

ANIMAL HUSBANDRY

Beef cattle and swine work is in cooperation with the Division of Animal Husbandry of the Bureau of Animal Industry, United States Department of Agriculture. As stated in the previous discussion of the pasture work, the Bureau of Plant Industry is cooperating in some of the grazing work with beef cattle.

The livestock tests at this Station have not been in progress long enough for definite recommendations in regard to the feeding, breeding and management problems involved. This report therefore, will be in the nature of a progress report. It is felt that the information most needed by farmers of the Coastal Plain area in regard to livestock is that pertaining to the practical side of feeding, breeding, disease control and herd management. The work is being conducted with these things in mind.

Swine production is very rapidly becoming one of the most important enterprises on the South Georgia farm. The past three years have witnessed a great increase in the value of hogs on farms in this area. The peanut area of the State is well suited for production of hogs. The good feed crops that can be grown throughout South Georgia are many. The soil is well adapted to grazing off or hogging off of crops. But most of the feed crops that can be produced successfully tend to produce soft pork. Much work needs to be done on the soft pork problem. Swine parasites, both internal and external, are taking great toll from the swine population. As is being demonstrated on the Station farm and elsewhere, these parasites can be easily controlled.

The past five years have witnessed a great increase in the cattle population of the southern part of the State. In some counties the numbers have increased over 100 per cent. Vast areas of cut-over and marginal lands in the Coastal Plain region should bring in more revenue from beef cattle production. Cattle production should play a more important part in operations of the average farm. Livestock is necessary to properly balance the farm enterprises from the point of view of labor distribution, farm income, maintenance of soil fertility and crop production.

Very little research work in animal breeding has been done in the Southeast. This Station is cooperating in conducting experiments in cattle and swine breeding, and in record of performance studies of cattle and swine. Animals of improved quality and breeding adapted to southern conditions and more efficient users of feed are greatly needed. These tests and studies should prove of great benefit to the farmers of Georgia and the entire Southeast.

There is great demand by farmers for information in regard to feeding, breeding and management of beef cattle, dairy cattle and swine in the State. With the conditions and demands in mind,

work with livestock at this Station is being planned and carried on so as to be of the maximum benefit to the farmer.

BEEF CATTLE

Beef cattle experiments consist of various tests in feeding, breeding and management. The work has been in progress only for the last two years. This being true this report will take the nature of a progress report.

Veal Herd—For Production of Veal Calves: The veal herd is made up of about 50 head of native and grade Jersey cows. A few grade Hereford heifers are being added from time to time. The herd will remain as a native and grade Jersey herd with a few grade Hereford and Shorthorn heifers added from time to time so that comparisons can be made of native with first cross animals.

The cows are bred during April and May so they will drop calves during the latter part of January, February and early March. Forty calves were dropped during this period in 1935. The average birth weight of the 40 calves was 51.3 pounds. On April 1 the herd was placed on permanent pasture. During April and May, one-half the herd was bred to a Hereford bull and the other half to a Shorthorn bull.

The veal calves were marketed in June and July. The calves graded as fair, common and medium. The average selling weight was 235 pounds. The average amount brought by each calf was \$11.77.

The herd ran on a permanent pasture composed of Carpet grass, Dallis grass, Bermuda grass and lespedeza, from April 13 to November 19. The cows made a gain of 129 pounds each for the period, and weighed 723 pounds on November 19.

From November 20, 1935, to January 1, 1936, 47 cows grazed 43 days on 45 acres of corn and velvet bean fields where the corn had been harvested. The cows maintained their weight on this field.

From January 2 to April 10, 1936, the cows were wintered 100 days on sorghum silage, cottonseed meal and oat straw. Each cow was fed 18 pounds of silage, 1.8 pounds cottonseed meal and 3.6 pounds oat straw per day. During the period the cows lost 83 pounds each. The cows dropped 22 calves during the period. The average birth weight of calves was 62 pounds. The increased birth weight of the calves over the previous year was probably due to the better feeding of the cows during the winter of 1935-36 as compared to the winter of 1934-35. The cows and calves were turned to pasture on April 11.

Feeder Herd—For the Production of Feeder Calves: The feeder herd is made up of high grade Hereford cows and heifers. The offspring from this herd are being used for the permanent and temporary pasture experiments and for the fattening tests.

During the winter of 1934-35 the cows were wintered on velvet bean fields and in dry lot on sorghum silage, cottonseed meal and oat straw. During this period the cows dropped calves that averaged 60.5 pounds at birth. The herd ran on permanent pasture from March 26 to November 15. During April, May and early June the cows were bred to purebred Hereford bulls. The calves ran with the herd during the summer and were weaned when the cows came off permanent pasture on November 15. The calves were wintered as indicated below. The calves are used in the various pasture and fattening experiments. A few of the better heifers are kept for replacements. The bull calves were castrated during the summer. Emasculators were used and were found to be satisfactory. Under screw worm condition, emasculators should be used rather than making open wounds with a knife.

The herd of 55 cows was wintered from November 16 to February 25 on 150 acres of corn and velvet beans. The corn had been harvested. The estimated consumption of velvet beans per cow per day was 5.4 pounds. During the 102 days the cows made a gain of 80 pounds each. On February 26 the herd was divided and 29 head were wintered for 45 days on 34 pounds of sorghum silage, 2 pounds cottonseed meal and 6 pounds oat straw per cow per day. The cows maintained their weight. The remainder of the herd was wintered for 45 days on green oats. The cows gained a half pound each per day on green oats. During February and March 16 calves were dropped that had an average birth weight of 66 pounds. The birth weight of the calves was six pounds greater than was the weight of the calves in the spring of 1935. This was probably due to better feeding of pregnant cows. The herd was placed on permanent pasture April 11, 1936.

Feeder Calves: Studies are being made to determine the best and most economical methods of wintering cattle. Twenty-nine head of feeder calves were wintered 75 days on 2.9 pounds ground snapped corn, .9 pound cottonseed meal and 5.5 pounds peavine hay per calf per day. The calves made an average daily gain of .47 pound.

The following table gives the results of wintering feeder calves 68 days on ground snapped corn, cottonseed meal and peavine hay.

TABLE XXXV
WINTERING ELEVEN FEEDER CALVES

January 31 to April 7, 1936

AVERAGE DAILY FEED			Average Initial Weight	Average Final Weight	Average Daily Gain per Head
Ground Snapped Corn	Cottonseed Meal	Peavine Hay			
1.7 Lbs.	.54 Lb.	10 Lbs.	370 Lbs.	399.9 Lbs.	.44 Lb.

