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1932

ANNUAL REPORT

of

L. I. CASE,

AGENT IN ANIMAL HUSBANDRY,

RALEIGH, N.C.

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Covering Work with Beef Cattle and Related Livestock  
Production, Marketing and Meat Utilization Projects  
in Areas Released from Quarantine.

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I. INTRODUCTION.

During 1932, as was the case the previous year, the majority of work was done in the coastal plains and tidewater sections of the State. Few new herds were established in this new territory. This, however, was not due to lack of interest, but rather to feed shortage resulting from the most severe drought people of that section have experienced within the memory of the oldest inhabitants.

More time was spent this year in Western North Carolina than in 1931, due to insistent calls for help from county agricultural agents and livestock farmers. While the mountainous sections of the State produce a higher quality of cattle than the east, in some localities they have deteriorated, due to the introduction of dairy breeds and the resulting admixture of types. The present low price of dairy products, however, is influencing many to change back to beef cattle and in two counties beef cattle improvement associations have been formed during the year.

## II. PLAN OF WORK FOLLOWED.

Pastures. Working on the assumption that pastures of a more or less permanent nature are the foundation of the beef cattle industry, projects were planned to determine:

- (a). The most practical means of establishing permanent pastures.
- (b). The best pasture mixtures on various soil types.
- (c). The carrying capacity of improved pastures of various kinds.
- (d). The effect of various fertilizers and lime on pastures already established.

### Crop Gleanings.

In certain sections of Eastern North Carolina large areas of corn and soy beans have been grown for grain exclusively, the stalks and leaves being left in the field. Thinking that such by-products would furnish considerable amounts of cattle feed for the winter months, a project was outlined for determining the value of these feeds where they were gleaned by cattle.

### New Herds.

There are large areas of land in the territory under consideration that are not producing sufficient income to pay taxes. In addition, there are many farms that have considerable areas of native pastures and some have been producing quite large amounts of feeds of various kinds with no livestock to consume it. Where conditions have warranted, it was planned to aid farmers in establishing herds for the purpose of consuming native grasses and surplus feeds of other kinds.

### Herd Improvement.

Many of the herds and flocks are of low grade due to poor breeding. In order to bring about improvement it was planned to import purebred bulls and rams and distribute them thru sales or other means.

III. ACCOMPLISHMENTS.

Pastures.

(a) Methods of Pasture Establishment.

In Bertie County during the winter of 1931 two acres of land were prepared for the seeding of pasture grasses as follows:

"A" - 1 acre

Disking one hour, one man and tractor	\$ 1.25
Breaking five hours, one man and two horses	2.25
Disking one hour, 25 mins. man and tractor	<u>1.04</u>
Total Cost	\$ 4.54

"B" - 1 acre

Disking one hour, man and tractor \$ 1.25

In the spring of 1931 a mixture of Lespedeza, Carpet grass and Dallis grass was sown.

Both acres were harrowed before and after seeding.

Results.

Both acres produced a very good stand of grasses and Lespedeza.

Observations 1931.

"B" contains a higher percentage of native grasses. Both acres have been grazed with cattle and sheep and both have been mowed to control foreign vegetation.

Observations 1932.

Still good stands of improved pasture plants on both plats with native grasses showing some diminution in preponderance on "B".

The results here correspond with observations elsewhere and lead to the following conclusions. If a farmer wants a small area of good pasture quickly careful preparation of the land will give him best results. On the other hand, brushing and disking together with close grazing will eventually result in a good pasture and the expense will be less.



Incidentally, all classes of stock show a decided preference for these plats tho there are many acres of what is considered good native grazing accessible.

(b) Best Pasture Mixtures on Various Soil Types.

Six acres of land in Currituck County were well prepared and seeded in early October, 1930 to the following mixture per acre:

Italian Rye Grass	8 pounds
Red Top	8 "
Kentucky Blue Grass	5 "
White Clover	5 "
Alsike Clover	3 "

The area was divided into four parts equal in size and in February 1931 Plat I was seeded to 6 pounds of Dallis Grass and 15 pounds of Lespedeza seed; Plat II, 6 pounds of Dallis Grass, 15 pounds of Lespedeza and 3 pounds of Red Mammoth Clover; Plat III, 8 pounds of Carpet Grass, 4 pounds of Dallis Grass and 12 pounds of Lespedeza. The season of 1931 produced an excellent stand of Lespedeza, Rye grass and Red Top which was cut for hay. At the present time there is a fair stand of everything except Alsike clover, Red Mammoth Clover and Carpet Grass. Similar seedings on similar soils where phosphate fertilizer was used produced good stands of clovers and it is thought this was the limiting factor on the test plats. The poor stand of carpet grass can probably be explained by the fact that the area was not grazed the first season and the shade from other grasses had an adverse effect.

Other tests under way in other sections on varying soil types show Lespedeza adaptable almost universally in the coastal plains and tidewater. Of the grasses, Carpet grass and Dallis grass seem best suited on the fine sandy loam soils where plenty of moisture is available, while on the black soils Blue grass and Red Top seem best adapted.

(c) Carrying Capacity of Pastures of Various Kinds.

As was reported last year, a Carpet grass and Lespedeza pasture in Jones County produced 2960 pounds gain on 14.2 acres from June 8th to September 8th. This gain in weight was made by 26 head of plain steers weighing from 520 to 705 pounds per head. To put this another way, three months grazing produced 208.45 pounds gain per acre. This pasture was six years old, had been grazed closely since it was established and had received little or no fertilizer except manure from the stock grazing it.

In Currituck County gains in weight were recorded in 1931 as follows:

No. Head	Dates on Pasture	Total Days	Pasture Days	Gain	Description of Pasture
36	5/1 - 10/28	180	6480	8062	16 A Lespedeza
3	5/1 'til sold,	dates unrecorded		473	
10	8/5 - 10/28	86	860	1427	9.25 Carpet & Lespedeza
12	10/6 - 10/28	22	264	215	5. Poor Carpet Grass in orchard
6	9/16 - 10/28	42	252	510	6. Native pasture
					36.25 acres
Total Gain		10,667 pounds			
Per Acre Gain		294.81 pounds			

The most severe drought in many years during the summer of 1932 prevented the obtaining of records of any significance.

Tame Versus Native Pastures.

Tame pasture produced three times as much gain as native pasture in Currituck County in a comparison with dry cows.

Daily gains of yearling steers and heifers in Washington County, one group on reeds and the other on tame Blue grass and Lespedeza were as follows:

Tame pasture - .955 pounds  
Reeds , - .605 pounds

Value of Reeds (*Arundinaria tecta*) for Summer Grazing.

Native cows nursing calves gained approximately .5 lb. per head daily from May 1 to December 1, 1932. Gains were most rapid from May to August.

Native calves gained 1.2 lbs. per head daily to Dec. 1.  
First cross Hereford calves gained 1.6 lbs. per head daily to Dec. 1.

Twenty-nine cows and twenty-seven calves were on 80 acres of scattered stand of reeds from May 1 to August 2. They were then transferred to a second 80 acre field where they were carried until November 15, at which time they were put back on the original 80. The areas grazed contained an estimated 80 per cent stand of reeds.

In order to determine the grazing capacity of an even stand of reeds a measured 10 acres tract was fenced in the spring of 1932. The area was accidentally burned over, making it necessary to delay the grazing until June 1. At that time 12 yearling steers were turned in and left until September 29 when it became necessary, due to drought, to give them two more acres, on which they stayed until October 31.

	<u>Native Steers</u>	<u>Grade Steers</u>
Average Initial Weight	492 lbs.	551 lbs.
Average Final Weight	<u>598 lbs.</u>	<u>657 lbs.</u>
Average Gain	106 lbs.	106 lbs.
Average Daily Gain	.697 lbs.	

There is little doubt but the 10 acres would have amply carried the twelve steers from May 1 to December 1 had it not been for the fire and drought.

(d) Pasture Fertilization.

Fertilizer test plats were continued this year. The plan of the tests is shown in the following diagram.

500 lbs. 4-8-4 per A.	Check	111 lbs. Nitrate of Soda per A.	250 lbs. of 16% Superphosphate per A.
1 TON	LIME	1 TON	1 TON

Observations continue to show an increased growth and spread of Lespedeza on complete fertilizer and phosphate plats. The reverse seems to be true on the nitrate plats although this appearance may be due to stimulation of the growth of grasses and consequent competition.



PASTURE FERTILIZATION TEST

E. E. Bell Farm - Pollockville, N. C.

"A" - 7.2 acres - Fertilized at rate of 400 pounds, 8-4-4 per acre.

"B" - 7.2 acres - With no fertilizer.

Both grazed with steers.

Record of GainsPasture "A"

No.	<u>Weight</u>	<u>Weight</u>	<u>Weight</u>	<u>Weight</u>	<u>Weight</u>	<u>Weight</u>
	Date May 11	Date June 8	Date July 6	Date August 3	Date Aug. 31	Date Sept. 28
2	278	358	358	366	375	410
4	784	896	904	856	890	894
5	968	1084	1052	1018	1052	1062
6	790	908	908	846	874	818
7	406	446	440	448	452	464
10	698	822	850	772	794	790
13	427	488	474	448	446	454
14	220	262	264	264	302	320
15	752	836	816	764	758	798
	5323	6100	6046	5802	5948	6008
	Av. Wt. 591.4	673.3				
Total Gain		777			141	85
19		528	582	562		
20		634	692	682		
21		558	604			
22		512	576	576		
23		416	444	446		
24		358	356			
		9086	9300	8068		
			214	Net Loss		
				- 272		
Net Gain May 11 to September 28 -				925 Lbs.		

## PASTURE "B"

No.	<u>Weight</u> Date May 11	<u>Weight</u> Date June 8	<u>Weight</u> Date July 6	<u>Weight</u> Date Aug. 3.	<u>Weight</u> Date Aug. 31	<u>Weight</u> Date Sept. 28
1	849	974	948	896	904	890
3	552	650	674	652	646	666
8	650	772	780	768	812	816
9	369	428	416	428	440	420
11	727	818	830	828	856	866
12	557	412	422	426	432	420
16	205	232	226	-	-	-
17	208	256	244	252	276	296
18	698	820	826	802	804	798
32	712	838	824	814	850	834
	5324	6180	6190	5866	6000	6008
Average	532.4	618.0		Net Loss	Net Gain	Net Gain
TOTAL Gain		856	10	- 98	134	8

Net Gain - May 11 to September 28, 910 lbs.

NOTES

- May 11, 1932 Notable difference in growth of Hop Clover on "A" - Carpet grass has made little growth. Fear lespedeza will be poor stand due to March freeze. Almost a complete stand of Hop Clover.
- June 8, 1932 Dry - "B" grazed much closer than "A" - Six bred heifers put in "A". Some lespedeza, but it is very scarce compared to last year. Carpet grass O.K. tho short due to lack of rain. No doubt Hop Clover responsible for most of gains first month. "A" should have had more cattle on it.
- June 8, 1932 Nos. 18 to 24 include heifers added to pasture "A".
- July 6, 1932 Very dry. Pasture started drying up July 2nd. Grass short both sides. Took No. 18 out "B". He had been getting across to "A". Also took Nos. 21, 22, and 24 out of "A". More will be taken off both sides if rain does not come soon.
- August 5, 1932 Still dry. Had one or two rains but not enough to do much good. All heifers taken out of "A", 19, 20, and 23.
- August 31, 1932 Pasture revived during past month somewhat but still dry and grass short.
- September 26, 1932 Pasture still short. The five largest steers in each lot taken out to be fattened in corn and velvet bean field.

SUMMARY

Killing of lespedeza by a freeze in March coupled with a severe drought caused this pasture to be very unproductive. Lack of close supervision is responsible partially for the gains showing little difference on the two plats. For example: "A" should have had more cattle on it the first period and less the third period.

No doubt lack of moisture had much to do with effect of fertilizer.

Plan to reseed lespedeza this winter and fertilize in February preparatory next year's test.





Rate of Applications.

1000 lbs. lime - per acre  
800 lbs. - 8 - 4 - 6 -- equivalent per acre  
500 lbs. - 16% superphosphate per acre.  
133 1/3 lbs. - nitrate of soda per acre.  
72 lbs. - muriate of potash per acre.

Procedure

1931 -- Fertilizer application -- June 2nd

Lime applied later.

Note -- Pasture grazed early spring by cattle. Taken off  
May 19th. Sheep (15 head) on whole tame pasture,  
20 acres, part of summer season but grazed close to  
barn hardly touching fertilized plats. Pasture moved  
about September 2nd.

Report of Observation September 4, 1931

Complete fertilizer and potash plats showing  
advantage in growth and spread of Lespedeza.  
Phosphate plat appears better in Lespedeza than  
Nitrate and Check plats.

1932 -- Same applications of fertilizers repeated April 27,

1932 - No lime applied 1932. Entire fertilized area  
fenced April 28th.

June 18th, 1932 - Each plat mowed, raked and weighed -  
green.

Plat 1 (8-4-6) 312 lbs. Plat 7-Check - 119 lbs.

Plat 2 (8-4-6)-Lime 209 lbs. Plat 8-Lime - 63 lbs.

Total 521 lbs. 182 lbs.

Difference in favor of Fertilizer 339 lbs.

Plat 5 - P -	69 lbs.	Plat 7 - Check	119 lbs.
Plat 4 - P - Lime	<u>70 lbs.</u>	Plat 8 - Lime	<u>63 lbs.</u>
Total	139 lbs.		182 lbs.

Difference in favor of Check 43 lbs.

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Plat 5 - N -	167 lbs.	Plat 7 - Check	119 lbs.
Plat 6 - N - Lime	<u>93 lbs.</u>	Plat 8 - Lime	<u>63 lbs.</u>
Total	260 lbs.		182 lbs.

Difference in favor of N - 78 lbs.

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Plat 9 - K	140 lbs.	Plat 7 - Check	119 lbs.
Plat 10 - K - Lime	<u>71 lbs.</u>	Plat 8 - Lime	<u>63 lbs.</u>
Total	211 lbs.		182 lbs.

Difference in favor of K - 29 lbs.

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Note - A hard wind in spring blew large amounts of top soil from corn field on to north edge of plats. For a few feet the sod was entirely covered resulting in nothing but weed growth. The next 15 or 20 feet grass greatly benefited, therefore, no comparison between limed and unlimed areas can be made. The severe drought made it impossible to get additional mowings. Entire area will be reseeded to Lespedeza in the spring of 1936, and another application of fertilizers similar to the past two years.

Value of Crop Gleanings.

Summary of second year's work on farm in Currituck County.

Fifty-six head of cattle of various ages and weights were carried during the winter of 1931-1932 as follows:

October 28th to November 14th - 1931

16 acres of Lespedeza that had been grazed during summer.

20 acres of silage corn stubble.

4 acres of soy beans - sown broadcast.

November 15th to February 22nd - 1932

65 acres corn stalks - yield of corn 45 - 50 bushels.

60 acres soy bean stalks - yield of beans 15 - 20 bushels.

Total Cattle days - 4959

Total gain 1711 pounds

Average daily gain .345

Gains were not as good as during the previous winter.

This can be accounted for in two ways. (1) Cattle were in better condition when they were turned on the fields and (2) they no doubt lost weight between the time they were taken off pasture and the time they were put on the stalk fields. It was not possible to make weighings for this period.

Miscellaneous

Trench Silos:

Since the fall of 1930 considerable thought has been given and effort has been expended in regard to the use of trench silos. None were in use at that time in the State.

Two silos were dug during the fall of 1931, one in Western, and one in the Piedmont section of the State. This winter there are thirty-nine in use in the State and most favorable reports are coming from the owners. One silo of 32 ton capacity was dug on a farm near Raleigh at a cost of \$ 9.75. The silage is keeping excellently.

Emergency Grazing Crops.

A rather severe drought in 1930, a most severe one in 1932, winter killing of carpet grass during the winter of 1930-'31, and killing of lespedeza in March 1932, not to mention droughts of short duration that occur most every year, all emphasize the necessity for growing annual crops of some kind or kinds which may be used to supplement permanent pasture if needed, otherwise used for hay or seed.

Mr. Hugh MacRae of Pender County has demonstrated the value of summer annuals for grazing purposes for the past two years. He has used Biloxi soy beans, Cherokee clover and Sudan grass. He uses a temporary fence for enclosing five acres which area is grazed for four or five days. The stock are then moved to another five acre tract. After the fifth area is grazed the first is again ready for the cattle.

A beef cattle farmer of Currituck County, found a sixteen acre field of newly seeded lespedeza to be a life saver for his beef cattle during the past summer. Permanent pasture had been damaged by freezing so that grazing in the early spring was very short. The cattle



were turned on the Lespedeza where they made excellent gains until permanent pastures had recovered from the winter damage.

#### Feeding for Market.

During the winter of 1931-'32, thirty eight cars of cattle were fed for market under the more or less careful supervision of this office. In several cases the owners were feeding cattle for the first time. This winter, 1932-'33, twenty-three cars are being fed, the decrease in numbers being due to feed shortage, financial difficulties and general losses last season due to the falling market.

#### Large Scale Cattle Farming.

With the thousands of acres of land in Eastern North Carolina bringing in no revenue whatsoever and with large areas of reeds and other native plants without cattle or other livestock grazing them, many look for the development of cattle raising on a large scale in this section. Such a venture is being contemplated in Onslow County. Parties in that county are now trying to interest Eastern capital in 40,000 acres of land for the purpose of cattle raising.

Help has been given in preparing facts and figures to show the requirements and possibility of such an enterprise.

#### Financing.

In response to rather urgent demand on the part of cattle feeders, considerable time was consumed in connection with ways and means of financing cattle feeding in the State. A conference was held with out State Director of the Eastern Livestock Cooperative Marketing Association. This resulted in a conference with the officers of this Association at Baltimore. The result was to put our feeders in a position to secure loans thru the Feeder and Finance Corporation.

Beef Cattle and Sheep Improvement:

In Eastern North Carolina low grade cattle and sheep predominate, many of the herds and flocks consisting of native females. In the western part of the State a higher quality of livestock is produced yet in some localities there, beef cattle in particular have deteriorated in recent years mainly due to interest in cheese factories and the resulting introduction of the dairy breeds and the consequent mixing of breeds. Considerable time has, therefore, been spent in an effort to improve the quality of both beef cattle and sheep. Three ram sales and two bull sales were held during the year and in addition many purebred bulls and rams were placed thru private treaty. Two county beef cattle associations were formed during the year. These associations had for their object the improvement of the quality of cattle being produced and particularly stressing the use of better bulls, pasture improvement, and better winter feeding. Two large and several smaller field meetings were held at which grading demonstrations were put on.

Meats Work.

The proper killing, cutting and curing of farm meat animals is of great importance in times of depression such as we are going thru. During 1932 R. E. Nance of the Animal Husbandry Department, has conducted twenty-eight demonstrations with a total attendance of 1185 farmers and farm women. Also during the year requests have been filled for approximately 3,000 circulars on killing, curing, and home tanning. Mr. Nance is on the College teaching staff and receives no part of his salary from the Extension Division. At the beginning of the year arrangements were made for Extension to pay his travel and a rather full schedule was made for him for three months' time. Curtailed appropriations, however, made it necessary to cancel many of these engagements. The expense of several trips has been paid by the farmers themselves.

Marketing.

Another problem that has demanded more than usual attention this year is marketing. In the eastern part of the State it has been customary to sell light weight, half finished cattle to local butchers, their practice being to buy at the farm, slaughter there, and pay a stipulated price per pound dressed weight. Increased production together with decreased demand has caused a serious problem. In some cases arrangements have been made with local butchers to take the surplus of individual farms at fair prices. In perfecting such arrangements, the development of the locality has been stressed together with assurance of higher finish and quality than has been customary in the past. In some instances cattle of uniform age and size have been sold and shipped as feeders, while others have been fattened and shipped to more distant points.

Other Activities and Accomplishments.

During the year covered by this report five programs for beef cattle and sheep development in that many sections of the State were prepared by this department. These programs were presented at district meetings of farmers and farm women and with some minor revisions adopted by them. They were later printed along with similar programs covering other phases of farming and livestock raising and placed in the hands of farmers.

Assistance was given in the plans and building or installation of three cattle barns, seven dehorning chutes and two sets of scales.

Publicity.

The difficulty of reaching more than a small percentage of farmers thru meetings and personal visits emphasizes the importance of news stories. Curtailed travel funds have further necessitated this means of reaching larger numbers.

In the early fall a week's trip thru the eastern part of the State was made with the College Editor. News flashes were sent to dailies each night and several feature articles were prepared by the Editor following the termination of the trip. A few clippings of articles prepared by the author of this Report appear on the following pages.



## Packers Demand Trimmed Lambs

Letters now being sent to the trade by livestock commission merchants indicate that the packers are demanding trimmed lambs. These dealers have always shown a preference for lambs handled in this way and now it appears they are in a position to make this a demand or the prices will be less.

"From the standpoint of the slaughterers, this would seem to be an ideal time for carrying out their intentions," says L. I. Case, livestock expert at State College. "There are liberal supplies of lambs on the market and it is getting to be more of a problem to absorb the supply than to get enough for their needs. It will, therefore, be to the advantage of producers to trim and dock their lambs where they will reach the market about June 10."

Trimming the lambs is not the only desirable thing in producing them for market. Mr. Case says top lambs must be properly bred. A good pure bred mutton type of ram should be used in the flock and while it is too late to do anything about this for the present season, plans should be made now for next season. The lambs also ought to be in good flesh. A fat lamb is one that is getting plenty of milk which means that the ewe be kept in good condition.

Choice lambs are also free from parasites. The common stomach worm which does its greatest damage during the warm weather of the spring and summer is the main offender but it may be controlled by frequently changing the pasture and by regular drenching treatments.

For lambs to bring the best prices, they should not only be of the right conformation, docked and trimmed and fat but they should be sent to market in uniform lots weighing from 75 to 80 pounds each, says Mr. Case.

## STATE NEEDS MORE SHEEP AND CATTLE

### Carolina Has Balanced Advantages For Feeding Both at Profit

For the mountain section of North Carolina the production of feeder cattle should be continued in spite of present low prices for beef and in the piedmont and coastal countries, the plan of fattening such feeder cattle for market might be a profitable method of using the surplus feedstuff.

Where sufficient pasture can be grown, economically, the keeping of a cow herd and the fattening and marketing of the calves at from 8 to 12 months of age will offer a dependable source of income. If it is impractical to keep a breeding herd, it is probably best to buy the feeder cattle from the mountain breeding grounds and fatten them for market, especially where the buyer has sufficient feed on hand.

The mountain area as well as the foothills and piedmont section is ideally suited to the production of sheep. Every piedmont farm should have a farm flock of sheep and in the higher altitudes the production of market lambs might continue to be a good farm program.

These give in a brief way some of the recommendations made by farmers attending the regional agricultural conferences held in the western part of the State this winter. These western farmers say there are good permanent pastures in the mountain and foothill counties. The climate is favorable; the drainage is adequate and there is an abundance of land too steep and rough for the profitable production of other crops. Especially in these areas should the growth of sheep and beef cattle be promoted.

Down in the lowlands, the growers should buy the feeder cattle for fattening and keep only small farm flocks of sheep.

These suggestions will be included in the livestock program of State College during the coming few years, says L. I. Case, animal husbandman.

## BEEF CATTLE FURNISH SURPLUS FEED MARKET

The two main advantage of fattening beef cattle for market are to provide a market for surplus feedstuffs and to secure manure that will cut down the fertilizer bill.

"Whether it will pay any farmer to feed some cattle this winter will depend largely on the amount of feed he has on hand and the need for manure in his farming operations," says L. I. Case, beef cattle expert at State College. "Every man who grows a surplus of feed each year will also find it profitable to feed a given number of cattle each year. If he will follow this system year in and year out, he will usually be ahead over a period of years."

Mr. Case makes it clear that the best feed for fattening cattle is corn. If this grain is fed with dry roughage and a protein concentrate it will produce excellent gains. The practice generally followed in the main cattle feeding sections of the country is to feed broken ear corn, allowing the hogs to follow the steers and consume any waste.

With present prices for beef cattle, it will not pay to buy feed, except cottonseed meal or some other such concentrate for balancing the corn. When cottonseed meal is low in price, it may pay to buy both meal and hulls. However, heavy rations of cottonseed meal are not safe over long periods of time. When using the meal, feed out mature animals weighing from 900 to 1100 pounds. They may be finished in from 90 to 100 days which is close to the limit of safety.

Low grade roughage is fine for wintering steers and dry cows but animals being fattened for market should receive only the dry roughage which they will clean up after the concentrates are fed. Case says

## Trade Now Demands Young Beef Animals

Progressive beef cattle growers no longer keep their steers until they are four or five years old but fatten them for market under one year of age.

This is the new tendency in producing beef cattle for market," says L. I. Case, animal husbandman at State college. "Two factors are responsible. First, there is the demand for small cuts of beef by the consumer and this must be the prime consideration. It is true that the hotel trade demands large carcasses and that these bring a premium when the supply is inadequate, but the great general demand is for small cuts. The second factor is the matter of economy. Young cattle can be fattened at less expense than old animals and a high quality of beef is produced at little expense."

Mr. Case says if it costs \$1 to put a given amount of flesh on a baby beef the same amount will cost \$1.05 for a yearling; \$1.26 for a two-year old, and \$1.60 for a

three-year old. Therefore farmers in this state as well as other states are following the practice of starting beef calves on grain when they are one month to six weeks old. The calves are finished at weights ranging from 550 to 700 pounds by late October or November when they may be marketed to advantage.

Some other advantages of producing baby beef are the quick turn-over of working capital, securing as good prices for heifers as for steers, lowering of wintering costs and the production of high quality at the lowest possible cost.

Mr. Case believes there is a place for the production of baby beef on many North Carolina farms. Given cows of good type and a pure bred beef bull of an early maturing type, the cows are bred to calve in late December, January or early February. Sufficient corn should be grown for feed and a good pasture available.



## GOOD PASTURE IS NECESSARY IN NEW LIVE-AT-HOME PROGRAM

It is impossible for any North Carolina farmer to live at home without keeping some kind of livestock or poultry, and to do this a good pasture is necessary.

L. I. Case, animal husbandman at State College, makes the suggestion that all farm plans for the future will include the laying aside of several acres for a permanent pasture, the amount of course depending on the kind of farming and the amount of live stock on the place.

"Most farmers now having permanent pastures tell me that they are the most profitable acres on their places," says Mr. Case. "I know this to be borne out in the case of E. E. Bell of Jones County, who grazed some plain quality steers with no supplementary feed on an 11-acre pasture from June 8 until September 8 of last year. The steers gained 2,960 pounds in that time. This was at the rate of 240 pounds an acre for a three months' period."

Mr. Case says the Bell pasture consists of lespedeza, carpet grass and white clover and is well above the average in quality. However, it illustrates the pasture possibilities on a fine sandy loam soil.

In Currituck County last season, W. W. Jarvis had a herd of beef cattle to gain over 10,000 pounds on pasture with no additional feed. This gain was made from May 1 to October 28, a period of 180 days. The gain for each acre of pasture was about 300 pounds and the pasture consisted of 16 acres of common lespedeza and several small areas of carpet grass, Dallis grass and lespedeza mixed. There was also a six-acre field of native grasses, but this contributed little to the total gains, Mr. Case found.

### Graze Velvet Beans With Beef Cattle

An economical way to winter or fatten beef cattle is to graze them on velvet beans planted in corn. A double purpose of improving the soil and fattening the animals is thus served.

L. I. Case, beef cattle expert at State College, recommends the Hundred Day Speckled as the best variety for this purpose. This bean is also known in some localities as the Early Speckled or Ninety Day Speckled. The bean seed may be planted in the corn when it is first planted or between the corn rows at the first cultivation. The latter plan allows the corn to make some growth ahead of the beans and is therefore not pulled down by the bean vines to such a great extent later in the season.

The best method of using the beans in cattle feeding is to permit the animals to graze the two crops. If the corn should be needed for other purposes, it might be wise to snap some of the ears prior to putting the beef animals in the field. In some cases too, the mature beans are gathered late in winter to secure planting seed for another season. Some growers gather the beans for feed.

Mr. Case suggests that grazing start following the first hard frost and be continued through the winter. When the fields are grazed by cattle, hogs may be used to follow them and pick up such corn and beans as should be trampled down. Both vines and beans will remain edible throughout the winter exposure. In fact, says Mr. Case, weathering makes the beans more palatable by softening the pods.

Mr. Case tells of instances where beef animals have gained as high as 200 pounds each in 90 days by grazing in this way. They may not have had the best finish, but they do make good beef.

### Need Grazing Crops To Supplement Pasture

Growers of livestock have found by two years of experience that it pays to have some annual grazing crops to supplement the permanent pasture if the stock is to be kept in the best of condition.

"These supplementary grazing crops are emergency or insurance crops for the livestock man," says L. I. Case, animal husbandman at State College. "The drought of 1930, the winter-killing of carpet grass that following winter. The March freeze of 1932, and the extended drought this summer has demonstrated the full value of such temporary grazing crops. Some of the crops which might be used to advantage are soybeans, sudan grass, Cherokee clover or lespedeza. Good farmers have found that a definite area in these crops each year is necessary. If not needed for grazing, they may be harvested in the usual way for seed or hay."

Case says Hugh McRae is one of the men in North Carolina who have led the way in demonstrating the value of these crops for grazing purposes. For the past two seasons he has used Biloxi beans, Cherokee clover and sudan grass for grazing his milk cows. He uses a temporary fence for enclosing five acres which is grazed for four or five days. The stock is then moved to another 5-acre tract. After the fifth area is grazed, the first is again ready for the cattle.

The Experiment Station at State College uses soybeans and sudan grass for grazing sheep. Twelve ewes and their lambs are carried on four acres from May 15 to November 15 and they make better gains than do others carried on permanent pasture and treated for stomach worms every two weeks. W. W. Jarvis uses temporary grazing crops for his herd of beef cattle and turns them on the crops when the pasture gets short, Mr. Case says.

## Rain And Sleet Hard on Livestock

Heavy rains followed by the sleet and snow which have fallen over most of North Carolina in recent weeks causes more hardship to livestock than sub-zero weather. Especially do animals not adequately bedded suffer under such conditions.

"We write and say much about our mild winters being suitable for the keeping of livestock on North Carolina farms, and it is quite true that we have an advantage in this respect. We should not overplay this advantage, however, and use it as an excuse for neglecting the stock," says L. I. Case, livestock specialist at State College. "Such weather as we have had in the State recently is hard on animals kept in barns or lots with insufficient bedding. Stock running in the open field will be much more comfortable under such conditions. We should keep in mind the old

saying that an animal with a good bed is half fed."

Mr. Case has found in his demonstration work with livestock that if livestock is provided with a good place to lie, a considerable amount of feed is saved.

"While we are all concerned with the suffering of human beings during the winter, let us not forget our livestock," Mr. Case says. He believes farmers are doing their part in relieving humane hardships but they should, at the same time, give proper consideration to their dumb animals. They should be properly fed and cared for both from a human standpoint and from an economical viewpoint. Where sufficient feeds were not produced on the farm for adequately nourishing the animals, such feeds should be purchased. Where dry bedding is not available, it must be secured somehow, somewhere and in some manner.

This will pay in peace of mind as well as in dollars, Case believes.—F.H.J.

## POOR ECONOMY TO GRIND ROUGHAGE FEED

It is not necessary to grind the roughages ordinarily used for livestock feed and certainly it is poor economy to do so with all feeds as low in price as they are now.

"We have come in contact repeatedly with much misleading propaganda in regard to the advantages of grinding feeds for livestock," says L. I. Case, animal husbandman at State College. "I recently overheard a salesman who was giving a demonstration of his machine say that the grinding of corn stover would make it 100 per cent digestible. Such a statement is ridiculous on its face because corn stover at best is only about 50 per cent digestible and no amount of grinding will make it any more so."

Mr. Case says no hard and fast rules may be laid down for every farm but generally speaking it does not pay to grind roughage.

In feeding beef cattle where hogs are to follow the heaves, it does not pay even to grind corn. Old feeders know this by experience and the majority of them feed broken ear corn or shelled corn, says Mr. Case. About the same thing is true in feeding corn to hogs. Numerous feeding trials prove conclusively that there is little saving in feeding ground corn to hogs in place of ear corn or shelled corn.

## More Feed Needed Because of Drouth

The dry weather of the past summer has left the pastures and stalk fields in poorer condition than ordinarily at this season of the year and cows left to maintain themselves on such pastures and fields may lose flesh rapidly unless some supplementary feed is given.

"If the animals are allowed to lose too much flesh, they will be devitalized through the entire winter and it will be more costly to bring them back into condition again," says L. I. Case, beef cattle specialist at State College. "It is of more than usual importance to feed this winter. Most of the cattle are in poor flesh due to poor grazing and they should not be allowed to get into worse condition."

Mr. Case says the stalk fields of corn and soybeans in sufficient acreage will probably furnish enough feed for dry cows, yearlings and two-year-olds for a greater part of the winter. However, calves not nursing and cows nursing calves should have some additional feed. The grower must not depend too much on the waste feed in the stalk fields. Cattle should be changed to other fields or given supplementary feed before they begin to lose flesh.

The man who has a field of velvet beans in his corn is very fortunate indeed at this time, believes Mr. Case. The cattle should be turned into such a field in January after the velvet bean pods have been softened by the frost and rain. Other splendid winter feeds which cattle may gather for themselves are cover crops of Abruzzi rye, barley, oats, vetch, crimson clover and other winter-growing legumes. Such feeds are especially good for young stock and for cows with nursing calves.



## PROGRAM SHOULD LIST BEEF CATTLE

### Livestock Industry Should Also Include Sheep for Slaughter

(By F. H. Jeter in Charlotte  
Observer)

In setting about to build up the livestock industry of North Carolina, apparently the agricultural leaders are confining most of their efforts to the dairy phase of this industry. Of course, attention has been paid to swine and to poultry but of the other three classes, dairy cattle have been promoted principally and little has been said of sheep and beef cattle. The reason for this, they say, is that beef cattle and sheep need wide ranges of land and plenty of cheap feed. The margin of profit with these two classes of animals is so low that few farmers can afford to handle them.

The price may be low. There may be little profit in beef or in lambs and wool. But certainly on the larger farms where little profit is had from cash crops, it seems that beef cattle and sheep could be grown. We should not think in terms of large sheep ranches but every good-sized farm in the state could support a few sheep. Every fair-sized farm could support a few beef cattle. Such animals will get a large part of their food from the pasture and from the surplus roughage and hays now being produced on North Carolina farms. They may be finished on cottonseed meal produced on North Carolina farms.

It has been my experience that the more nearly a person produces a finished product, the more profit he makes. In other words, one may not get much profit from selling hay as hay, but if he converts home-grown hay into beef, he may get a larger profit. Then in finishing his beef animals for market, there is a great quantity of animal manure left in the feed lot which could be used to excellent advantage in building up the fertility of our starved lands. Sometimes, growers of beef cattle get their only profit from the manure, but, even then, they feel that they have been well repaid. There is one large farm down in Halifax county where some beef cattle are fed each season for the simple reason that the manager came from the middle-west and believes in the use of animal manure in growing his cash crops. The cattle so fed are sold on the Baltimore market and bring in some additional profit.

I think, therefore, that any well balanced farm program would call for more beef cattle and sheep.

North Carolina farmers will not soon forget the lesson they have learned during this depression. I do not believe we shall ever again follow, without reason, the will-o'-the-wisp of cash crop farming when times get better. We have learned our lesson dearly and if we are wise we shall never get caught again and we should teach our children about this lesson. For all the years to come North Carolina should follow the type of farming adopted generally during the past two or three years.

First food, then plenty of feed, then legumes to build up the soil, then pastures and hay, then livestock and poultry to consume all this, and finally the remainder in cash crops. If this principle is followed, we shall in future years live in a land of plenty. That grand old man of agriculture, the late W. A. Graham, who was for years commissioner of agriculture, told me more than once, "I have never seen the sheriff sell out a man with a crib full of corn." He meant by this that such a farmer followed safe farming first. Every day we see evidences of this. We saw it in the borrowing from the government seed loan this year, and we shall see it down through the ages to come.

#### CATTLE, SHEEP

An expert at Raleigh who has been working with Eastern Carolina farmers predicts this will be a season of stock farms in the future. He says Eastern Carolina's farmers will breed beef cattle and sheep as well as hogs. They should do precisely that.

The farmers must be educated first, of course. Their objections, for the most part easily answered, must be overcome. The objections include: Fencing costs money. Grazing must be augmented with grain feed a part of the year. Insect pests harass the animals and keep them lean, in some localities at least. Market prices are low. There are other objections. True, fencing costs money, but it costs comparatively little to fence an area that will graze a half dozen or dozen animals. Cattle and sheep will sustain themselves most of the year. If native grasses provide too poor grazing there are others which grow luxuriantly in this part of the country. In a properly drained pasture few insects breed; animals eradicate their breeding places. Animals clean up a country and keep it cleaned. Prices of beef, mutton and wool are low, but so are prices for all other commodities. These things can be marketed at a moderate profit most of the time. Moderate profits are what our farmers need.

On the Scandinavian peninsula farmers raise large numbers of cattle. The climate is very severe compared with that of North Carolina. Very little of the land can be used for any phase of agriculture, even grazing. Certainly the rich soils of Eastern Carolina, with a stream bordering nearly every farm and vegetation literally running riot, will support hundreds of thousands of cattle and sheep.

And the cattle and sheep would enrich the soil, clean up the waste places, thus converting the countryside into a much more attractive vista, and, in most times, afford their owners a moderate profit. Most people are content with a moderate profit. Farming for a moderate profit is safe farming.—Kinston Free Press.



## Eastern Carolina Destined Become Livestock Country

Raleigh, Sept. 30.—Eastern North Carolina, long renowned as the great cash crop section of North Carolina, is destined to become a livestock country with especial attention to beef cattle and sheep along with the hogs now being produced there, declares L. I. Chase, beef cattle expert of State College, who visited this section last week in company with F. H. Jeter, agricultural editor.

Mr. Chase has been working in this section for three years now and he is particularly impressed with the lower coastal plain or tidewater section as a home of beef cattle production. The place of sheep, he says, will be as small farm flocks and not in large ranch holdings. However, eastern Carolina can produce legume roughages and grass pastures much more economically than they may be produced elsewhere in the State and there are great areas of wild grass reeds in the tidewater section on which cattle makes substantial gains at practically no cost.

Mr. Chase is working with a number of good farmers who have recently purchased pure bred beef bulls which are used to upgrade the native cattle of the section. On some farms, two or three pure bred heifers of the same breed as the bull have been added to start a small purebred breeding herd. Herefords, milking type of Short-horns and Aberdeen Angus animals so far lead the list though there are one or two Red Poll bulls in the east.

The planting of pastures has also increased steadily in the last three years. A number of farmers claim that the areas seeded to improved grasses and lespedeza have become the most valuable acres of their farms. Usually Mr. Chase recommends the laying out of the pastures in comparatively small lots so that the animals may be shifted from time to time and thus not damage any of the pastures too severely.

## JARVIS BELIEVES IN STOCK FARMING

### Currituck Man Has Never Planted A Single Acre To Cotton

By F. H. JETER.

Moyock, Sept. 15.—There is one farmer in eastern North Carolina who has never grown an acre of cotton and never intends to do so. That person is W. W. Jarvis, of Moyock, Currituck county, who is generally regarded as one of the best business men in the county as well as one of the best farmers.

"I have always noticed that when a man has cotton to sell, he asks the buyer what he will give for it," says Mr. Jarvis. "When I have a lamb or a hog or a beef to sell, I usually tell the buyer what I will take. Livestock consumes all the waste roughage on my place, cleans up the fields, leaves the land fertile, and is in demand most of the time."

Mr. Jarvis farms lands that have been in his family since Colonial days. There are 250 acres in the home tract, though Mr. Jarvis is interested in nearly a thousand additional acres, a large part of which is in woodland.

J. W. Flora and W. T. Aydelette are two other smaller Currituck farmers who are finding that the livestock route is the safest route for farmers. Mr. Aydelette is an excellent hog breeder and follows a sanitation system with his brood sows which assures him large litters of healthy pigs. He is also grading up a herd of cattle. Mr. Flora is interested in cattle and hogs also and is feeding out a lot of about 40 now for the late September market.

W. D. Walker, owner of Evergreen farm near Moyock, is going into the production of purebred Hampshire hogs and Shropshire sheep. He has his land fenced into rather small fields and shifts his animals from one field to the other to graze. There are 174 acres of land in the farm. Forty acres are planted to corn; 45 to beans and the remainder of the cleared area to hay crops and pastures. Mr. Walker sells about 55 fat hogs a year to the market but gets his main income from the sale of purebred breeding animals. He has a small flock of beef cattle started and intends to produce purebred stock from this herd.

According to County Agent T. B. Elliott, Mr. Walker is one of the progressive small farmers of the

## LIVESTOCK WILL PRODUCE WEALTH

### Farmers Will Find New Source of Revenue Through Growth of Stock

Raleigh, March 26 (AP)—Growing livestock will not make any North Carolina farmer suddenly independent but livestock properly bred, fed and cared for will help to build up permanently prosperous agriculture in North Carolina was the belief expressed today by L. I. Case, livestock specialist of the experiment station at N. C. State College.

A farmer recently reported to Case that he had never made any profit out of livestock but at the same time, he had never made any money farming until he began to keep some livestock on the place.

"The only way to start with beef cattle on any farm where livestock has not been kept is to get a good bull to use in connection with the plain scrub or low grade cows on the place," Case said.

"How important this is may be seen in the case of a farmer in western North Carolina who had three steers in his herd which weighed about the same amount. One was a plain animal of poor breeding; the second showed some intermingling of beef breeding, while the third was a high grade showing several crosses of good bull. A buyer paid this man \$20 for the first steer; \$29 for the second and \$40 for the third."

During the past two years several thousand head of cattle have been shipped into eastern North Carolina and among them are some 100 herd of pure bred animals, mostly bulls, Case said.

"The result will be found in a more permanently prosperous form of farming in that section," he declared.

### Washington's Farm Success Based On Stock Growing

To his other virtues, add that of being a livestock farmer as one of the reasons why George Washington was generally credited as being the leading farmer of his day.

"When Washington came into possession of the beloved Mount Vernon, the fertility of the soil had been impoverished by a century of almost continuous cropping to tobacco and corn," says L. I. Case, animal husbandman at State College. "He was quick to realize this condition and immediately instituted less harmful systems combined with livestock production. His carefully kept records show that he increased the capacity of his acres by the balanced type of farming followed. The records show that he had at the time on the Mount Vernon farm, 34 horses, 15 jacks and Jennets, 37 mules, 329 cattle and 640 sheep which were disposed of in his will."

Mr. Case says Washington not only grew livestock of all kinds, but he received a thrill from the breeding of pure strains. He increased the wool output of his sheep by using good rams. He also enjoyed having livestock products on his table.

Finally, he was convinced that improved agricultural practices were vital to the future of the young Nation which he had helped to found. "I know of no pursuit in which more real and important services can be rendered to any country than by improving its agriculture, its breed of useful animals, and other branches of the husbandman's cares," he said in 1794. Again in 1796, he compared the kind of farming done in the United States with that of some other countries and urged the farmers of America to "fall on a better mode of treating them (the soil)."

According to Mr. Case, this is advice which any farmer in North Carolina could well apply in 1932.

# East Carolina's Alert Farmers Now Turning Toward Livestock

## Beef Cattle and Sheep Utilize Crop Residue and Increase Area's Financial Resources

By F. H. JETER.

Eastern North Carolina's long growing season and mild climate is now being capitalized by certain alert farmers who have realized that this is a natural stock country. In general these men find that beef cattle and sheep can graze the crop residues left in the field after harvest and may convert otherwise unsalable material into steaks and chops which do find a sale when people are financially able to buy good meat.

Beef cattle, say these men, will make good gains on the corn and soybean fields and can be maintained on vast areas of reed grass which are found in certain areas of the tidewater section. Cattle will consume some of this and sheep will complete the job. Along with the cattle, hogs work well in the livestock system and when finished on corn and fish meal or tankage demand top prices on local and eastern markets. If, however, there is not enough of the rough feed, there is plenty of fertile ground not exactly suitable for crops which may be planted to pasture and hundreds of acres of good pasture are being seeded each year.

It was to learn of these things that I made a trip through Edgecombe, Halifax, Bertie, Chowan, Pasquotank, Currituck, Craven, Jones, Lenoir and Wayne counties during the past week. My guide was L. I. Case, livestock specialist at State College, who has been working in these sections for the past three years. Mr. Case is convinced that the eastern country, especially the tidewater section, is the natural home of livestock and so contagious is his enthusiasm that he has in turn persuaded county agents and hard-headed landowners to add livestock to their farming program. In doing this, Mr. Case had only to study the results of several men who were already in the game and who were finding it a pleasing as well as a profitable mode of farming. Some of these men who are new to the game and some who have been growing and feeding cattle for some years were visited on the recent trip.

Among the newcomers is Bass Brothers in Edgecombe where 16 grade heifers and three pure-bred Shorthorn milking type shorthorn heifers have been added recently

On the larger livestock farm there are 78 pure bred Aberdeens Angus breeding cows, 50 calves and five blooded bulls. These animals have 160 acres of common pasture to graze upon and an additional 85 acres seeded recently under the direction of County Agent G. W. Falls. There are also 220 acres of grass reeds which may be used in an emergency. If that fails, the farm produces about 21,000 bushels of corn a season and has 125 acres in fine alfalfa which turns out about four tons of cured hay an acre each season.

There are two silos at the livestock farm with a capacity of 250 tons of silage each and the manager, C. E. Pritchard, was filling these silos on the day of my visit. For the 87 Guernsey cows at the dairy farm there is another silo over 200 tons capacity. Then there are 125 pure bred sows of the Hampshire breed and about 450 shoats now being grown out for market. Mr. Pritchard sells around 1,200 fat pigs each year. He also sells much surplus beef, pork, mutton and lamb to the 125 employees of the Foreman Lumber Company.

There are 156 head of Shropshire sheep and 200 head of goats on the place. They all work into the rotation system followed. Only cottonseed meal and tankage of fish scrap is purchased as feed. The remainder is grown on the place. The big feed barn 80x240 feet gives on a vivid indication of the size of the livestock operations.

Miles Brito, another Pasquotank farmer, has one of the best Hereford bulls in the Albemarle section. He has 40 cows from which he is building up a beef herd, and there are 32 acres of seeded pasture. He keeps about eight brood sows from which he sells some 70 fat pigs each year. His ewes number 104 and the flock is headed by four good rams. Mr. Brito says it pays him to use land for pasture which formerly produced as much as 87 bushels of corn an acre.

### The Master Grower.

In Currituck county, W. W. Jarvis of Moyock is the outstanding livestock grower and feeder. Mr. Jarvis has some 250 acres in his home place, which by the way, has been a home for the Jarvices since Colonial days. The first start with beef cattle here was with the Shorthorn breed but the owner is changing to Herefords. He has 70 head of grade stuff from which he is seeking steers to fatten and sell on the Norfolk market, 40 minutes away by truck. He also has 28 ewes of the Shropshire breed and 148 head of hogs.

Farms are also close to the supply of cottonseed meal and fish meal which are used in the finishing process and the Eastern markets are available for those who produce a surplus.

According to Mr. Case, those men now in live stock work are making a good job of the project. The trouble is, he says, there are all too few of them.



the recent trip.

Among the newcomers is Bass Brothers in Edgecombe where 16 grade beltors and three pure-bred Shorthorn milking type shorthorn beltors have been added recently. By some means, County Agent H. W. Taylor persuaded the Government Livestock Farm at Beltsville, Maryland, to loan Bass Brothers a fine bill of the dual-purpose type. So the owners have started a small herd of purebred milking shorthorns and are grading up a scrub herd from native cattle.

R. V. Knight of Tarboro, route 1, also has a pure bred milking type Shorthorn bull and has started a dual purpose herd. Mr. Knight has the best carpet grass pasture in the county. It supplies grazing for his cattle as well as for his mules and 28 head of sheep. John Whitehurst, Sr., is another Edgecombe farmer with a pure bred shorthorn bull which will be used to build up a herd of beef cattle to use th waste roughage and pasture land of his farm.

#### The Temple Farm

Nearly every livestock grower in North Carolina knows about T. D. Temple of Scotland Neck and his heard of Herford cattle. Mr. Temple has 40 cows and 37 calves. Most of the calves have been upgraded until they are nearly pure blooded. He ships three cars of cattle and about three cars of hogs each year from his Ronoke Valley farm. He only buys cottonseed meal for feeding purposes. The remainder of the feed is grown at home.

While peanuts are the main cash crop of the Temple farm, the principal income is for cattle, sheep and hogs and Mr. Temple has learned to plant and utilize the waste roughages and pasturage of his place to where they produce the finest quality of meat. There are 1400 acres in the River farm and most of the crops produced are marketed on the hoof.

#### Griffin Brothers

In Bertie county near Woodville, are the Griffin Brothers, Tom and Charles, who own 1,000 acres of land much of which is of the same river bottom type as found on the Temple farm. Griffin Brothers have 75 head of beef cattle, about 200 hogs and a good flock of sheep. There is 250 acres in pasture and there is grazing from 200 acres of corn where soybeans are interplanted. While the brothers plant 300 acres of cotton and 300 acres of peanuts, they still consider livestock one of the most profitable projects on this vast farm. They were the first farmers in Bertie to build self-feeders for hogs and the first to feed-out a car of hogs for the Richmond market. Now they sell about three cars of hogs each year and some 50 early spring lambs.

John G. Wood of Chowan county owns the "Hayes" estate, the home of Colonial Governor Samuel Johnston. There are 1500 acres of land in the home farm with an additional 600 further down the sound. Mr. Wood has been growing, feeding and selling cattle for about 15 years and now has about 200 grade Herefords on his pastures. His great love, however, is saddle horses and he has two fine brood mares of the Chief and Denmark strains. From "Hayes" each year are sold 250 hogs and the lambs from a flock of 75 ewes. No feed is bought.

George O. Wood of Edenton, a cousin of John's, is also a lover of fine horses and has three eblooded brood mares and a stallion of the "Chief" blood lines. Mr. Wood raises saddle horses along with Hereford beef cattle, Jersey dairy cattle, and hogs. He feeds for market between 200 and 300 hogs a year. He now has 72 cattle in his beef herd of which about 25 are good cows.

#### State's Largest Livestock Farm.

Probably the largest livestock farm in North Carolina, however, is that owned by the Foreman Livestock Company of Elizabeth City. This concern owns two farms, one of 4,000 acres where beef cattle, hogs, sheep and goats are kept and another of 672 acres which is run strictly as a high class dairy farm.

meat out the other is changing to Herefords. He has 70 head of grade stuff from which he is seeking steers to fatten and sell on the Norfolk market, 40 minutes away by truck. He also has 28 ewes of the Shropshire breed and 148 head of hogs. About four cars of fat hogs are sold each year. Mr. Jarvis has 26 acres of seeded pasture which is divided into small lots for rotation grazing. Hogs will eat what the cattle will not, says Mr. Jarvis, in explaining his growing system, and the sheep will clean up the residue.

W. D. Walker, also of Currituck, is developing his livestock program in a different way by growing pure-bred stuff only. He to has several small pasture lots, well seeded and well fenced. Shropshire sheep and Hampshire hogs are his specialties. However, he sells about 55 fat hogs on the Richmond market each year. In Craven county, H. A. Patten, the new county agent is having a time checking up on all the good work by C. B. Farris, who recently resigned. But Mr. Patten insisted on our seeing the feeding work done by H. C. McKeel who feeds out Hereford beef cattle and aft hogs. Mr. McKeel says he paid \$60 for a ram and six ewes about three years ago and has since sold \$300 worth of lambs and wool and now has 24 head of sheep in his pasture.

#### A Beautiful Farm.

Probably one of the most beautiful farms in eastern North Carolina, however, is that belonging to E. E. Bell, of Pollocksville. In Jones county, Mr. Bell has been conducting some fertilizer demonstrations with Mr. Case and County Farm Agent J. T. Moore to determine the best methods of handling pasture grasses. There are 18 steers and 25 pure bred Hereford cattle headed by a registered sire. His swine herd furnished meat for the plantation.

Mr. Bell is gradually building up a pure bred beef cattle herd and then plans to sell the surplus as it becomes available.

About the same plan is being followed by J. K. Warren of Trenton, who has a herd of 75 cattle headed by a pure bred Hereford sire. Mr. Warren is gradually seeding to pasture some of his low-lying land not needed for crops.

When it comes to corporation farming, L. Harvey and Sons of Kinston, and the Wells of Goldsboro are making a start with beef cattle also. Three of the forty-two Harvey farms comprising some 776 acres are being used for live stock. They hold about 200 head of Hereford and Shorthorn cattle headed by Hereford bulls. The Harvey farms started with 70 beltors some three years ago.

#### Ideal Management.

To see good live stock farming, however, one has only to visit the farm of the State Hospital for Negroes at Goldsboro. Here W. M. Redfern is using his farm knowledge and his required information about live stock to make this farm one of the showy places of the State. Those who wish to see cattle handled properly should make a tour of this place. The operations are too large to be detailed in an article of this kind but to see the feed lots, the pasture, the pens and the grade of live stock kept is well worth a trip over the place with Mr. Redfern.

With the class of labor with which he has to deal, Mr. Redfern is not only handling beef cattle, sheep and hogs but is also managing a dairy herd with a high degree of efficiency. He has 322 acres in pasture; there are 142 head of beef cattle in which 60 of the animals being bred. Hampshire hogs from 341 pure bred Hampshire hogs from which about 90,000 pounds of meat are killed and there are 65 head of dairy cattle to say nothing of 1,000 hens. Only the best and most modern methods of handling are followed for all of these.

There is no doubt but that live stock growing has found new favor in the east and that small herds of beef cattle and sheep will be added to the swine already there. Roughage can be grown economically and the animals may graze throughout the winter with only a small amount of feeding needed in mid-winter. The

<u>Statistical Report.</u>	<u>1952</u>	<u>1953</u>
Number of days in field	148	128
Number of days in office	163	172
Number of days on leave	0	10
Number of auto miles traveled	16054	16133
Number of rail miles traveled	2741	193
Number of air miles traveled	422	—
Number Method Demonstrations	9	13
Attendance	94	82
Number of Meetings Addressed	40	21
Attendance	4407	487
Number of Farms Visited	236	151
Number of Office Consultations	51	42
Number of Letters Written	796	540
Number of Circular Letters Prepared	14	8
Number of Circular Letters Sent	1390	938
Number of Bulletins Sent Out	124	53
Number of Articles Prepared	20	14
Number of Beef Bulls Placed <i>Personally selected and placed</i>	121	14
Number of Purebred <sup>Females</sup> and High Grade Females placed <i>personally selected and placed</i>	151	11
Number of Purebred Rams Placed	108	16
Number of Purebred or <sup>High Grade</sup> Ewes Placed	38	10
Number of Children Completing 4-H-Club Project with Beef Cattle	28	
Number of Children Completing 4-H-Club Project with Sheep	26	





Hoke	2								
Hyde									
Iredell /	1								10
Jackson /	2	2		8	1		7		8
Johnston	2								12
Jones <sup>NYNNN</sup>	11	2					1		
Lee									10
Lenoir ///	6	5	5	1					22
Lincoln /		2							2
Macon /	1	2	1	5					14
McDowell	1								
Madison //	7	12	2	1		1			
Martin		2	2	3	3				12
Mecklenburg /		1	1	1				6	
Mitchell and /									
Yancey ) /		10	2	11			3		6
Montgomery				4	2			9	22
Moore	1								6
Nash /									
New Hanover /	1								
Northhampton									
Onslow /	6								
Orange									10
Pamlico	2	1							6
Pasquotank /	4	2	6	2					40
Pender ///	1	1	2						40
Perquimans	1								
Person		1							
Pitt		2	35						
Polk									
Randolph /			1						4
Robeson <sup>NY</sup>	4								45
Richmond //	4								
Rockingham /									1
Rowan ///	1	1	3	2	4				
Rutherford									
Sampson									
Scotland //	4	1							
Stanley									69
Surry									20
Swain									
Stokes									
Transylvania									
Tyrrell /		1		5	4				12
Union									
Vance									39
Wake ///	5								
Warren									
Washington //	6	3		3	4				35
Watauga									
Wayne /	2	1	1	1					
Wilson		1	3	2	3				74
Yadkin /									
Yancey - See Mitchell									
Totals	128	121	116	106	38	2	28	23	896

INDEX.

	Page
Beef Cattle Improvement	17
Emergency Grazing Crops	15
Feeding for Market	16
Financing	18
Gleanings	14
Large Scale Cattle Farming	16
Marketing	18
Neats Work	17
Pasture - Carrying Capacity of,	5
Pasture - Establishment	3
Pasture - Fertilization	7 - 12
Pasture - Mixtures	4
Pasture - Native vs. Tame	5
Publicity	18
Reeds ( <i>Arundinaria tecta</i> )	6
Statistical Report	20
Trench Silos	15

Map Showing Counties Worked In During 1932.

