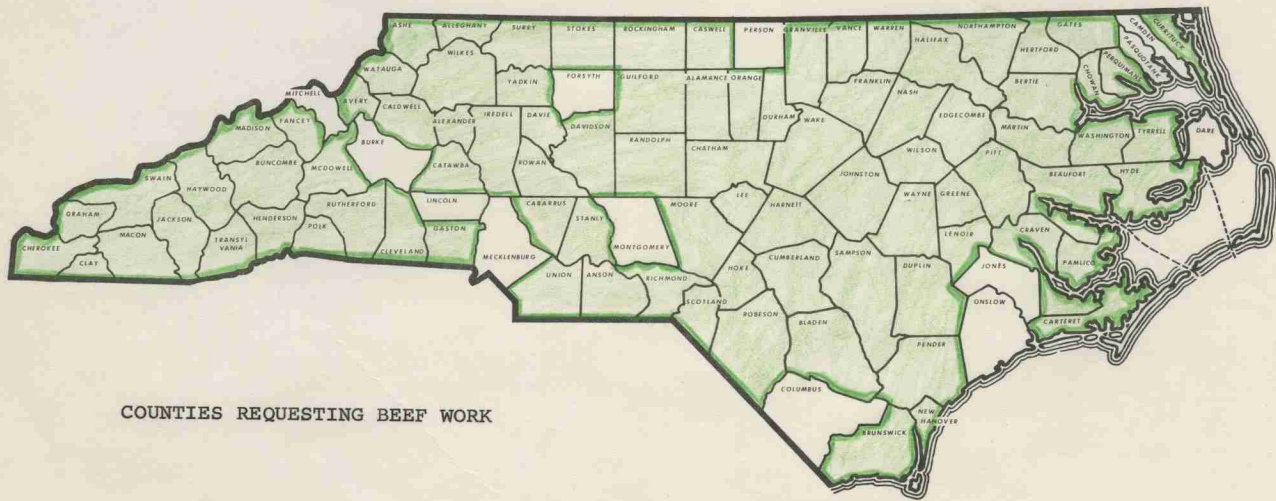
Method demonstration will be prepared and presented with special emphasis this year going to internal parasites.

Results of this program will be reflected by more healthier, heavier, higher quality calves for our feeder calf market and more satisfied producers.

D. Marketing

The number one problem in marketing is getting sufficient volume to increase competition and improve marketing methods. To accomplish this, cooperative sales will be used to demonstrate the effect of volume and uniformity in quality. Additional method demonstrations on dehorning, castrating and vaccinating calves will be given in educational meetings.

In marketing problems livestock specialists will cooperate with the College Marketing Section, the N. C. Department of Agriculture, the N. C. Cattlemen's Association, livestock auction markets and packers in the State.



COUNTIES REQUESTING BEEF WORK

III. SHEEP:

A. Breeding

The major problem in the field of sheep production is getting ewes bred at the proper time.

Method and result demonstrations on the advantages of late shearing of ewes and re-shearing of the ram will be conducted. Educational meetings, field days and mass media will be used to stress the advantages of having lambs born so as to take advantage of the cool growing season before hot weather and having them ready for market when prices are the highest.

Individual flock owners will be encouraged to keep records and cull flocks according to production records. This program can be evaluated by a study of the time, weight and grade of lambs moving to market.

B. Feeding

The main problem to be worked on this year is creep feeding of lambs.

Information on the advantage of creep feeding lambs will be furnished to all County Agricultural Agents and be made public through mass media. Plans for a low cost creep are available.

Farm flock results demonstrations, county planning meetings, field days and personal contact will be used to publicize the advantages of creep feeding.

C. Management

Problems receiving major attention will be culling ewes on basis of production, parasite control and docking and castrating.

Parasites continue to be a major problem in sheep production. Method and result demonstrations to illustrate the approved practices for eradication and control will be given in the counties with sheep. The problem of keeping non-producers and low producers along with the problem of docking and castrating will be given extra attention. These subjects will receive major attention at all educational meetings, field days, tours and through the use of mass media.

County Agricultural Agents will be assisted with method demonstrations in all problem areas. The economic reason for these practices will be pointed out at livestock schools, county conferences, field days and local lamb pools.

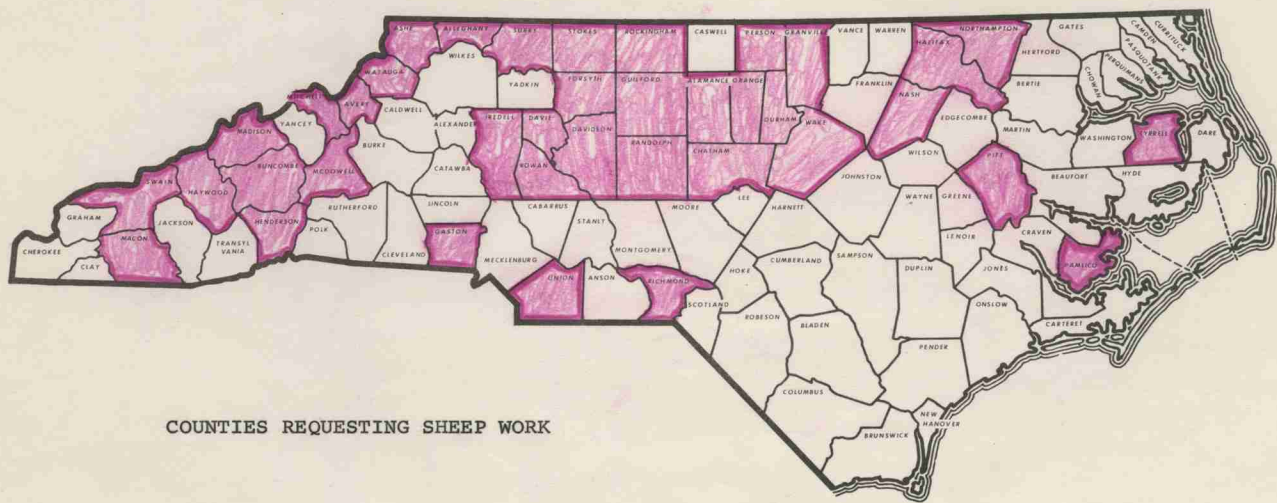
The results can be observed in the records of the lamb pools, in farm flock records and the interest in sheep production over the State.

D. Marketing

Volume and quality of both lambs and wool are the main marketing problems.

Demonstration on shearing, preparing and storing wool for market will be stressed at 4-H sheep shearing contests, field days, tours and television programs. Educational material will be made available to all producers through the County Agricultural Agent.

Improvement in quality of lambs and wool will be evident from a study of the pool reports.



COUNTIES REQUESTING SHEEP WORK

IV. SWINE:

A. Breeding

One of the major problems to be worked on is the production of meat-type hogs. Continued emphasis will be placed on the meat-type certification program. Plans are being made to do some additional production testing. Backfat probing of breeding gilts and weighing to determine rate of gain will also be used with both purebred and commercial breeders to aid in selecting meatier breeding animals with better rates of gain. Commercial breeders will be encouraged to use boars from certified litters or certified matings. Efforts will be made to make both the purebred and commercial breeder aware that twice as much progress can be made in improving the quality of swine if proper selection is used in selecting breeding gilts as well as boars.

Continued emphasis will be placed on quality feeder pig production. Additional efforts will be made to inform Extension Agents and farmers of proper type breeding animals, best systems of crossbreeding, and breeding techniques which will result in the greatest

number of high quality pigs.

Multiple farrowing will be encouraged among the larger breeders so that better use will be made of facilities and labor resulting in a lower pig cost. This would also assure a constant supply of feeder pigs for farmers who buy pigs to feed to market weight.

Grading demonstrations and Type Conferences will be held to further acquaint commercial and purebred breeders with the type of hog which is most desirable on today's market.

A swine evaluation station should go into operation this year. Feed conversion, rate of gain, and carcass quality of breeding animals will be measured by this station in an effort to select more efficient breeding animals with higher quality carcasses.

B. Feeding

Tremendous progress has been made in the last five years in getting swine producers to feed a balanced ration. Intense educational efforts by Extension Workers, feed companies, and farm publications have made most farmers aware of the advantages of feeding a balanced ration.

Most of the work in feeding this year will be to inform Extension Agents and farmers of the most economical ways to feed hogs. This will be most important since hog prices are at the low point in the price cycle, and the profit margin is very small. Efficiency will be stressed. Farmers will be encouraged to feed adequate protein, but not too much. Utilization of as much home-grown feed as possible will also be stressed as a means of cutting the cost of production.

Pasture will be recommended for all breeding animals for producing cheaper pigs. It will also be recommended for market hogs if the land would not be more productive for other purposes. Pasture will definitely save concentrates and cut feed costs. Pasture still has a place in our feeding program.

The feeding of hogs on concrete has made the need for a balanced ration critical. This is especially true insofar as protein, vitamins, and minerals are concerned. Trace minerals must be provided for hogs fed on concrete if they are to do well. Anemia in baby pigs caused by iron deficiency is a good example of this. More emphasis will be placed on informing Extension Agents and farmers of

the importance of a completely balanced ration, i.e., adequate T.D.N., digestible protein, vitamins, and minerals.

Emphasis will be placed on feeding sows and gilts to produce large litters of big, healthy pigs with better livability. These pigs should be creep-fed and should weigh at least 40 pounds at eight weeks. They should reach market weigh in 5½ months on 350 pounds feed per cwt. gain if proper breeding and feeding practices are followed.

Feeding demonstrations on pasture and on concrete will be conducted in cooperation with County Agricultural Agents to show farmers the merits and costs of production under both systems.

C. Herd Management

Efficiency will also be the keynote in herd management. The program will be; get more pigs, save more pigs, and grow more pigs -- all for less cost. These points will be brought to the producer through field days, tours, educational meetings, news releases, television, radio, and on-the-farm demonstrations. ^P Emphasis will be placed on disease and parasite control and a good housing program.

A good sanitation program will also be stressed since it is the key to a successful disease and parasite control program. Rotation of pastures, disinfecting farrowing houses, and temporary grazing will be advocated.

A state-wide disease control program has been developed and will be promoted. It is as follows:

1. Isolate all additions to the herd for 21 days.
2. Test all breeding animals before adding to the herd for Bang's and Lepto, if hogs have not been tested.
3. Blood test all breeding animals when program is initiated.
4. Vaccinate pigs at 6 weeks of age for Cholera, using modified virus with ample serum. Also vaccinate for Erysipelas if it is manifest on the farm or in the area.
5. Re-vaccinate gilts three weeks before breeding for Cholera and Lepto.
6. Vaccinate all breeding animals yearly for Cholera and Lepto.

A great deal of emphasis will be placed on housing. With the trend toward larger units and more specialization there is a greater need for better housing. Pole-type, central farrowing houses will be recommended as a good, economical type of housing.

County Agricultural Agents and farmers will be advised on fitting the swine enterprise to the farm. The farmers will be advised to make their swine unit as large as land, labor, feed, and capital will permit. This will result in more efficiency, and better use of labor and facilities, hence, a lower cost of production.

D. Marketing

Farmers are finally beginning to heed outlook information on market conditions. This is evident because they are doing a better job of adjusting their swine enterprises as market conditions vary. Hence, price fluctuations have not been as severe as had been predicted.

Primarily, our work is in getting a better product to market. This starts with proper meat-type breeding

animals. Proper feeding to a desirable market weight also must be stressed. Meat-type hogs are worth from \$1.00 to \$3.00 more per head at market weight than fat hogs. They cost no more to produce. They encourage the consumer to buy more pork. We must encourage more meat-type hogs.

Farmers will be encouraged to produce meat-type hogs and market them on a graded basis.

Multiple farrowing is being encouraged among larger producers to make better use of labor and facilities. This reduces cost of production and also provides a more uniform supply of hogs for our packers.

Assistance will be given in the marketing of quality feeder pigs. North Carolina already leads the South in this field and efforts will be made to stay ahead. Assistance will be given Agricultural workers, auction market operators, and other interested parties in marketing quality feeder pigs through existing sales or by organizing new sales.

Educational meetings, grading demonstrations, and other communications media will be used to help solve

marketing problems.

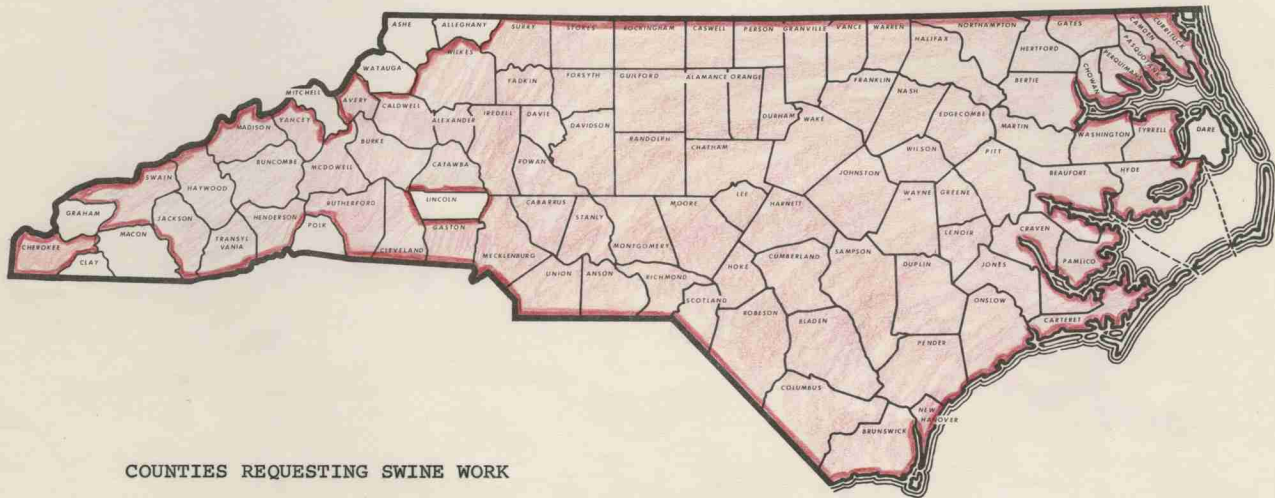
Outlook information will be supplied farmers and Extension Agents to keep them informed on market trends and outlook.

Purebred breeders will be assisted in conducting purebred sales. Commercial breeders will be assisted in locating good purebred boars.

E. Other Activities

1. County Agricultural Agents in each county will be encouraged to develop a long range swine program for his county. Office conferences will be held with the County Agricultural Agent and his Assistants in swine producing counties. An outline of swine work which would be timely will be presented. Assistance will be given in formulating a County Swine Program.
2. Field Days at demonstrations and on farms to teach the best methods of swine production.
3. Type Conferences are being planned to demonstrate the best type of hogs to grow.

4. Grading demonstrations with packers, market operators, and County Agricultural Agents.
5. Work with markets and packers to improve market facilities.
6. Work with Farm and Home Development families and encourage hog production wherever practical.
7. Swine tours with Extension Agents and farmers.
8. Radio, television, news articles, and circular letters will be used.
9. Requests by County Agricultural Agents for assistance with swine work in their county will be filled insofar as possible.



COUNTIES REQUESTING SWINE WORK

V. MEATS:

A. Beef

The big problem in the preparation of any meal is selecting and using the proper kind of meats. More information for the consumer is needed so that she will know how to prepare certain qualities and cuts of beef.

Information is being compiled to send to Home Economics Agents for distribution to the consumers in the county on the selecting and using of quality meats. There are plans for holding several demonstrations on cutting and selecting of beef, also on the proper use and storage of meats. There will also be several meetings held in cooperation with locker plants and packing companies to get this type of information to the consumer.

Another problem is the low beef consumption, especially among the lower income brackets in eastern North Carolina. Plans are to hold several meetings in this area to promote the raising and using of more beef in this area. Information will be given through radio, television and news articles on the nutritional value of beef and why it should be a part of the protein diet.

B. Pork

A problem in farm pork supply is the curing and storing of farm meats. We have several demonstrations planned on cutting and curing, (1) to prevent over-salty meats, (2) to keep the insects out of the meats and (3) on proper storage of meats under farm conditions. Bulletins and information pertaining to the curing and storing of meats will be sent to all of the County Agricultural Agents, Home Economics Agents and to the commercial ham curers giving them the information on the proper ways of handling cured meats. Several demonstrations are also planned on the cutting and using of country hams and shoulders to get the most from them. Information is available to the consumer through bulletins and newspaper articles.

Eighteen County Ham Shows are to be held during 1960 with County Negro Agricultural Agents in the Western District of the State. Two District Ham Shows have also been planned with this same group -- one to be held in Charlotte and the other in Greensboro. The purpose of these shows is to promote country hams and to improve their quality and appearance.

C. Lamb

The problem on lamb in North Carolina is to get the public to consume more of it. Several television programs have been planned to give the information to the consuming public on the nutritional value of lamb and the economy of serving lamb to the family. Newspaper articles, radio programs and personal contact will also be used to help increase the consumption of lamb in North Carolina.

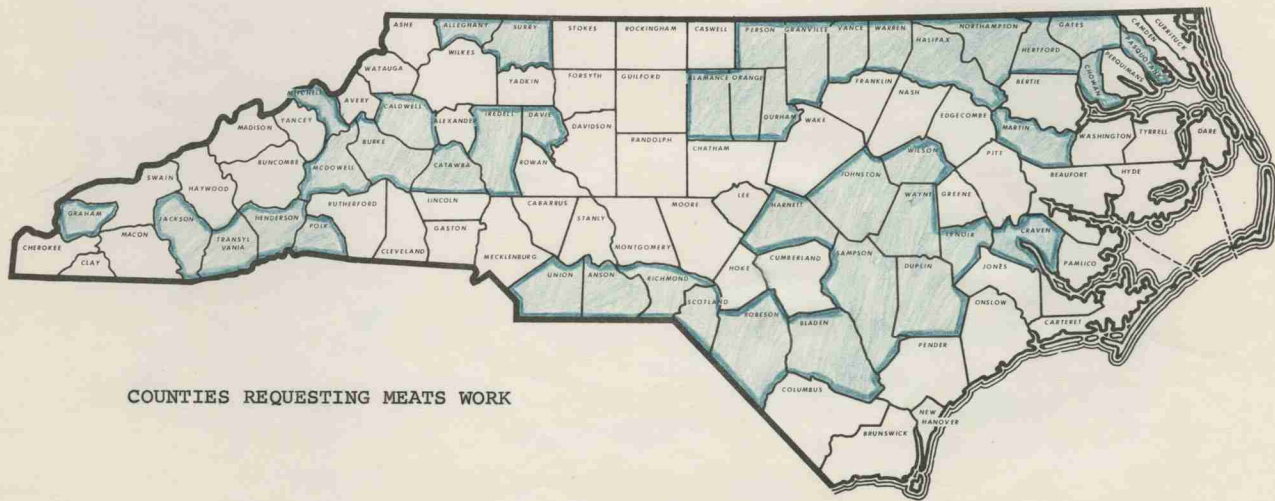
D. Locker Plants and Packing Companies

Much needs to be done with the locker plants as there is a change in the basic service which they offer. More and more of the locker plants are changing from a storage plant to a processing plant and need help in this conversion.

The packing companies are beginning to buy more cattle and hogs on carcass grade and yield basis and it is important that the information on this way of marketing be given to the producer and also checked as far as the locker plant and packing companies are concerned.

E. Proper Storage Facilities for Cured Meats

A problem exists on having proper storage space for cured meats. Plans are to work with the County Agricultural Agents and commercial ham curers on building a modern, usable storage house for cured meats. We are also working with the producers on bagging of hams to prevent insect damage and the construction of ham houses that can be fumigated to prevent insect trouble. Continued efforts will be necessary to increase the number of good curing houses and also to reduce the amount of spoilage of meats due to insects and rodents.



COUNTIES REQUESTING MEATS WORK

VI. 4-H CLUB:

A. Steer Projects

The number of steer projects on feed will probably be up this year due to the favorable prices received in 1959. With the outlook for lower prices in 1960, the major problems of reducing feed costs and increasing efficiency will take on more significance.

Rations of home grown grain will be recommended to all Agents and Club Members. Demonstration on mixing home grown feeds will be outlined for Agents use at club meetings. This will be also stressed in county conferences and all educational meetings.

B. Sheep

Projects in this field include fat lambs as well as breeding flocks. The main problem of the fat lamb project is in fitting and showing the lamb. With the breeding flocks the problems are about the same as with adult sheep. This year breeding, feeding, and management problems will be stressed in the same manner as for adult farmers.

Fitting and showing demonstrations will be put on in counties with lamb projects. Club members will be furnished a list of necessary supplies and show

officials will be encouraged to offer larger prizes for fitting and showing.

C. Swine

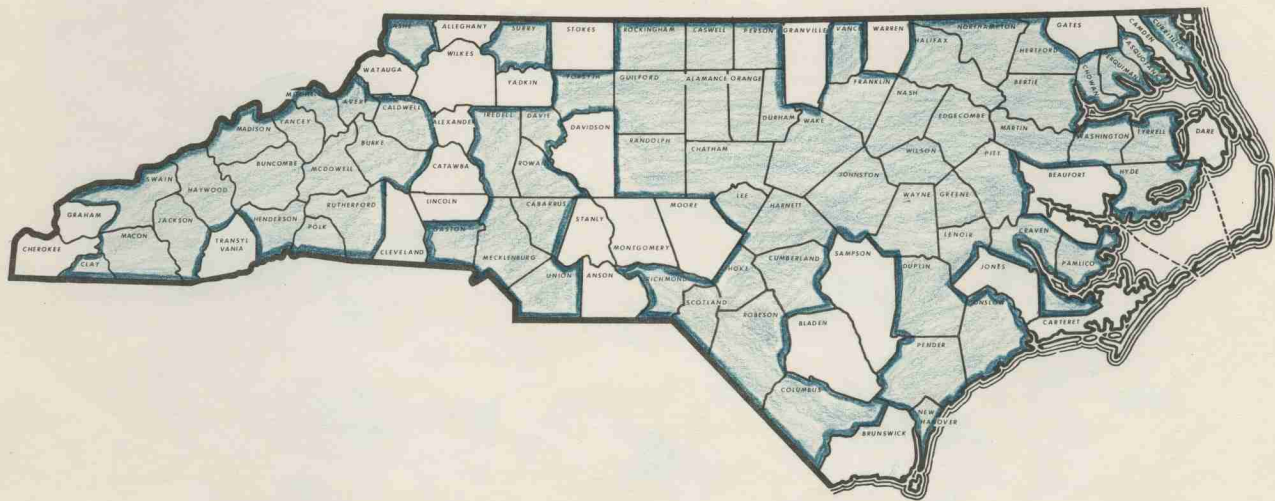
Breeding and fattening projects are available for club members. The majority of the breeding projects are in the nature of pig chains sponsored by civic, commercial and professional groups. The market barrow projects are available in all counties with 24 Fat Stock Shows and Sales and the State Market Hog Show and Sale in which club members can participate. Problems to be emphasized are selecting hogs that are the right age, weight and type to be at their peak at show time.

Demonstrations will be presented and educational material furnished on the selection of breeding stock and pigs for market projects. Selection of animals that are off-spring of certified meat type boars will be stressed.

D. Other Activities

In addition to the animal projects, Specialists will work with Agents, Leaders, Club Members, Civic

Groups, Industry and others interested in club projects other than live animals. These projects will include livestock conservation demonstrations, livestock judging teams, sheep shearing teams and country ham shows and sales.



COUNTIES REQUESTING 4-H WORK

VII. PROJECTED PROGRAM NEEDS:

1. Larger, more efficient units.
2. More productive breeding stock.
3. Improved carcass quality of market animals.
4. Less feed per pound of gain.
5. Faster rate of gain.
6. More marketing by grade.
7. Better disease and parasite control.
8. Better knowledge of animal nutrition.
9. More labor saving equipment.
10. More and better records.

