

NORTH CAROLINA AGRICULTURAL EXTENSION  
SERVICE

N. C. STATE COLLEGE OF AGRICULTURE AND ENGINEERING  
AND  
UNITED STATES DEPARTMENT OF AGRICULTURE  
COOPERATING  
I.O.SCHAUB, DIRECTOR

NARRATIVE REPORT

1938

-L. I. CASE, - ANIMAL HUSBANDRY SPECIALIST

1938

Report Only This Year's Extension Activities and Results That Can Be Verified

ITEM	Dairy cattle (a)	Beef cattle (b)	Sheep (c)	Swine (d)	Horses and mules (e)	Other livestock <sup>1</sup> (f)	
214. Days devoted to line of work by:							
(1) Home demonstration agents		85	50		63	16	214
(2) 4-H Club agents		984.2	16	177.7	226.6	27.2	
(3) Agricultural agents		90.5	5	26.5	2.8		
(4) Specialists		86			68	14	
215. Number of communities in which work was conducted		286	20.5		53	84	215
216. Number of voluntary local leaders or committeemen assisting		33	15.8	63	11.8	3	216
217. Days of assistance rendered by voluntary leaders or committeemen		146.6	63.5		112.6	32.0	
218. Number of adult result demonstrations conducted		23	12.1	10.8	4.7	1.3	218
219. Number of meetings at result demonstrations		26	6.2	1.3	6	1	219
220. Number of method-demonstration meetings held		31	8.2	4.9	11	8.0	220
221. Number of other meetings held		68	8.9	2.2	32	5	221
222. Number of news stories published		27	15.7	7.7	24	5	222
223. Number of different circular letters issued		85	6.6	6.3	11	1.5	223
224. Number of farm or home visits made		82	14.8	6.39	61	10	224
225. Number of office calls received		82	14.8	6.39	61	10	225
226. Number of 4-H Club members enrolled	(1) Boys	30	181	14	27	1	226
(2) Girls	3	18	10	1	13	6	
227. Number of 4-H Club members completing	(1) Boys	31	138	12	28	1	227
(2) Girls	3	16	10	1	13	6	
228. Number of animals in projects conducted by 4-H Club members completing		27	184	136	17	35	228
229. Number of farmers assisted in obtaining purebred sires		43	185	87	23	2	229
230. Number of farmers assisted in obtaining high-grade or purebred females		7	22.5	17.4	3	1.85	230
231. Number of bull, boar, ram, or stallion circles or clubs organized or assisted		7	8	1	3	2	231
232. Number of members in breeding circles or clubs		1	12.7	2.4	20.2		232
233. Number of herd or flock-improvement associations organized or assisted		1	1	1			233
234. Number of members in these associations		6	8	18			234
235. Number of farmers not in associations keeping performance records of animals		8	16	2.3	1	2	235
236. Number of families assisted in home butchering, meat cutting, and curing		15.8	1.3			1.9	236
237. Number of families assisted in butter and cheese making		18	30	2.93	2	4	237
238. Number of farmers following parasite-control recommendations		27	10	12.0	2.99	2.22	238
239. Number of farmers following disease-control recommendations		38	27	6.57	2	3	239
240. Number of farmers following marketing recommendations		31	8.9	5.44	5.53	7.5	240
241. Number of farmers assisted in using timely economic information as a basis for readjusting enterprise							241

<sup>1</sup> Do not include rabbits, game, and fur animals, which should be reported under Wildlife Conservation.

# AGRICULTURAL ECONOMICS

Report Only This Year's Extension Activities and Results That Can Be Verified

ITEM	Public problems and economic planning on county or community basis	FARM MANAGEMENT			Outlook	Marketing, buying, selling, and financing
		Farm records (inventories, accounts, etc.)	Individual farm planning	Farm and home financing (short and long time)		
	(a)	(b)	(c)	(d)	(e)	(f)
244. Days devoted to line of work by:						
(1) Home demonstration agents.....						
(2) 4-H Club agents.....						
(3) Agricultural agents.....						
(4) Specialists.....						
245. Number of communities in which work was conducted.....						244
246. Number of voluntary local leaders or committeemen assisting.....						245
247. Days of assistance rendered by voluntary leaders or committeemen.....						246
248. Number of adult result demonstrations conducted.....						247
249. Number of meetings at result demonstrations.....						248
250. Number of method-demonstration meetings held.....						249
251. Number of other meetings held.....						250
252. Number of news stories published.....						251
253. Number of different circular letters issued.....						252
254. Number of farm or home visits made.....						253
255. Number of office calls received.....						254
256. Number of 4-H Club members enrolled.....						255
(1) Boys.....	x x x x			x x x x	x x x x	x x x x
(2) Girls.....	x x x x			x x x x	x x x x	x x x x
257. Number of 4-H Club members completing.....						256
(1) Boys.....	x x x x			x x x x	x x x x	x x x x
(2) Girls.....	x x x x			x x x x	x x x x	x x x x
258. Number of farmers keeping farm accounts throughout the year under supervision of agent.....						257
259. Number of farmers keeping cost-of-production records under supervision of agent.....						258
260. Number of farmers assisted in summarizing and interpreting their accounts.....						259
261. Number of farmers assisted in making inventory or credit statements.....						260
262. Number of farmers assisted in obtaining credit.....						261
263. Number of farmers assisted in making mortgage or other debt adjustments.....						262
264. Number of farm credit associations assisted in organizing during the year.....						263
265. Number of farm business or enterprise-survey records taken during year.....						264
266. Number of farmers making recommended changes in their business as result of keeping accounts or survey records.....						265
267. Number of other farmers adopting cropping, livestock, or complete farming systems according to recommendations.....						266
268. Number of farmers advised relative to leases.....						267
269. Number of farmers assisted in developing supplemental sources of income.....						268
270. Number of families assisted in reducing cash expenditure:						269
(a) By exchange of labor or machinery.....						
(b) By bartering farm or home products for other commodities or services.....						
(c) By producing larger part of food on farm.....						
(d) By making own repairs of buildings and machinery.....						

\* Include county agricultural planning, taxation, land utilization, and economic basis of extension programs.

1938  
ANNUAL REPORT  
OF  
EXTENSION WORK IN ANIMAL HUSBANDRY  
IN  
NORTH CAROLINA

By: L. I. Case,  
SPECIALIST IN ANIMAL HUSBANDRY.



# TABLE OF CONTENTS

	Page
Introduction	1
Beef Cattle Projects	1
Beef Bull Placement	2
Breeding Herds Established	3
Feeds and Feeding	3
Pastures	4
Silos and Silage	4
Cover Crops	5
Fattening Cattle for Market	5
Management	6
Cattle Feeding Record	7
Beef Calf 4-H Club Work	9
Asheville Fat Cattle Show and Sale	11
The North Carolina State Fair	14
Sheep Projects	17
Farm Flock Record	18
Ram Placements	20
Parasite and Disease Control	20
Docking and Castrating Lambs	20
Marketing	20
Tabulation on Lambs Marketed Cooperatively	22
Wool Sales	25

Table of Contents Cont'd.

	Page
Tabulation showing record of Wool Sold	26
Miscellaneous Activities:	27
Farm Tours	27
Lamb Grading School	27
Hereford Breeders' Meeting	27
Judging	28
Cold Storage and Freezer Locker Unit	29
Out of State Trips	29
Statistical Summary	30
Outlook	32
Circular Letters	
News Articles	

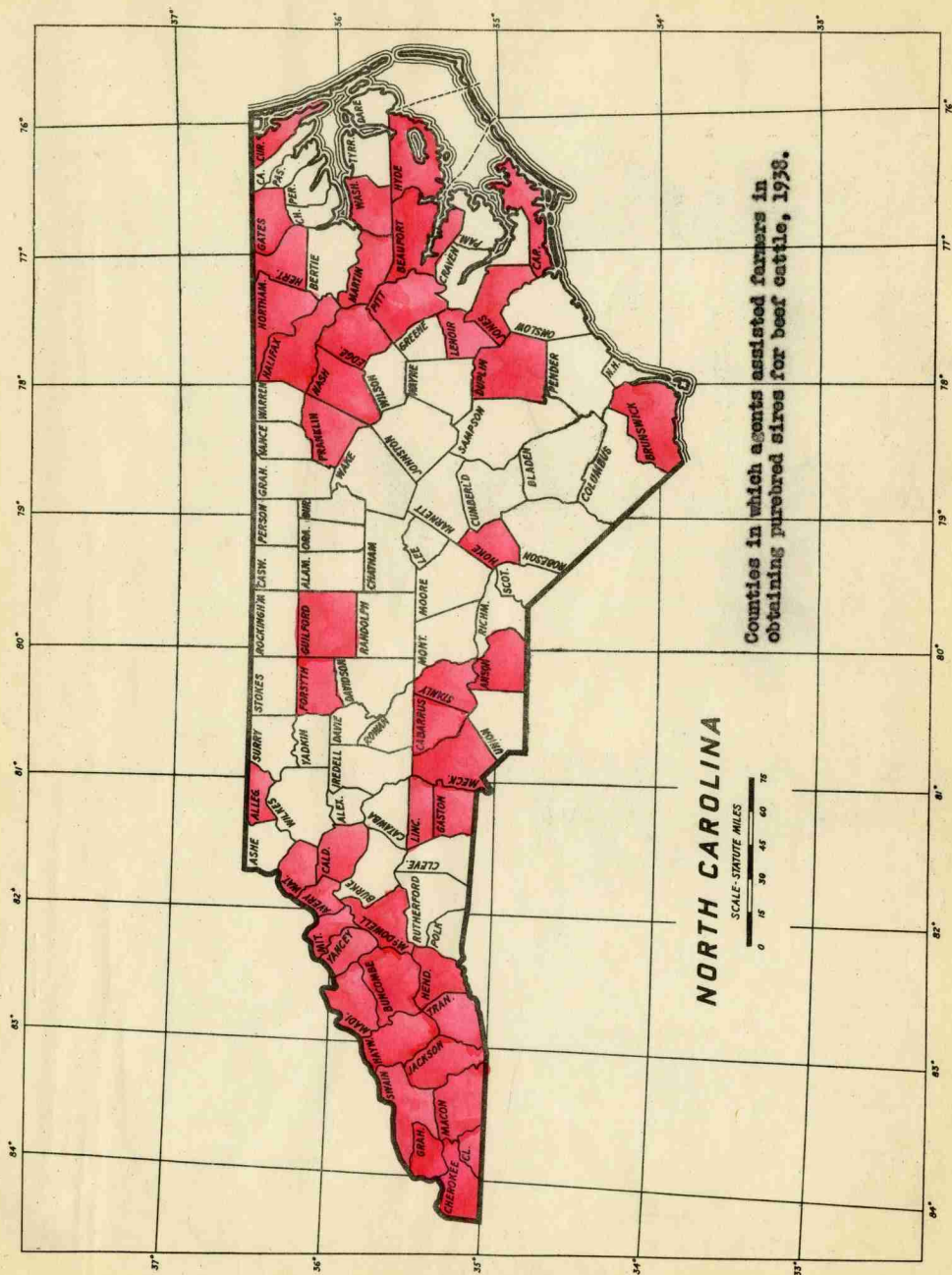
## INTRODUCTION

Nineteen hundred and thirty eight resulted in greater progress in the Animal Husbandry field in North Carolina than any year during the past decade. This was especially true in respect to beef cattle and the calls for breeding stock were so numerous and strong that our normally surplus areas were unable to supply the demand with the result that approximately fifteen hundred head of females were shipped into the state from Texas, Nebraska and other western states. Several factors are responsible for this unusual interest. The Soil Conservation Program is increasing the supply of available feed. The majority of cotton farmers feel that the boll weevil and declining market outlets are sounding the doom of that crop. Cattle prices have been high in comparison with most other farm commodities.

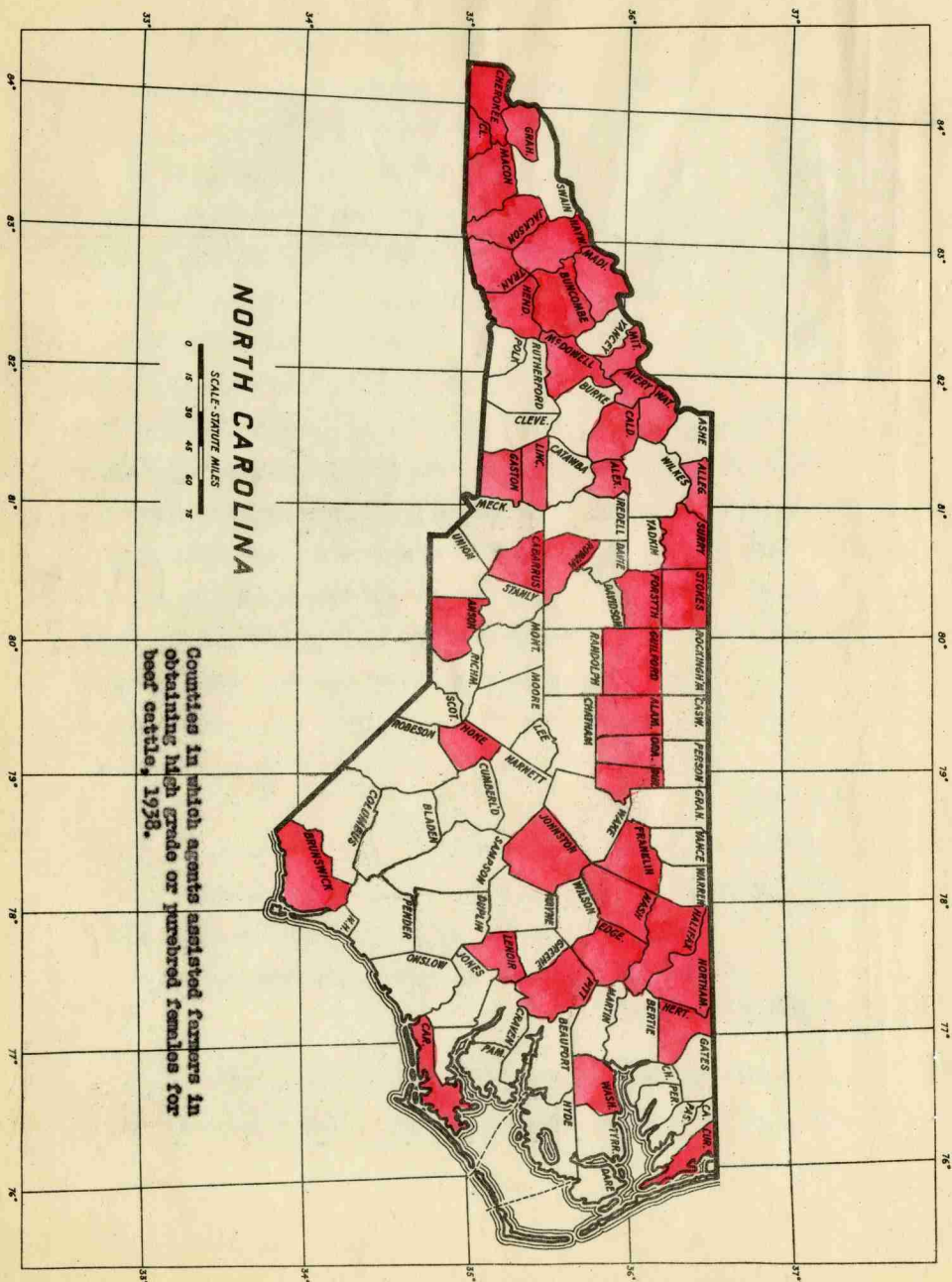
In addition to increased interest in greater numbers of beef cattle, quality improvement is gaining more and more advocates each year. It is believed that 4-H Beef Calf Club work, show yard competition for 4-H Club members and adults, and increased knowledge of U. S. Standard grades are all playing an important part in this interest in better cattle.

### I. BEEF CATTLE PROJECTS

Deterioration in the quality of our state beef cattle went on for many years. The main reason, we believe, for this was the high percentage of mediocre bulls in service which resulted in many low grade steers and heifers being produced. This lowering of quality was seriously handicapping the market for our feeder steers in Southwestern and Northern







Virginia. For these reasons the replacement of common bulls with better type animals has been one of our main lines of work in 1938.

#### A. Beef Bull Placement

The problem of beef bull replacements was attacked:

1. By having each county agent where possible include this work in his plans for the year. Each agent set up a definite goal for the placing of a certain number of purebred beef bulls in his county during the year.

2. By using every means possible to make farmers conscious of better cattle. (a) News articles. County agents in 48 counties used a total of 159 news articles relative to better bulls and better breeding generally in 1938. (b) Circular letters. A total of 66 circular letters were used by 27 county agents in calling attention to beef cattle improvement through improved breeding. (c) Meetings. Eighty-nine beef cattle meetings were held in 31 counties. (d) Farm visits. Extension workers made 3148 farm visits in connection with beef cattle improvement. (e) Judging contests and judging demonstrations. One hundred twenty-seven 4-H Club boys and forty-eight adults took part in two major judging contests held in the state during the year. (f) Fairs and exhibitions. Four state or regional exhibitions of beef cattle and numerous community and county shows were held during the year. It is thought, however, that these small shows create considerable interest in live stock improvement. Baby beef club work is very definitely calling attention to better cattle.

3. Selection and purchase of bulls. The large majority of beef bulls placed during the year were by individual selection and purchase, the county agent or specialist assisting with the transaction.

Beef bull placements planned 139

Actual number placed 185

Several of these bulls were rather outstanding individuals selected to head purebred herds at prices of \$2500.00, \$1000.00 and on down to from \$200.00 to \$500.00

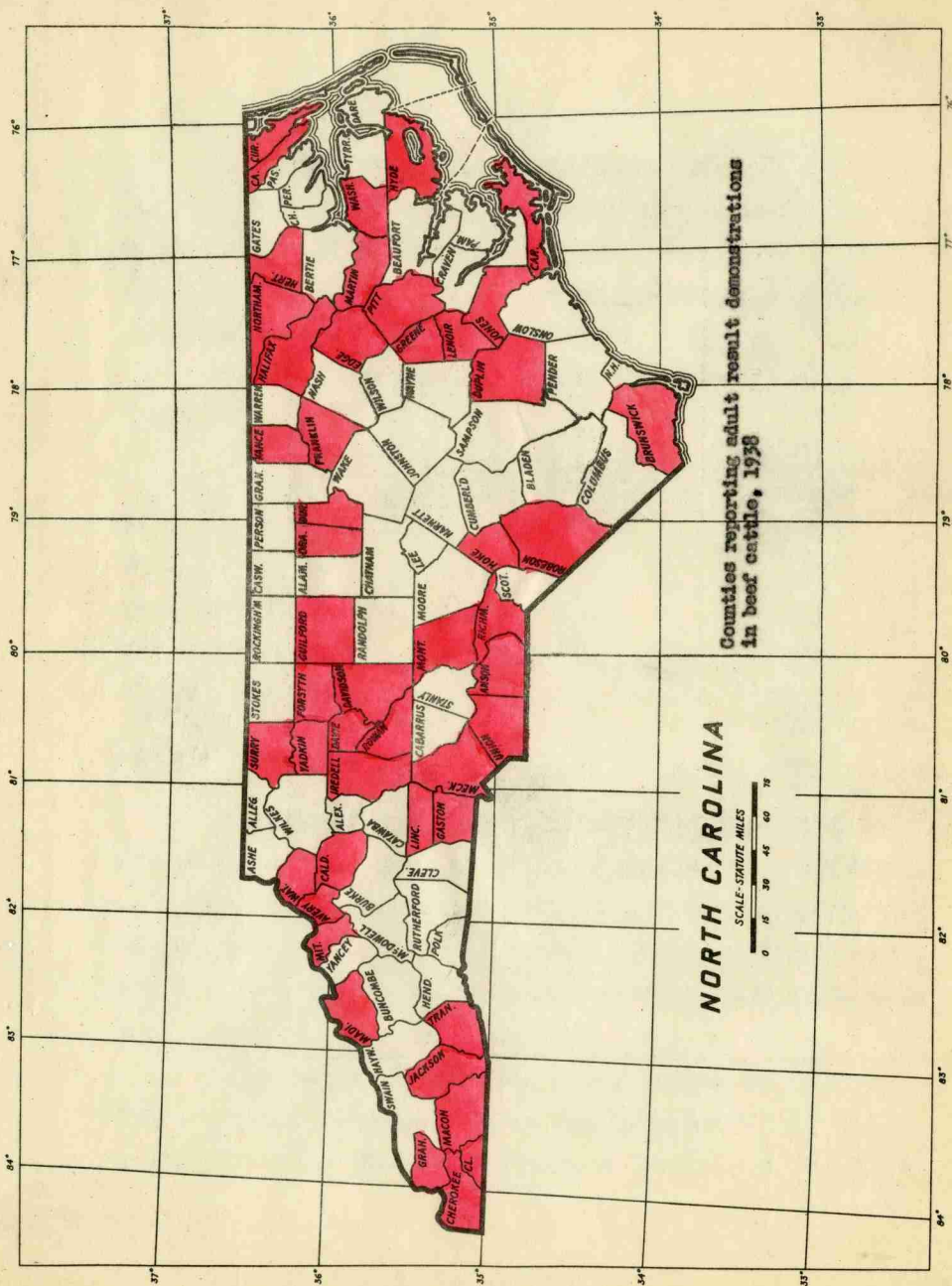
#### B. Breeding Herds Established

One of the limiting factors in beef cattle improvement in the state is an inadequate supply of good breeding cattle. Considerable time and much effort has, therefore, been spent in encouraging the owners of purebred herds already established and in the starting of new herds on farms where it was thought that enterprise practical.

Three hundred twenty farmers in forty-three counties of the state were assisted in obtaining purebred or high grade females during the year. Two breeders of Polled Herefords added two car loads of excellent breeding cattle to their herds. These were purchased from some of the best herds in the west.

#### C. Feeds and Feeding

Work under the heading of Feeds and Feeding was carried on in very much the same way as outlined under the previous project heading. Much of this work is reported under the heading of Agronomy but as this is the foundation of the live stock industry it will bear repetition. No attempt has been made to separate these figures according to types of live stock raised.





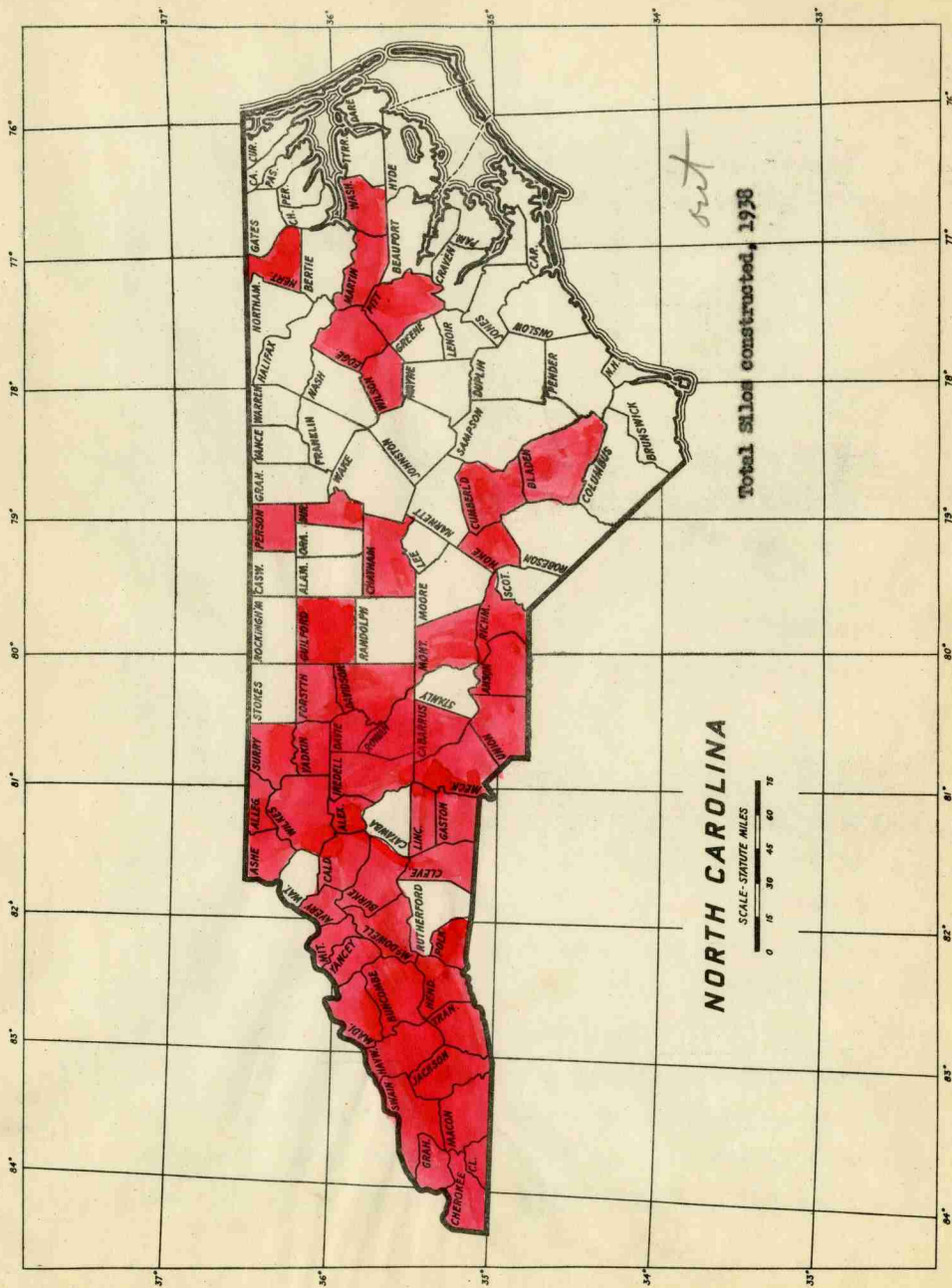
1. Pastures. There is no question but what pasture is the foundation of economical live stock production. Much more research is needed along this line. However, there is a great deal that can be done with our present knowledge of adapted varieties, fertilizing practices and better care and management of our pastures.

That this state is making progress I think is evident by the following statistics:

	<u>No. Counties Reporting</u>	<u>No. Demonstra- tions, etc.</u>
Result pasture demonstrations	76	1159
Meetings at demonstrations	47	143
Pasture news articles published	71	219
Circular letters in regard to pasture	61	159
Farmers following fertilizer recommendations - pasture	75	4477
New pastures established	63	1786

2. Silos and Silage. The use of silage in the winter feeding of beef cattle is becoming more and more popular. No doubt the introduction of the trench silo has had much to do with this increasing popularity. Corn is the main crop used for silage, although cane is used to some extent and experimental work is being done in the use of grasses and legumes with black strap molasses added to correct acidity.

During the year 224 silos were built in 51 counties. These were built on all types of live stock farms and no attempt has been made to determine how many of these were constructed on beef cattle and sheep farms.



3540

3840

4194

6144

6563

1536

768 | 16.016.840

\$28.54

834.46

46 -

216.07

12

800.00

1027.24

96 -

53.13

7 -

267.80

26 -

11709.65

502 -

247.68

19 -

860.31

60 -

Out

no

3. Cover Crops. It is believed that too much emphasis cannot be placed upon the advantage of winter cover crops for wintering cattle and sheep. This advantage is particularly great on the sandy loam soil of the Coastal Plain and Tide Water sections of the state. On this type of soil live stock can graze practically all winter without regard to the moisture condition of the soil. Many of our flocks of sheep in Eastern North Carolina make their entire living on fields of Abruzzi Rye, other small grains, and winter legumes. Many of our best cattle farmers winter their herds of dry cows and other mature cattle on field gleanings and winter cover crops. These cattle in many instances never secure any harvested feed nor are they kept under roof the entire winter.

It is impossible to make a statement relative to the increasing use of winter cover crops in the state, although without question this practice is increasing to a considerable extent.

D. Fattening Cattle for Market.

The winter of 1937-38 due to an unfavorable outlook and consequent advice to go easy, resulted in a considerable decrease in the feed lot fattening of cattle. Last fall however, more than the normal number of cattle were put in the feed lot and good returns from feeding operations are in prospect. Approximately 2000 head are on feed, the majority of which are being handled under the guidance of extension workers.

Special forms are in use for the securing of records of cattle feeding. One of these records follow. This farmer has shown a very low credit for the manure produced. We suggest an average credit allowance of \$4.00 per ton for this item although the usual value is placed at \$2.00.



Attention is called to the fact that this record is for a truck load of cattle. We are encouraging the fattening of cattle either in large or small numbers with the production of manure for soil building the main thought in mind. It is felt that this is practical on most any type or sized farm where the keeping of a breeding herd is only adapted to special farms where adequate pasture is available.

E. Management.

Managerial practices, especially in Eastern North Carolina are of a low order. This is due largely to the fact that in most cases cattle raising in this section of the state is of minor importance and the so called cash crops are given first consideration. Among the things that are being attempted in a corrective way are as follows:

1. Controlled breeding. (a) To have calves dropped in the spring of the year. (b) Prevent heifers from getting bred too young.
2. Castration and dehorning of calves at proper age.
3. Adequate shelter and dry feed lots in order to conserve feed and manure.

During the year 181 herd management demonstrations were conducted in 48 counties. There were 62 meetings held on these farms during the year and they were frequently visited by the county agent, and as often as possible by the specialist.

## CATTLE FEEDING RECORD

Surry

County

Name of Feeder I. W. Barber Address Mt. Airy, N. C.  
 No. of Head Fed 7 Age 2 to 3 yrs. Sex Female  
 Total Buying Wt. 4835 lbs. ver. Wt. 690.7 Place Mt. Airy Date Dec. 1, 1937  
 Total Wt. Unloading Pt. 4835 Av. Wt. 690.7 Shrink None assumed  
 Total Wt. When Put on Feed 4835 (a) Aver. Wt. 690.7 Date Dec. 1, 1937  
 How were cattle handled between time received and time started on feed? On Dec. 1, 1937, the cattle were brought by truck from the range on the mountains to the stock yard at Mt. Airy, N. C., unloaded, weighed, reloaded, and taken to the feeding shed on the farm 20 miles and started on feed at once. They were on full feed in about four weeks. They were weighed again on March 2, 1938, at Mt. Airy and sold.  
 Total Home Wts. When Sold 5875 (b) Aver. Wt. 839.3 Date March 2, 1938  
 Total Gain Feed Lot (b) minus (a) 1040 Aver. Gain 148.6 Av. Daily Gain 1.63  
 Total Wt. at Stock Yards 5875 Aver. Wt. 839.3 Shrink \_\_\_\_\_

## Financial Statement

Cost or Value of Feeder Cattle	\$	<u>193.40</u>	
Freight and Other Charges to Farm (Trucking)	\$	<u>4.00</u>	
Total Initial Cost or Value	\$	<u>197.40</u>	(c)
Sale Price: At Home _____ at Stock Yards <u>352.50</u>	\$		
No. Head <u>7</u> at <u>6</u> cts. per lb.	Total \$	<u>352.50</u>	
No. Head _____ at _____ cts. per lb.	Total \$		
No. Head _____ at _____ cts. per lb.	Total \$		
Grand Total	\$	<u>352.50</u>	(d)
Freight and Stock Yard Charges to Market (Trucking)	\$	<u>4.00</u>	
Commission Charges	\$	<u>0.00</u>	
Total Marketing Costs	\$	<u>4.00</u>	(e)

Further Explanation: This little bunch of cattle included 7 grade Herefords and, I think, would be classed as fair feeders. They were not weighed at the farm; only the stock yard weights at Mt. Airy were used in both buying and selling. The cattle had been brought perhaps 25 miles by truck before being weighed when bought, and then taken 20 miles further to the feed shed. When sold, they were taken by truck from the feed shed to the same stock yard and weighed. When cattle were on full feed, they received and consumed each per day: O.S. Meal 3 lbs.; Shelled corn 12 lbs.; Corn silage 21 lbs; and dry roughage, corn fodder, wheat straw, and a little grass hay.

- 2 -

Feed Consumed in Feed Lot.

Kind	Amount	How Fed <sup>#</sup>	Farm Value*
White corn	7066	Shelled - put on silage	\$104.58
C.S.Meal	2331	On silage @ \$1.40 per 100 lbs.	32.63
Corn silage	6.61 tons @ \$8.00		52.88
Salt			2.85
Dry feed - hay and top fodder (corn fodder)			19.52
Total Feed Cost Cattle			212.46
Pork \$28.35 plus 7 pigs @ \$5.00 = \$53.00			\$ (f)
Pork Produced From Pigs Following Cattle Lbs.Total Value			63.35 (g)
Total Pounds Minerals Consumed 200 bone meal & salt			5.00
No. Lbs. Protein Supplement Consumed			10.95
Show Kinds and Amounts of Other Feeds Fed to Hogs:			
Corn		Cost	11.50
Buttermilk		Cost	12.50
Paid for care of two sows at farrowing time		Cost	10.00
Total Cost of Pork Produced			49.95 (h)
Profit on Hogs (g) minus (h)			13.40 (i)

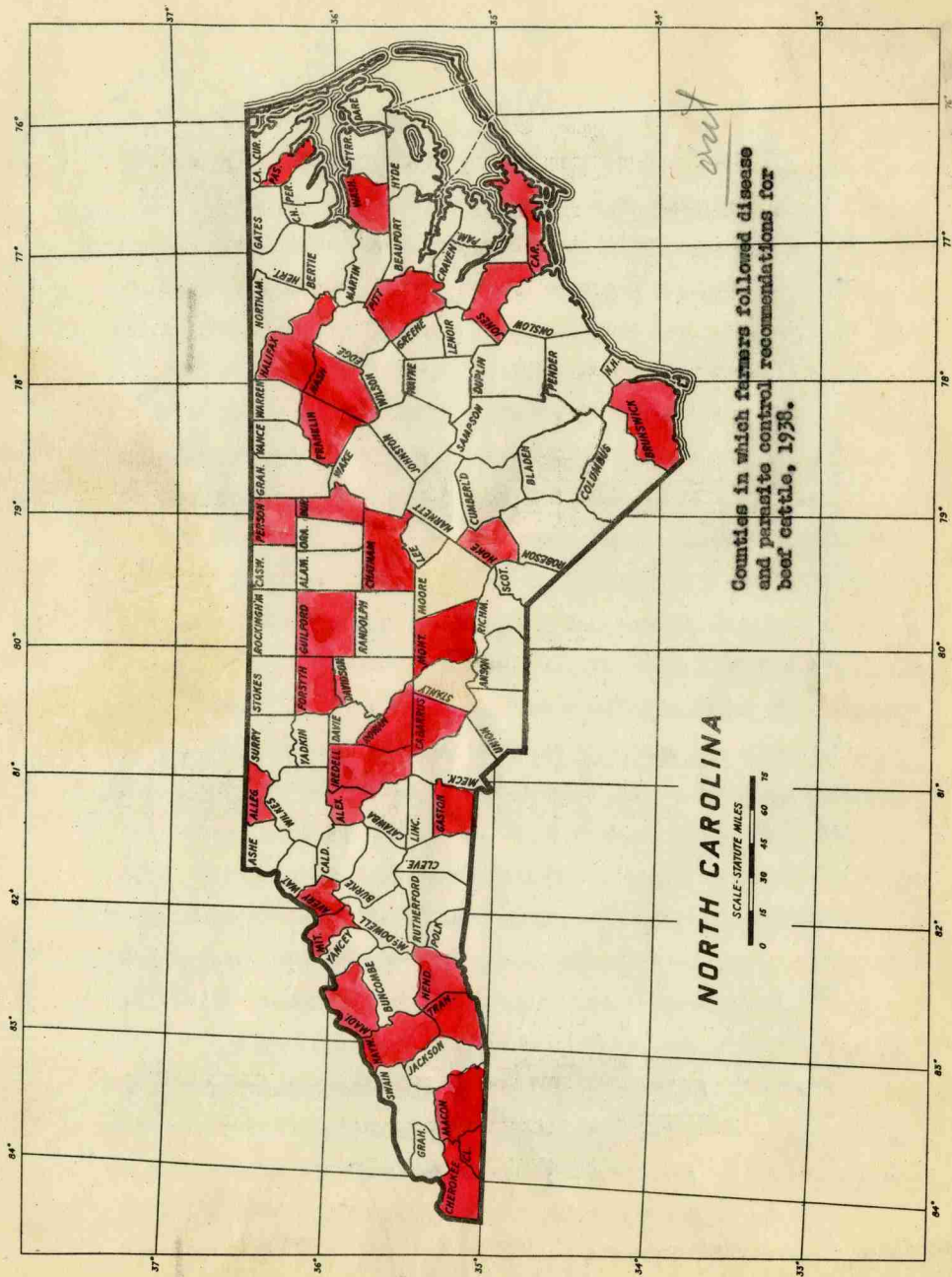
Summary

Total Cost or Value of Cattle (c)	\$	197.40	
Marketing Cost (cattle) (e)	\$	4.00	
Feed Cost (cattle) (f)	\$	212.46	
Total Cost (c) plus (e) plus (f)-----	\$	413.86	(j)
Profit or Loss (cattle) (d) minus (j)	Loss	61.36	(k)
Profit or Loss on Cattle and Hogs (k) plus (i)	Loss	47.96	(l)
Estimated Manure Produced 30 Tons	Value	52.50	(m)
Profit Including Manure (l) plus (m)	Profit	\$4.54	

#Designate whether ground or whole. In case of corn, whether broken ear, shelled, corn and cob meal, etc. etc.

\*Show value on farm at beginning feeding period.







## F. Beef Calf 4-H Club Work.

Beef calf club work was started in North Carolina in 1935. This work has been built around a Fat Cattle Show held at Asheville for the past four years and sponsored by the Asheville Chamber of Commerce. In 1936 a small premium list was added to the State Fair list of awards and this was increased considerably in 1937 and again in 1938. During the past year 199 boys and girls were enrolled in beef calf club work from 26 counties. It is interesting to note that 138 boys completed their projects while every girl that enrolled went through to completion.

There has been a steady improvement in the quality, conformation and condition of the cattle shown and the interest in better cattle is very noticeable in sections where this type of club work is being carried on.

When beef calf club work was started in 1935 at Asheville many were of the opinion that we should have a feeder calf show rather than a fat cattle show at that point because Asheville is in the center of a feeder cattle producing area. The majority of the county agents, however, were in favor of a fat cattle show and the classes were set up on that basis in 1935 and 1936. In 1937, however a Feeder Calf Class was added with only two entries. Good prices and good profits were realized from them and in 1938 twelve entries from seven counties were shown. It is expected that this class will continue to increase its popularity and numbers as time goes on.

Another class that was added in 1937 was a Get-of-Sire Class. The purpose was to encourage the production of the right kind of cattle at home rather than to find it necessary to import calves for club work each year. This class calls for three steers bred, owned and exhibited from one county and the get of a registered bull of one of the beef breeds.

69 out of 80 head ~~of 44 club~~. Baby Beers  
fed by 4<sup>th</sup> club members.  
made a profit exclusive of premium  
~~sum~~ of \$2440.18. Subtracting the  
losses of \$133.81 on eleven head - the 80 head  
made a profit of \$2306.37 or an  
average of \$28.83 per head. When  
prize money is included on 5 out of  
80 head lost money, and the average  
profit on the total number was \$47.04  
per head.

Totals For Rocky Mt., Asheville + N.C.  
State Fair.

140 head - 105723 lbs = \$13,257.50

January.  
Condition cows for Feb. calving. If necess

8,45  
96 87

State Fair  
State Fair

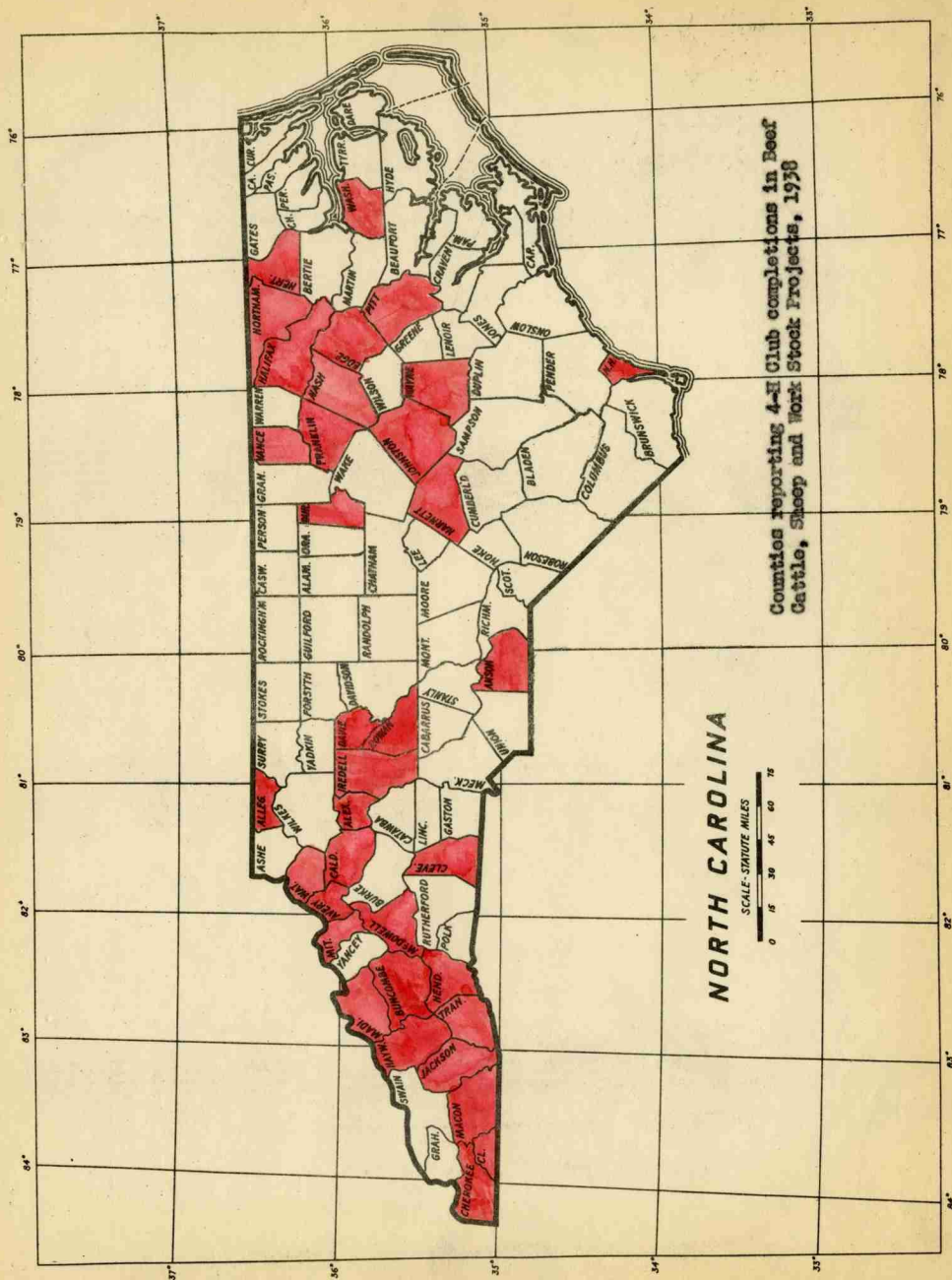
140 lb - 106.55 lb - 13.55 lb

A third fat stock show was started in 1938. This was at Rocky Mount, North Carolina and was sponsored by the Chamber of Commerce. This show consisted of classes for fat cattle and hogs. There were only a small number of entries in the cattle department this year largely due to the unfavorable outlook for cattle prices. Some increase is expected in 1939.

County agents were requested to furnish reports of financial returns derived from 4-H Baby Beef Club work in 1938. Reports on only 36 steers were received and these showed profits made on 35 and a loss on one. Deducting the loss from the profits we have a total profit of \$1791.55 on the 36 head or an average profit of \$49.76 per calf. These figures include cash awards.

Reports of awards and resume of sales at Asheville and the State Fair follow:





## AWARDS AT THE ASHEVILLE FAT STOCK SHOW--1938

Class 1 Light Weight

1	\$15.00	Maston Hodges	Watauga County
2	12.00	Joe Brown	" "
3	10.00	Burl Greene	" "
4	9.00	Carmen Curto	Transylvania County
5	8.00	J. D. Wallen	Madison "
6	7.00	Gay Snelson	Buncombe "
7	6.00	Fred Bryan	Madison "
8	5.00	Wayne Thompson	Buncombe "
9	4.00	David Farthing	Watauga "
10	3.00	Burl Greene	" "

Class 2 Medium Weight

1	\$15.00	Frank Mast	Watauga County
2	12.00	Council Henson	" "
3	10.00	J. C. Dockery	Buncombe "
4	9.00	Romulus Dockery	" "
5	8.00	Gilbert Edmisten	Watauga "
6	7.00	Council Henson	" "
7	6.00	Carmen Curto	Transylvania County
8	5.00	Henry Curto	" "
9	4.00	Henry Curto	" "
10	3.00	Ben Owenby Jr.	Buncombe "

Class 3 Heavy Weight

1	\$15.00	Earl Edmisten	Watauga County
2	12.00	Way Abel	Haywood "
3	10.00	Joe Brown	Watauga "
4	9.00	John Abel	Haywood "
5	8.00	John Edmisten	Watauga "
6	7.00	Asa L. Reese	" "
7	6.00	Dennis Franklin	Madison "
8	5.00	Hope Tweed	" "
9	4.00	Helen Hipps	Haywood "
10	3.00	Francis Boyd	" "

Class 4 County Groups

1	\$25.00	Watauga County
2	20.00	Haywood "
3	15.00	Buncombe "
4	10.00	Madison "
5	5.00	Transylvania County

Class 5 Get-of-Sire

1	\$20.00	Watauga County
2	15.00	Haywood "
3	10.00	Cherokee "

Class 6 Champions

Grand Champion	-	Frank Mast	Watauga County
Reserve Champion	-	Earl Edmisten	" "

Class 7 - Feeder Calves

1	\$12.00	Frank Taylor	Watauga County
2	10.00	C. B. Briggs	Madison "
3	9.00	Chas. J. Ferguson	Macon "
4	8.00	Rafe Teague	" "
5	7.00	Rafe Teague	" "
6	6.00	Paul Ammons	" "
7	5.00	Carmen Curto	Transylvania County
8	4.00	Russell Dockery	Buncombe "
9	3.00	Donald Ramsey	Cherokee "
10	3.00	Robert Lovingood	" "

Class 8 Get-of-Sire (Feeders) No EntriesNorth Carolina Hereford Breeder's Special

1	\$25.00	Frank Mast	Watauga County
2	15.00	Earl Edmiston	" "
3	10.00	Way Abel	Haywood "

Class 9 Showmanship

1	Way Abel	Haywood County
2	John Edmiston	Watauga "
3	Hope Tweed	Madison "

RESUME OF AUCTION SALE 4-H CLUB FAT STEERS - ASHEVILLE FAT AND FEEDER  
CATTLE SHOW 1938

Thirty-two head of fat steers sold for an average of \$8.90 per cwt.

Sixteen head sold for less than \$9.00 per cwt.

The White Provision Company, Atlanta, Ga., bought 21 head at a weighted average of \$8.92 per cwt.

The East Tennessee Packing Company of Knoxville, Tennessee bought 7 head at an average of \$8.97 per cwt.

Other buyers were as follows: V. Davis, 1 head at \$8.50 per cwt., and The Dixie Stores bought 1 the morning after the show and sale at \$8.25 per cwt.

Seven head of feeder steers sold for an average of \$7.15. The buyers in this division were Ed English, Madison County, 3 head; T. C. Gibbs, one, and East Tennessee Packing Company, two head.



# AWARDS IN 4-H BABY BEEF EXHIBIT AT THE NORTH CAROLINA STATE FAIR - 1938

## Light Weight Class

1st	\$12.00	Romulus Dockery	Buncombe County
2nd	12.00	Maston Hodges	Watauga "
3rd	12.00	Council Henson	Watauga "
4th	10.00	Wayne Thompson	Buncombe "
5th	10.00	Hal Thomas Erwin	Pitt "
6th	10.00	Gay Snelson	Buncombe "
7th	8.00	Joe Brown	Watauga "
8th	8.00	Graham Penny	Johnston "
9th	6.00	John Pugh	Alleghany "
10th	6.00	Jonas Andrews	Alleghany "
11th	3.00	Lester Earl Turnage	Pitt "
12th	3.00	B. C. Powell	Johnston "
13th	3.00	Lynwood Powell	Johnston "
14th	3.00	Holton Whittington	Johnston "

## Medium Weight Class

1st	\$12.00	Frank Mast	Watauga County
2nd	12.00	Council Henson	Watauga "
3rd	12.00	Charles Cone	Nash "
4th	10.00	Guy Griffin	Franklin "
5th	10.00	J. C. Dockery	Buncombe "
6th	10.00	Asa L. Reese Jr.	Watauga "
7th	8.00	Van Miller Jr.	Alleghany "
8th	8.00	Lonnie Lee Edwards	Alleghany "
9th	6.00	Gland Peele	Wayne "
10th	6.00	Lamont Sutton	Wayne "
11th	3.00	Elmer Tucker	Pitt "
12th	3.00	Glen Ellis Taylor	Durham "
13th	3.00	Albert Smith	Johnston "
14th	3.00	Charlie Dale Edwards	Alleghany "

## Heavy Weight Class

1st	\$12.00	Way Abel	Haywood County
2nd	12.00	John Abel	Haywood "
3rd	12.00	Q. S. Leonard, Jr.	Franklin "
4th	10.00	John Edmisten	Watauga "
5th	10.00	Gilbert Edmisten	Watauga "
6th	10.00	Earl Edmisten	Watauga "
7th	8.00	Harold Grant	Johnston "
8th	8.00	Dan Hill	Buncombe "
9th	6.00	Francis Boyd	Haywood "
10th	6.00	Joe Brown	Watauga "
11th	3.00	Cyrus Lee	Johnston "
12th	3.00	Elmer Tucker	Pitt "
13th	3.00	Lamay Penny	Johnston "
14th	3.00	Oswald Thompson	Wayne "
15th	3.00	Glen Ellis Taylor	Durham "

County Groups

1st	Watauga County
2nd	Haywood "
3rd	Buncombe "
4th	Johnston "
5th	Pitt "
6th	Wayne "
7th	Alleghany "

Showmanship Awards

1st	Earl Edmisten	Watauga County
2nd	Romulus Dockery	Buncombe "
3rd	Council Henson	Watauga "
4th	Gay Shelson	Buncombe "

Grand Champion Steer - Frank Mast, Valle Crucis, Watauga County

Reserve Champion Steer - Romulus Dockery, Weaverville, Buncombe County.

RESUME OF AUCTION SALE 4-H CLUBS .FAT STEERS NORTH CAROLINA STATE FAIR  
1938

Grand Champion sold to the White Packing Company, Salisbury, N. C. for \$53.00 per cwt.

Reserve Champion sold to the Green Grill Restaurants, Raleigh, N. C. for \$25.00 per cwt.

Top 10 head including champions; averaged \$18.30 per cwt.

Top 20 head including champions; " 14.78 per cwt.

Entire offering including champions; " 12.79 per cwt.

Top 10 head excluding champions; " 13.17 per cwt.

Entire offering excluding champions; " 11.19 per cwt.

Twenty-seven head sold for \$10.00 or more per cwt.

Only 3 head sold for less than \$9.00 per cwt.

White Packing Company, Salisbury, N. C. purchased 11 head at an average of \$14.81 per cwt.

The Carolina Hotel, Raleigh, N. C. purchased 3 head at an average of \$13.67  
This included the heavy weight champion at \$16.50 per cwt.

Armour and Company purchased 7 head at an average of \$12.08.

Swift and Company purchased 9 head at an average of \$11.29.

The Millens Grocery Company of Boone, N. C. bought one Watauga County calf at \$12.50.

Two light unfinished western calves went to Wilson County to be fed for the Rocky Mount Show and several eastern calves with insufficient finish were taken back home to be fed on for the Rocky Mount Show.

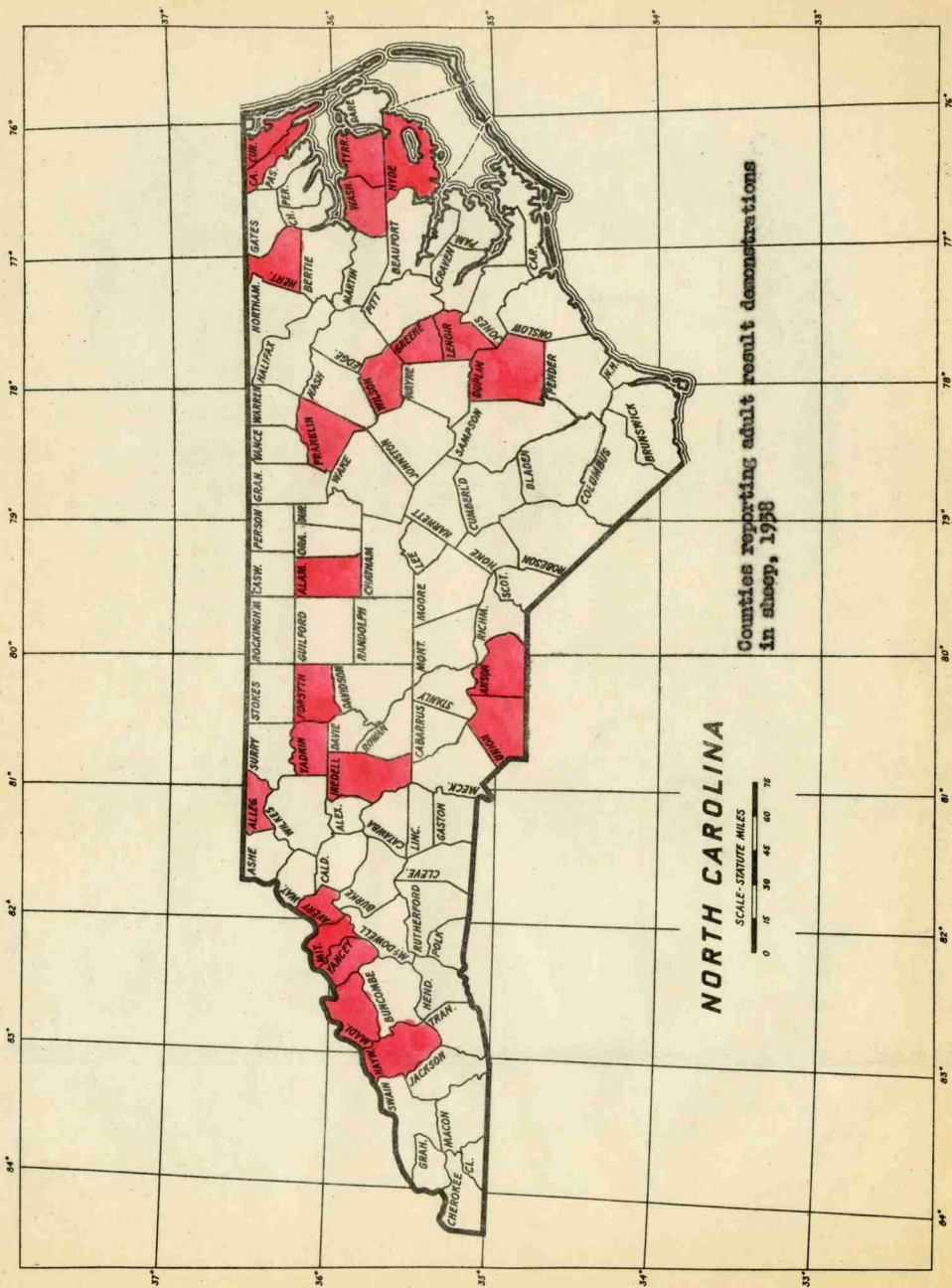
## II. SHEEP PROJECTS

Prices for lambs and wool in 1938 were not as favorable as the previous year. Then too a greater than normal rainfall resulted in much damage from internal parasites and lambs generally were not as good as usual. This may have been a blessing in disguise, however, for many ewe lambs that normally would have been sent to market were held back for replacement purposes. As a result it is thought that 1938 showed some increase in sheep population. If this is the case it will be the first increase in many years.

### A. Farm Flock Records

Records secured on farm flocks throughout the state showed a gross income per ewe of \$7.18 compared with \$9.36 in 1937. As was true last year western flocks showed a larger income than the eastern flocks. The average gross income for western flocks was \$8.72 and from eastern \$6.41. A Farm Flock Record follows:





COOPERATIVE EXTENSION WORK  
IN  
AGRICULTURE AND HOME ECONOMICS  
STATE OF NORTH CAROLINA

NORTH CAROLINA STATE COLLEGE OF  
AGRICULTURE AND ENGINEERING  
NORTH CAROLINA COUNTIES AND  
UNITED STATES DEPARTMENT OF  
AGRICULTURE COOPERATING

EXTENSION SERVICE

## FARM FLOCK RECORD (SHEEP)

(For Commercial Flocks Only)

On Farm of D. J. Jones

Post Office Stratford, N. C.

County Alleghany

County Agent R. E. Black

Number ewes exposed to ram 16

Were ewe lambs exposed? If so state number 3

Number lambs raised to market weight 24

Total value of lambs sold or kept \$ 33.52

Number fleeces sold 20

Number pounds of wool sold 99

\*Total value of wool \$ 24.75

Total Income \$ 58.27

Gross Income per ewe \$ 8.33

\*To include market value of wool made into blankets etc.

Was a purebred ram used? Yes

If so what breed? Hampshire

At what time did most lambs come? March 15 to April 1.

When were most of lambs sold? August 1 to September 1.

Were lambs creep fed? No

Were lambs docked? Yes Castrated? Yes

How many times was flock treated for stomach worms? Two

What treatment was used? Bluestone

Number of times flock dipped 0

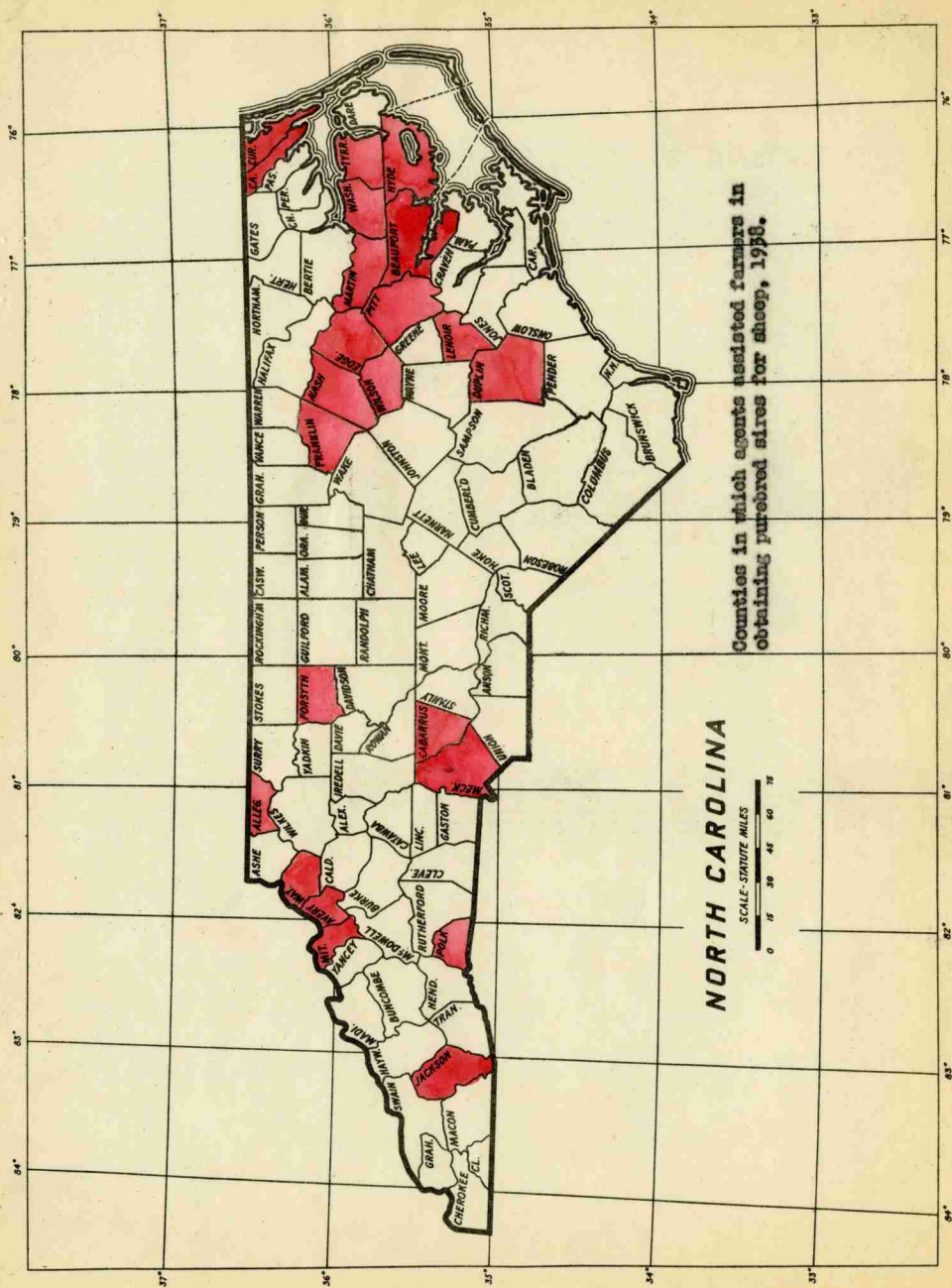
Was flushing practiced? No

Tell briefly how flock was wintered. Fed small amount of shelled corn, wheat  
and ensilage and winter pasture

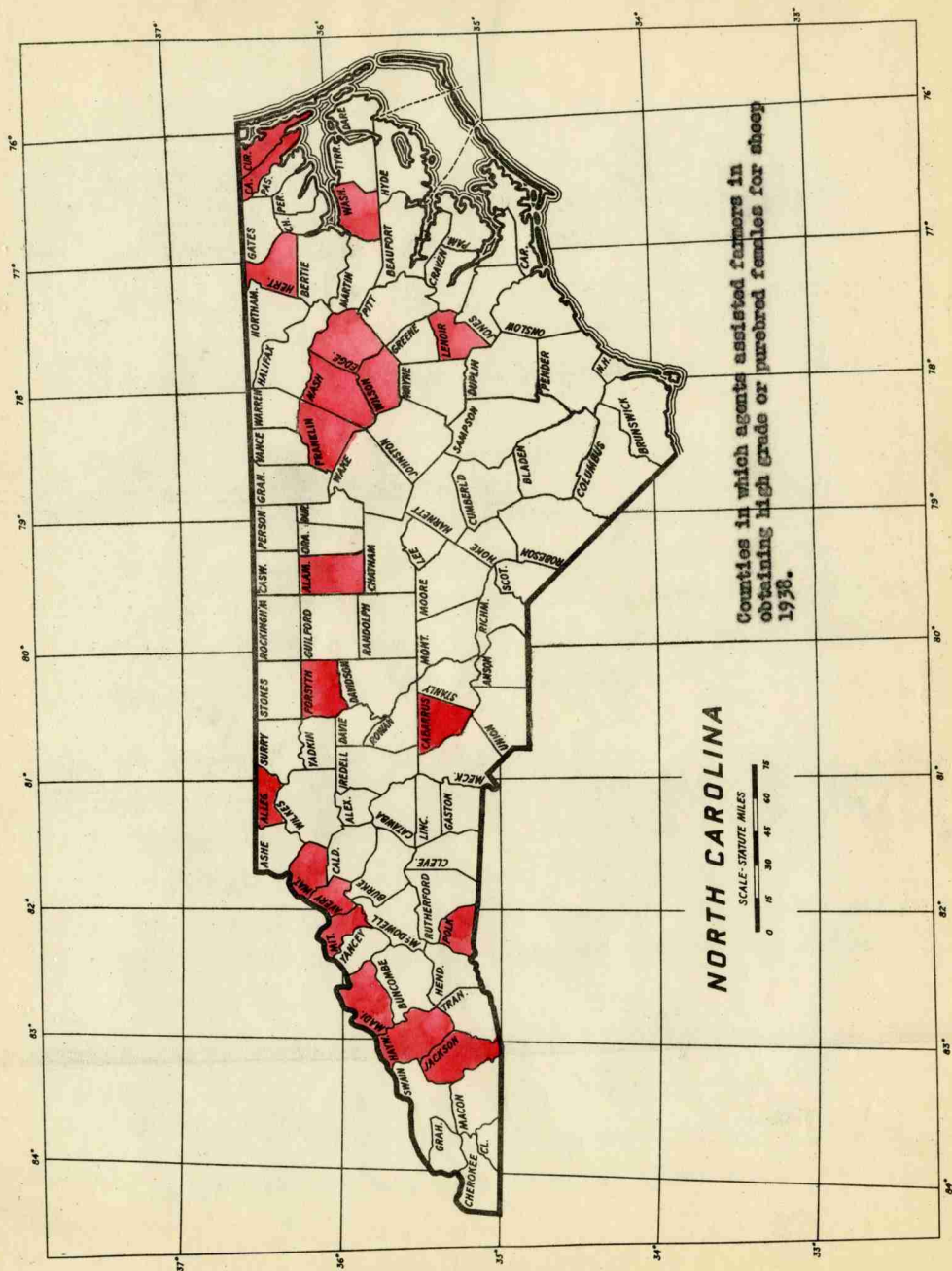
How was wool sold? Allegheny wool pool

How were lambs sold? Allegheny lamb pool

REMARKS:







### B. Ram Placements

It is usually the case that ram replacements are more difficult when prices of lambs and wool are low. Nineteen thirty-eight was no exception to the rule and only 87 replacements in 23 counties were reported.

As previously stated more ewes were held back last year and 20 counties reported 174 farmers assisted in obtaining high grade and purebred ewes.

### C. Parasite and Disease Control

The problem of parasite and disease control is something that has to be hammered away on year after year for there is the human tendency to do nothing until the sheep are showing advanced symptoms of disease. Thirty counties reported 293 farmers assisted with parasite control and 15 counties reported 120 farmers assisted with disease control.

### D. Docking and Castrating Lambs

Grading and cooperative selling of lambs is helping to emphasize the value of docking and castration of lambs intended for market. A penalty of \$1.00 per cwt. on ram lambs compared with ewe and wether lambs is a strong argument in favor of trimming. There is still need for work along this line, however, and 49 demonstrations were conducted in 15 counties during the season.

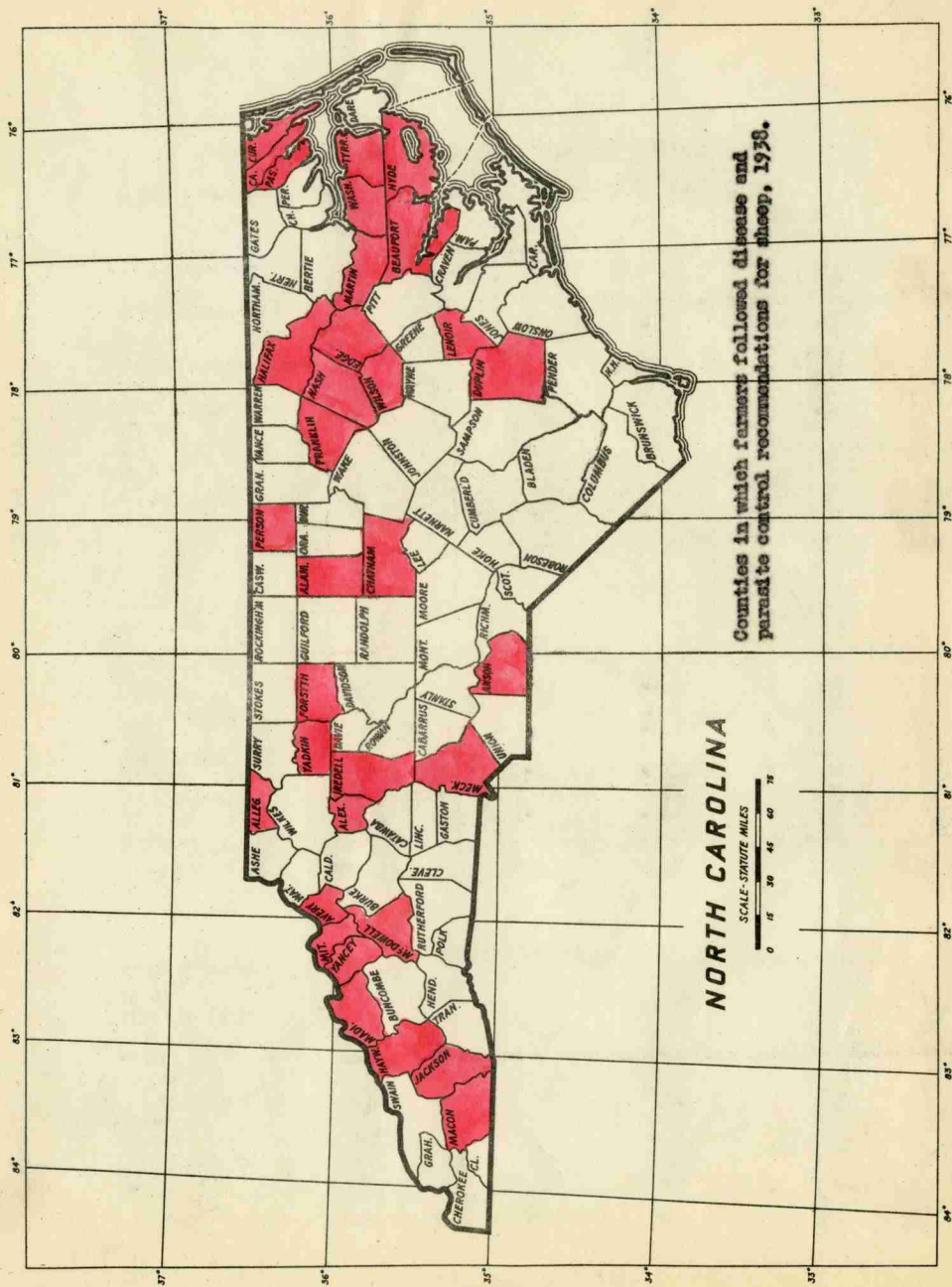
### E. Marketing

#### 1. Lamb Grading and Cooperative Sales.

The cooperative selling and shipping of lambs did not work out as smoothly as during previous years. There were several reasons for this, the

most important of which was a halt in direct bids following three eastern shipments. This necessitated two consignments to another selling agency. Another thing, local buyers were more active than usual in some sections and very good prices offered by them resulted in country sales, where cooperative shipments were made the previous year. It is interesting to note, however, that in Alleghany and Watauga Counties where this work was initiated, and where good work has been done by the county agents, cooperative sales have increased each year. The following table shows the percentage of lambs of the various grades sold cooperatively for the past four years from these counties as well as the totals for each year.

Year	Choice	Good	Good Bucks	Medium	Medium Bucks	Common & Cull	Total No.
1935	2.4	62.9	1.7	24.5	2.7	5.9	2324
1936	10.5	62.9	3.9	18.9	2.1	1.7	2410
1937	23.2	54.7	6.3	9.7	2.3	3.9	2824
1938	19.8	49.6	6.3	17.0	3.0	4.2	2881





The following tabulation gives detailed information regarding  
lambs marketed cooperatively from North Carolina in 1938:

Grade	No.	Home Weight Lbs.	Alleghany County Percent of total		Average per head wt. Lbs.	Net per cwt.		Net Returns Dollars
			By head:	By weight		lbs.	home wt. Dollars	
Choice	276	24855	19.2	21.6	90.1		8.80	2187.77
Choice bucks	11	1057	.8	.9	96.1		8.03	84.90
Good	664	52956	46.1	46.1	79.8		8.05	4261.80
Good bucks	116	10236	8.1	8.9	88.2		7.14	730.82
Medium	206	14895	14.4	13.0	72.3		6.67	993.70
Medium bucks	53	3866	3.7	3.4	72.9		5.82	225.09
Common	82	5036	5.7	4.4	61.4		5.71	287.37
Skips	19	1080	1.3	.9	56.8		4.49	48.45
Sheep	9	894	.6	.8	99.3		3.90	34.91
Totals	1436	114875	100.0	100.0	80.0		7.71	\$8854.81

Ashe County							
Choice	107	9246	17.8	19.5	86.4	8.56	791.19
Choice bucks	27	2677	4.5	5.7	99.1	7.92	211.97
Good	231	18053	38.6	38.1	78.2	7.91	1428.33
Good bucks	71	6201	11.9	13.1	87.3	7.04	436.47
Medium	74	4955	12.4	10.5	67.0	6.77	335.25
Medium bucks	55	3899	9.2	8.2	70.9	5.95	231.98
Common	26	1560	4.5	3.3	60.0	4.68	72.98
Sheep	7	768	1.1	1.6	109.7	4.66	35.82
Totals	598	47359	100.0	100.0	79.2	7.48	\$3543.99

Watauga County							
Choice	279	26115	18.3	20.6	93.6	8.58	2240.36
Choice bucks	5	507	.3	.4	100.1	6.62	33.57
Good	766	64550	50.3	50.9	84.3	7.75	5004.37
Good bucks	65	6052	4.3	4.7	93.1	6.93	419.41
Medium	284	20938	18.6	16.5	73.7	6.22	1302.71
Medium bucks	35	2668	2.3	2.1	76.2	5.75	153.36
Common	18	1235	1.2	1.0	68.6	6.71	82.86
Skips	2	100	.1	.1	50.0	5.16	5.16
Mixed, Com-Skip	65	3931	4.3	3.1	60.5	3.36	132.11
Sheep	5	731	.3	.6	146.2	2.01	14.66
Totals	1524	126827	100.0	100.0	83.2	7.40	\$9388.57

## Camden - Currituck - Pasquotank Counties

Grade	No.	Home	Percent of total		Average	Net per crt.	Net
		Weight	By head:	By Weight	per head wt.	lbs. home wt.	Returns
		Lbs.			Lbs.	Dollars	Dollars
Choice	18	1486	6.8	8.8	82.5	8.68	128.92
Good	61	4500	23.2	26.7	73.8	8.40	378.03
Good bucks	1	80	.4	.5	80.0	7.00	5.60
Medium	53	3420	20.2	20.3	64.5	7.72	263.98
Medium bucks	1	80	.4	.5	80.0	6.53	5.22
Common	55	2930	20.9	17.4	53.3	6.84	200.55
Mixed, com-skps.	16	970	6.1	5.8	60.6	6.43	62.38
Skips	58	3370	22.0	20.0	58.1	4.79	161.59
Totals	263	16836	100.0	100.0	64.0	7.16	\$1206.27

## Edgecombe County

Choice	51	4303	40.5	46.3	84.4	9.32	401.15
Choice bucks	1	73	.8	.8	73.0	9.25	6.75
Good	33	2448	26.2	26.3	74.2	8.82	216.02
Medium	18	1112	14.3	11.9	61.8	7.83	87.06
Medium bucks	9	595	7.1	6.4	66.1	7.85	46.68
Mixed, com-skps.	14	776	11.1	8.3	55.4	6.77	52.50
Totals	126	9307	100.0	100.0	73.9	8.70	810.16

## Tyrrell - Washington - Hyde - Martin Counties

Choice	48	4398	9.3	13.3	91.6	9.37	411.99
Good	65	4768	12.6	14.4	73.3	8.87	423.10
Good bucks	3	263	.6	.8	87.7	9.17	24.12
Medium	71	4707	13.7	14.2	66.3	8.47	398.72
Medium bucks	6	442	1.2	1.3	73.7	8.20	36.26
Common	104	6740	20.1	20.4	64.8	5.94	500.41
Skips	162	8530	31.3	25.8	52.7	4.07	346.78
Mixed, com-skps	57	3117	11.0	9.4	54.7	5.98	186.49
Sheep	1	145	.2	.4	145.0	1.95	2.83
Totals	517	33110	100.0	100.0	64.0	7.04	\$2330.70

Summaries

<u>All Shipments Combined According to Grade 1938</u>							
<u>Grade</u>	<u>No.</u>	<u>Home</u>	<u>Percent of total</u>		<u>Average</u>	<u>Net per cwt.</u>	<u>Net</u>
		<u>Weight</u> <u>Lbs.</u>	<u>By head:</u>	<u>By weight</u>	<u>per head wt.</u> <u>Lbs.</u>	<u>lbs. home wt.</u> <u>Dollars</u>	<u>Returns</u> <u>Dollars</u>
Choice	779	70403	17.5	20.2	90.4	8.75	6161.38
Choice bucks	44	4314	1.0	1.2	98.0	7.82	337.19
Good	1820	147275	40.9	42.3	80.9	7.95	11711.65
Good bucks	256	22832	5.7	6.6	89.2	7.08	1616.42
Medium	706	50027	15.8	14.4	70.1	6.76	3381.42
Medium bucks	159	11550	3.6	3.3	72.6	6.05	698.59
Common	285	17501	6.4	5.0	61.4	6.54	1144.17
Skips	241	13080	5.4	3.8	54.3	4.30	561.98
Mixed-com-skips.	152	8794	3.4	2.5	57.9	4.93	433.48
Sheep	22	2538	.5	.7	115.4	3.48	88.22
<b>Totals</b>	<b>4464</b>	<b>348314</b>	<b>100.0</b>	<b>100.0</b>	<b>78.0</b>	<b>7.50</b>	<b>\$26134.50</b>

Individual Shipment Averages

<u>Origin - Date</u>							
<u>Alleghany</u>							
5/31*	85	7179			84.4	8.53	612.56
7/2	340	28395			83.5	8.65	2457.07
8/1	456	37427			82.1	7.88	2948.69
9/3	555	41874			75.4	6.77	2836.49
<u>Ashe</u>							
7/2	125	10037			80.3	8.34	837.41
8/1	236	18863			79.9	7.66	1445.81
9/3	237	18459			77.9	6.83	1260.77
<u>Camden, etc.</u>							
5/12	141	8666			61.5	7.89	683.67
6/13**	122	8170			67.0	6.39	522.60
<u>Edgemoor</u>							
5/11	126	9307			74.3	8.70	810.16
<u>Washington</u>							
5/13	186	13025			70.2	8.13	1058.63
6/17***	331	20085			60.7	6.33	1272.07
<u>Watauga</u>							
7/2	378	32623			86.3	8.46	2759.40
8/1	623	52752			84.6	8.08	4262.41
9/17****	523	41452			79.3	5.71	2366.76
<b>Total</b>	<b>4464</b>	<b>348314</b>			<b>78.0</b>	<b>7.50</b>	<b>26134.50</b>

\*The lambs trucked from Boone, West Jefferson and Sparta to Wytheville, Va. and sold in the auction market shrank 4.8 percent of their home weight.

\*\*8.3 percent of home weight shrink to Jersey City.

\*\*\*5.3 percent of home weight shrink to Jersey City.

\*\*\*\*14.3 percent of home weight shrink to Jersey City. This shrink was considerably above normal, probably because of a very light market fill. The average shrink for this section last season was 11 percent.

## 2. Wool Sales.

Not quite as much wool was handled cooperatively in 1938 as in the previous year. In round numbers 48000 pounds were sold through the assistance of extension workers as compared with 50000 pounds in 1937. The greater part of this was concentrated and sold to The Chatham Manufacturing Company, Elkin, N. C., although some was sold to dealers and in the eastern counties farmers shipped their own wool under the direction of the county agents.

Judging from reports from farmers and county agents the pooled wool sold for an average of four and one-half cents per pound more than wool sold by individual farmers to local buyers. It is also true that local buyers always pay more in sections where wool is being pooled. It is estimated, therefore that extension efforts in assisting farmers with wool sales put fully \$2500.00 more in the pockets of the sheep farmers."

The following tabulation gives an incomplete record of wool sold by the help of extension workers in North Carolina in 1938



County	Pounds of Wool	To Whom Sold	Price Clear Wool	Price Gen. Rec'd.
Alleghany	14500	Chatham Mfg. Co.	25¢	20-22¢
Watauga	16500	A. W. Hodgson	25¢	20¢
Ashe	3186	Chatham Mfg. Co.	23¢	
Avery	4200	Richardson & Hutton, Glade Springs, Va.	25¢	19-20¢
Mitchell	2769	Fields Mfg. Co. Mouth of Wilson, Va.	21½¢	16-18¢
Yancey	2094	Fields Mfg. Co. Mouth of Wilson, Va.	21½¢	18-20¢
Chatham	1150	A. W. Payne, Burlington, N.C.	20¢	
Tyrrell	290	Producers Coop. Exchange Richmond, Va.	14½¢	
Camden	1207	Producers Coop. Exchange Richmond, Va.	21¢	16¢
Washington	2400			

### III. MISCELLANEOUS ACTIVITIES

#### 1. Farm Tours

The Animal Husbandry Specialist attended farm tours in Buncombe and Mitchell counties. These are two of our better beef cattle counties. Requests were received to accompany farmers on several more of these tours but time did not permit.

#### 2. Lamb Grading School.

Lamb grading has been done by three trained graders in Ashe, Alleghany, and Watauga counties and by Paul L. Fletcher of the State Department of Agriculture and the Extension Animal Husbandman. In order that grading be as near perfection and as uniform as possible a grading school was held in Watauga county in July. Fifty-four lambs representing all grades were graded by the above as well as by several county agents. The grading was then compared and where there was much variation in the grading the lambs were gone over again.

#### 3. Hereford Breeders' Meeting

The fourth annual get-together of State Hereford Breeders was held at Mr. Jack Hipps' farm in Haywood county on September 9. There were about 100 in attendance and much interest in the promotion of the breed was in evidence. They decided to raise money again in 1939 for special prizes on Hereford steers both at Asheville and the State Fair. This year \$50.00 is being awarded at Asheville, \$25.00 first, \$15.00 second and \$10.00 third. This, of course, is just awarded on Hereford steers. Next year the offer will be made on Hereford steers bred in North Carolina and sired by a purebred Hereford bull. Twelve counties were represented at the meeting, they being

Macon, Haywood, Buncombe, Jackson, Transylvania, Henderson, McDowell, Watauga, Caldwell, Rowan, Anson and Stanly. A judging contest was conducted for breeders in attendance. This consisted of one class of aged cows, one class of bred heifers and one class of open heifers. Small cash prizes were awarded and the winners were first, J. M. Carpenter, McDowell County; second, W. L. Wilkins, Buncombe County; third, Geo. D. Stamey, Haywood County. The matter of forming an association of Hereford breeders as well as the matter of an annual sale was discussed. It was finally decided to turn both of these matters over to a committee which would go into the matter further and report back to the members of the association. This committee is as follows: Dr. J. M. Lynch, Fairview, N. C.; Adam Lockhart, Wadesboro, N. C.; B. B. Miller, Mt. Ulla, N. C.; R. C. Hunter, East LaPorte, N. C. and R. C. Shipley, Vilas, N. C. This committee met at a later date and decided to form a North Carolina Hereford Association. The matter of an annual sale was discussed but in view of the scarcity of sale cattle it was decided to postpone action indefinitely.

#### 4. Judging

In response to a request from R. E. Davis, Animal Husbandry Specialist in Georgia, a trip was made to Atlanta, Georgia on April 19-20, where assistance was given in judging the fat cattle show there. In addition judging of cattle and sheep was done at three county fairs, three judging contests were conducted and assistance given several county agents in training 4-H judging teams.

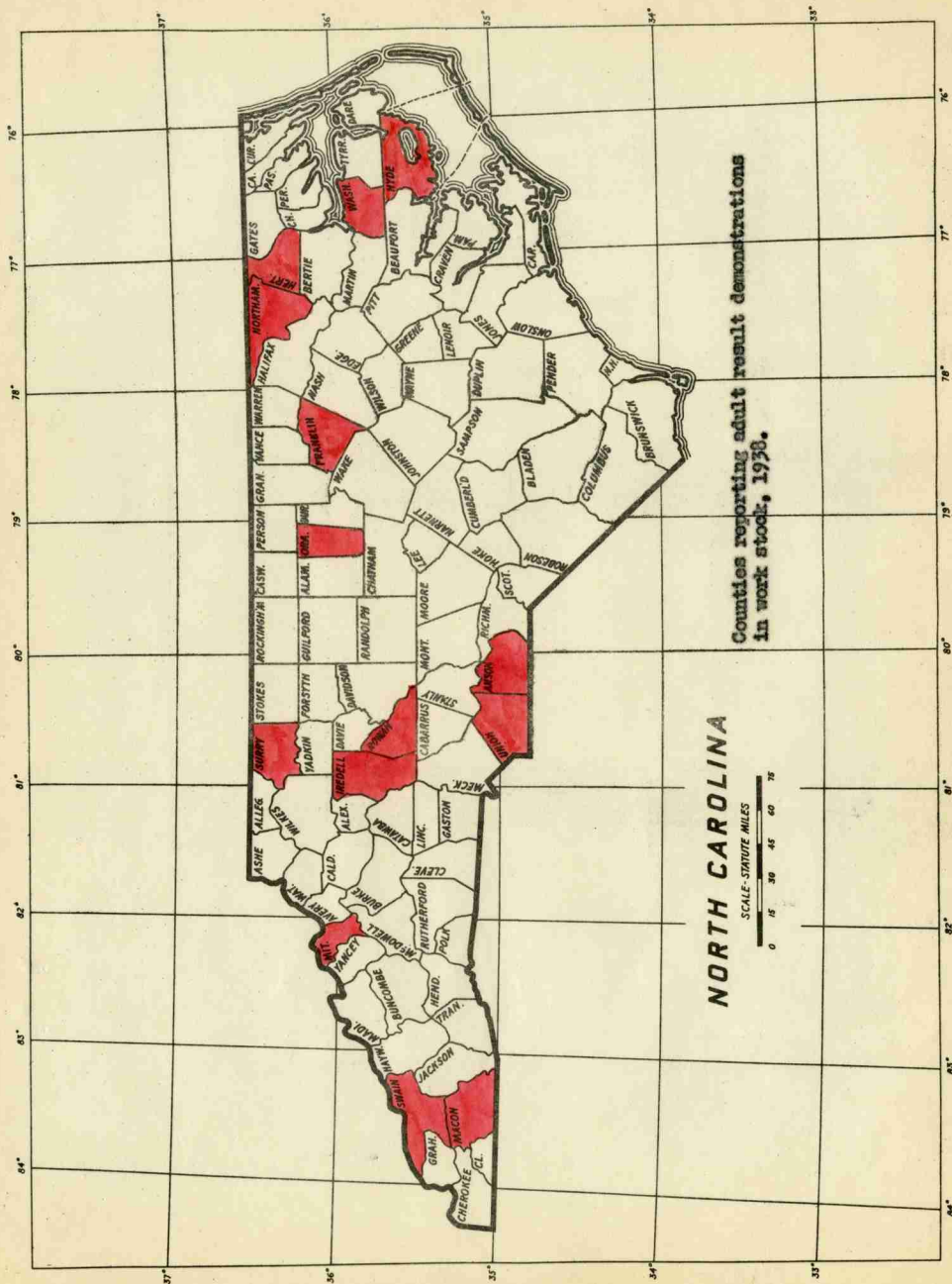
#### 5. Cold Storage and Freezer Locker Unit

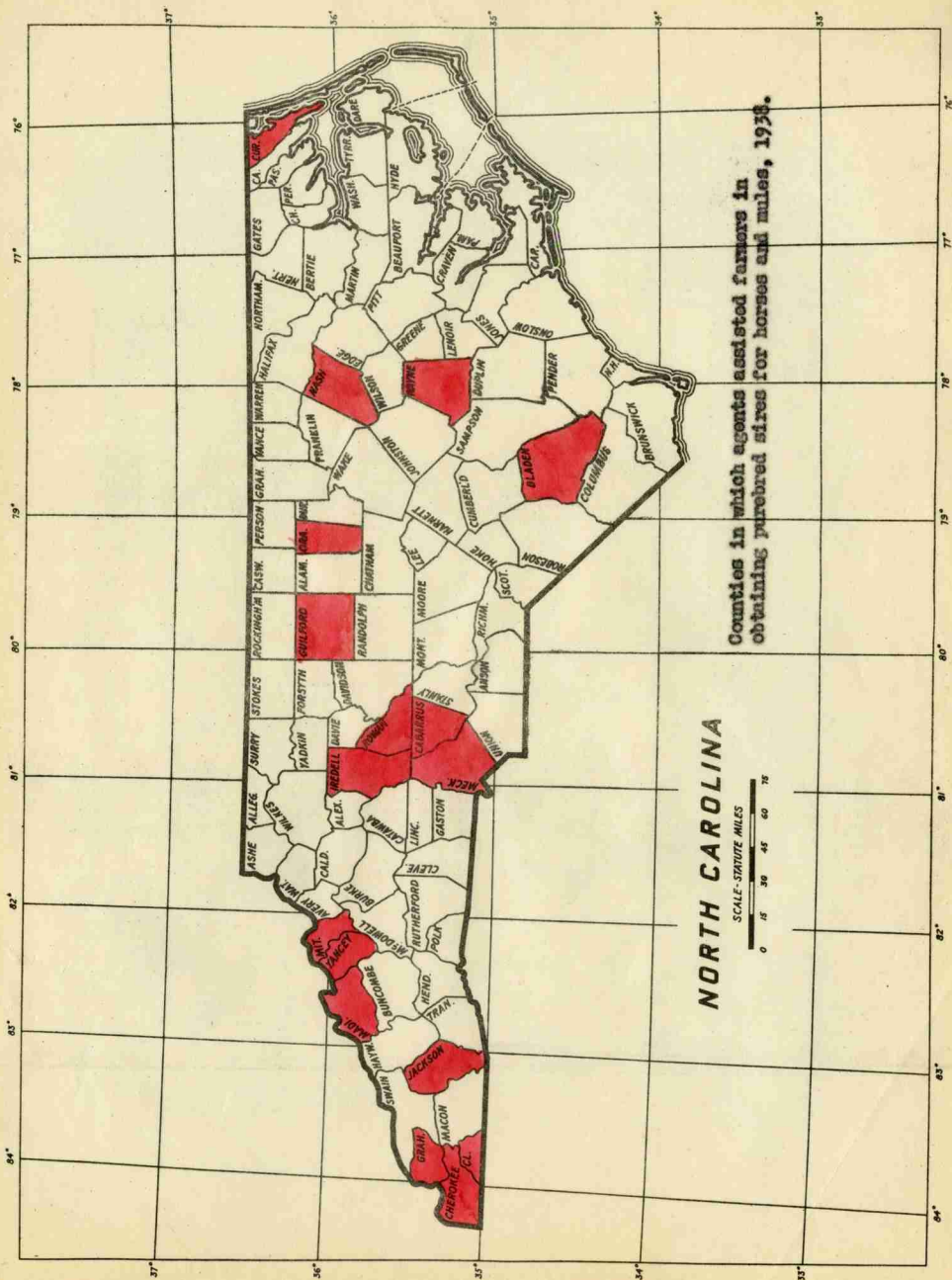
The interest in freezer lockers which started in the northwest several years ago has spread to this state. Two small units were started in 1937 and last year a very up to date plant was opened at Lumberton in Robeson County. This plant is in charge of R. E. Nance who was formerly connected with the Animal Husbandry Department of State College. It opened in November and is doing a very good business. Much interest has been shown in this plant and several parties have visited it from Eastern and Piedmont North Carolina. It is predicted that other plants of the kind will be opened soon.

#### 6. Out of State Trips

Attendance was made during the year to the Southern Agricultural Workers Meeting in Atlanta, Ga., the American Society of Animal Production, in Chicago, Ill., The International Livestock Exposition, and a Market Lamb Conference in Bristol, Va.







STATISTICAL SUMMARY

(As taken from Annual Reports of County Agents)

	<u>Beef Cattle</u>		<u>Sheep</u>		<u>Work Stock</u>	
	Co's.	Units	Co's.	Units	Co's.	Units
1. No. days devoted to line of work by county agents and assistants	85	982	50	199	69	290
2. No. days devoted to work by Specialist	42	97	16	36	6	28
3. No. adult result demonstrations conducted	48	181	23	100	14	47
4. No. meetings at result dems.	23	62	9	12	6	7
5. No. method demonstration meetings held	26	82	15	49	11	80
6. No. other meetings held	18	32	13	39	10	17
7. No. news stories published	48	159	19	47	24	55
8. No. different circular letters issued	27	66	21	63	11	11
9. No. farm visits made	85	3148	47	639	61	1000
10. No. office calls received	82	4845	47	1343	59	2378
11. No. 4-H Club members completing <i>projects</i>	30	154	10	12	13	30
12. No. farmers assisted in obtaining sires	50	185	23	87	17	31
13. No. farmers assisted in obtaining high grade or purebred females	43	325	20	174	23	185
14. No. families assisted in home butchering, meat cutting & curing	8	158	4	13		
15. No. farmers following parasite & disease control recommend's.	41	461	45	413	23	730
16. No. farmers following marketing recommendations	28	559	27	657	7	82

Williams ?

1939

STATISTICAL SUMMARY

(From Specialist Reports)

*one full time specialist and one for three months*

Number days in the field .....  $180 + 53^W = 233$   
 Number days in the office .....  $126 + 13^W = 139$   
 Number days on annual leave; ..... 2  
 Number days on sick leave ..... 1  
 Number automobile miles traveled .....  $22,289 + 2874^W = 25,163$   
 Number railroad miles traveled ..... 0  
 Number visits to county agents .....  $219 + 74^W = 293$   
 Number visits to demonstrators .....  $168 + 149^W = 317$   
 Number other visits .....  $145 + 144^W = 289$   
 Number meetings addressed ..... *attended*  $52 + 11^W = 63$   
 Total attendance above meetings .....  $3874 + 323^W = 4197$   
 Number office consultations .....  $221 + 21^W = 242$   
 Number letters written .....  $1673 + 79^W = 1752$   
 Number different circular letters ..... 36  
 Number articles prepared ..... 7  
 Number radio talks prepared and given ..... 2



STATISTICAL SUMMARY

(From Specialist Reports)

Number days in the field	168
Number days in the office	128
Number days on annual leave	7
Number days on sick leave	2
Number automobile miles traveled	21821
Number railroad miles traveled	2000
Number visits to county agents	176
Number visits to demonstrators	200
Number other visits	127
Number meetings addressed	19
Total attendance above meetings	451
Number office consultations	119
Number letters written	1368
Number different circular letters	35
Number articles prepared	10
Number radio talks prepared and given	5

### OUTLOOK

The outlook for progress in the Animal Husbandry field is exceedingly bright. More interest is evident among farmers and this is being reflected in increased interest among county agents. This line of work is handicapped by lack of training of personnel which goes back to home environment and college training. This statement is meant as no reflection on the Animal Husbandry Staff at State College for a very good job has been done for the teaching facilities available. Laboratory equipment is sadly lacking, however, and in most cases what there is, is so involved in research that its usefulness for teaching work is much impaired. In spite of this criticism which is meant to be constructive the animal husbandry graduates in extension are the best in the work. Many have had practically no livestock training whatsoever.

Phases of work to be emphasized in 1939.

1. Beef Calf Club Work
2. Better feeding and herd and flock management
3. Grading and cooperative selling of market lambs
4. Improved purebred herds and flocks for supplying stud sires.

Circular Letters and News Articles:

On the following pages will be found sample circular letters used during the year and clippings of news articles published.

COOPERATIVE EXTENSION WORK  
IN  
AGRICULTURE AND HOME ECONOMICS  
STATE OF NORTH CAROLINA

NORTH CAROLINA STATE COLLEGE OF  
AGRICULTURE AND ENGINEERING  
NORTH CAROLINA COUNTIES AND  
UNITED STATES DEPARTMENT OF  
AGRICULTURE COOPERATING

EXTENSION SERVICE

State College Station  
Raleigh, N. C.  
March 9, 1938.

TO COUNTY AGENTS IN EASTERN NORTH CAROLINA:

Sometime ago Mr. E. H. Austin, Secretary, Chamber of Commerce, Rocky Mount, N. C. sent you several copies of the classification and premium list of the Fat Stock Show scheduled for April 7, and 8th at Rocky Mount, N. C. If you will refer to one of these you will note that Rule 3 states that the closing date for making entries is April 1, 1938.

Entries in the fat cattle department will be rather limited this year due to high prices for feeder cattle last fall and the prospect at that time for a drop in prices. It is suggested, therefore, that you see that anything qualified to show from your county be entered and exhibited. Remember that animals shown in Classes 1, 2, 3, and 4 must be halter broken.

In making entries in the cattle department it is unnecessary to designate the class as that will be determined by weight after the animal reaches the show.

Do not overlook the Showmanship Class. Four H Club members should have some special training in the proper methods of showing animals.

Remember also the Judging Contest and give all time possible to training a 4-H Club team. Note the rules of the contest.

Yours very truly,

L. I. Case,  
Specialist in Animal Husbandry.

COOPERATIVE EXTENSION WORK  
IN  
AGRICULTURE AND HOME ECONOMICS  
STATE OF NORTH CAROLINA

NORTH CAROLINA STATE COLLEGE OF  
AGRICULTURE AND ENGINEERING  
NORTH CAROLINA COUNTIES AND  
UNITED STATES DEPARTMENT OF  
AGRICULTURE COOPERATING

EXTENSION SERVICE

State College Station  
Raleigh, N. C.  
April 25, 1938

TO ALL COUNTY AGENTS:

Last week a letter was written you in regard to marketing wool. This may look like putting the cart before the horse but anyway there are given below some brief instructions for: Preparing the Wool For Market.

Shearing should be done as soon as the weather is warm enough to bring the grease or yolk up into the fleece. This varies with the season and with the section but as a rule may be done in North Carolina from May 1st to 15th.

The shearer should keep in mind that he is harvesting a valuable crop and should treat the wool as such.

Cut off all dung tags before shearing is started.

Keep the wool free from trash by shearing on a canvas or a clean floor.

Do not shear when the fleeces are wet.

Avoid cutting the wool twice.

Machine clippers, properly used, will do a smoother job, avoid more second cuts, and save more wool.

Tie each fleece separately, skin side out, with paper twine. Binder or coarse twine of any kind should not be used.

Black, burry, dead or dirty fleeces should be kept separate from the rest.

Sack wool in regular wool bags and if not sold immediately, store in a clean dry place.

Perhaps you can use these brief suggestions to advantage either in a circular letter or news article or both.

Yours very truly,

L. I. Case,  
Animal Husbandry Specialist.



COOPERATIVE EXTENSION WORK  
IN  
AGRICULTURE AND HOME ECONOMICS  
STATE OF NORTH CAROLINA

EXTENSION SERVICE

NORTH CAROLINA STATE COLLEGE OF  
AGRICULTURE AND ENGINEERING  
NORTH CAROLINA COUNTIES AND  
UNITED STATES DEPARTMENT OF  
AGRICULTURE COOPERATING

State College Station  
Raleigh, N. C.  
August 10, 1938

TO COUNTY AGENTS DOING BABY BEEF CLUB WORK:

Please send me at your earliest convenience a complete list of names, initials, and post office addresses of owners of beef steers that will be shown at either The Asheville Fat Stock Show, The State Fair or both. Also indicate the breed of the animal, (the breed is determined by the sire), whether or not the owner is a 4-H Club Member, and in case of feeder calves and fat steers to be shown in Get-of-Sire Class at Asheville, give the name and registration number of the sire. Please be accurate as this list will be used in claiming money from Breed Associations, etc. A report form is being enclosed for your convenience.

A State Fair catalog will be sent you as soon as they are printed which they say will be in two or three weeks. Suffice it to say here that after a hard fight the 4-H Baby Beef Club premiums are considerably higher than last year. There will be twenty prizes in each of the three weight classes, ten prizes for County Groups of three head, three Showmanship awards and the usual extra offers of 25 per cent additional by the three National Beef Cattle Breed Associations. Then there is the Special North Carolina Cottonseed Products Association Scholarship award. In this connection remember that the record book, showmanship and participation in club activities in addition to the individuality of the animal, all play a part in the awarding of this prize.

Plans are shaping up well for the Auction Sale of fat steers at the State Fair. Only feeder steers and such other animals as it seems desirable will be disposed of at Asheville.

In case you need combs, brushes and other equipment I am asking one of the stockmen's supply companies to send you a catalog. Expensive equipment such as factory made leather halters, blankets, etc. are unnecessary. A rope halter, properly made to draw under the jaw of the animal is good enough.

In my opinion it is very desirable that either the county agent or assistant agent stay at the show barn day and night with the club boys and their calves. This will assure the animals getting proper care and attention and also that the boys conduct themselves properly.

If you can get good kodak pictures of your baby beeves and owners send prints, properly labeled to Mr. Fred Weed, Manager, Asheville Chamber of Commerce and or Mr. Frank Jeter, State College Station, Raleigh.

Yours very truly,

L. I. Case,  
Animal Husbandry Specialist

COOPERATIVE EXTENSION WORK  
IN  
AGRICULTURE AND HOME ECONOMICS  
STATE OF NORTH CAROLINA

NORTH CAROLINA STATE COLLEGE OF  
AGRICULTURE AND ENGINEERING  
NORTH CAROLINA COUNTIES AND  
UNITED STATES DEPARTMENT OF  
AGRICULTURE COOPERATING

EXTENSION SERVICE

August 22, 1938

Dear County Agent:

In order that we may have a comprehensive picture of cooperative efforts in the marketing of wool I am asking that you fill out the following form and return to me at your convenience.

Regardless of whether or not you assisted in the selling of any wool in your county it will be appreciated if you will return this form to me filled out as far as possible. A summary of replies will be used as a guide in the handling of wool next year.

Yours very truly,

L. I. Case,  
Animal Husbandry Specialist

1. Number pounds of wool assisted in selling in 1938 \_\_\_\_\_
  2. To whom sold: \_\_\_\_\_
  3. Date sold \_\_\_\_\_
  4. Price received: Clear wool \_\_\_\_\_ Light burry \_\_\_\_\_ Heavy burry \_\_\_\_\_  
Other classifications \_\_\_\_\_
  5. Was wool sold outright or consigned? \_\_\_\_\_
  6. Price received for wool sold individually to local buyer \_\_\_\_\_
- Remarks: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
County Agent.

COOPERATIVE EXTENSION WORK  
IN  
AGRICULTURE AND HOME ECONOMICS  
STATE OF NORTH CAROLINA

EXTENSION SERVICE

State College Station  
Raleigh, N. C.  
September 2, 1938

Dear Hereford Breeder:

You have already received an invitation from Mr. W. F. Hipps to attend the annual Hereford Get-together at his farm in Haywood County on Friday September 9th. This is the fourth annual meeting of the kind, the others having been held at the farms of Dr. J. M. Lynch, Fairview, The Patterson School, Legerwood, and Robert G. Shipley, Vilas, during the years of 1935, 1936, 1937, respectively.

The purpose of these meetings is for Hereford breeders to get better acquainted and to talk over ways and means of improving and promoting the breed. Last year the matter of an annual sale was brought up and the breeders in attendance expressed themselves in favor of the same. This will be gone into more in detail this year, and no doubt other things of general interest will be discussed.

I am sure you will get both pleasure and profit by coming to Mr. Hipps' farm on September 9th. Talk with your county agricultural agent and he will help you in making plans for the trip.

Looking forward to seeing you, I am

Very truly yours,

L. I. Case,  
Specialist in Animal Husbandry.

COOPERATIVE EXTENSION WORK  
IN  
AGRICULTURE AND HOME ECONOMICS  
STATE OF NORTH CAROLINA

NORTH CAROLINA STATE COLLEGE OF  
AGRICULTURE AND ENGINEERING  
NORTH CAROLINA COUNTIES AND  
UNITED STATES DEPARTMENT OF  
AGRICULTURE COOPERATING

EXTENSION SERVICE

State College Station  
Raleigh, N. C.  
September 14, 1938

To County Agents in Alleghany, Watauga, Mitchell, Buncombe, Madison, Henderson,  
Transylvania, Jackson, Macon, Cherokee and Haywood Counties.

Gentlemen:

The Asheville Show has been definitely set for Wednesday October 5th.  
It will be held at the auction market as in the past,

In order to give the people in charge sufficient time to look after  
details, the cattle must be on the grounds not later than 3:00 P.M. Tuesday Oct. 4th

As we have discussed heretofore it will be advisable to take the  
majority of the fat steers on to the state fair. I will be glad to advise you  
which animals in my judgement should be taken to Raleigh. However, each exhibitor  
will have the privilege of selling any or all his cattle at Asheville. My advice  
is to sell the Grand Champion and perhaps the Reserve Champion, providing he brings  
a good price, and such others as will pay their way at the state fair.

In order to facilitate the shipment of cattle from Asheville to  
Raleigh it will be well to combine county exhibits. By this means we should be  
able to get all state fair cattle in two cars. Freight shipments will probably be  
a little more expensive than truck but the cattle will go through in better shape  
in a box car. The freight rate from Asheville to Raleigh is 35 cents per cwt.  
with a minimum of 20000 pounds for a 36 foot car. In addition each person going  
in the car with the cattle will have to pay regular fare which I believe is \$5.50.

In order that you may make some preliminary arrangements for  
shipping I am making the following estimates as to the number of steers that should  
go to Raleigh. Watauga 11, Buncombe 6, Haywood 5, Cherokee 3 to 5, Madison 1 to  
3, Transylvania 3, Mitchell 1, Henderson 1, and Macon 1. Alleghany will  
probably not go to Asheville. Just for something to work on let me suggest that  
Watauga, Madison, Mitchell and Cherokee go in together on one car and Buncombe,  
Haywood, Transylvania, Macon and Henderson go together on the other. Two men or a  
man and a boy, one of whom has had experience in shipping show cattle should go  
with each car. Each car should be provided with ample bedding for both cattle and  
men, a large water barrel, tubs or feed boxes for feeding the cattle, one for each  
animal, ample feed and hay to last through shipment, buckets for watering the  
cattle, two forks for handling litter and the usual supply of brushes, combs, etc.  
as well as food and water for the men. Other accessories that should be carried  
are a good flash light, hammer or hatchet, nails, saw, and sufficient lumber for  
boarding up one door of car, providing places for the cattle, etc.



Just a few suggestions for the handling of the steers from now until show time. Have each owner practice leading and showing his or her steer each day. A good walk each day will help the appetite and keep the animal on his feet in better shape. Wash each steer at least three times between now and the Asheville Show. Groom each day and curl as often as possible. A few days before the Asheville Show clip the heads and tails of all cattle. This should be done or at least directed by one who has had experience.

I hope it will be possible for one of the agents or at least a reliable man who will follow instructions about taking cattle off feed and water as directed, etc. to be with the cattle at Asheville and Raleigh, night and day.

Don't forget to have blankets etc. for men and boys who will sleep at the barns.

Have all club boys and girls as far as possible on hand to show his or her calf at Asheville. Also as far as practical have them at the state fair.

Review the rules of the show and see that all are carefully observed. Remember that none other than dehorned steers that have been owned five months and especially prepared for the show should be taken to either Asheville or Raleigh.

If there are any questions of which you are not certain write me or the show management.

Yours very truly,

L. I. Case,  
Animal Husbandry Specialist

COOPERATIVE EXTENSION WORK  
IN  
AGRICULTURE AND HOME ECONOMICS  
STATE OF NORTH CAROLINA

NORTH CAROLINA STATE COLLEGE OF  
AGRICULTURE AND ENGINEERING  
NORTH CAROLINA COUNTIES AND  
UNITED STATES DEPARTMENT OF  
AGRICULTURE COOPERATING

EXTENSION SERVICE

May 9, 1938

TO ALL COUNTY AGENTS

In Regard to Buying Stocker and Feeder Cattle.

My attention has been called in several instances to advertisements, post card announcements etc. from various parties in Iowa in regard to white-faced stocker and feeder cattle. In practically every instance prospective buyers are led to believe that they can buy cattle at a very low price. Four and one-half cents per pound has been mentioned in several instances. When a farmer answers one of these ads they are usually answered by wire or a long distance call. We have assurances from several sources that cattle racketeers are operating in the middle west and the purpose of this letter is to warn prospective buyers to stay away from that section. There are a plenty of reliable producers and commission firms throughout the country to be dealt with. Do not think that it is possible to buy cattle for less than they are really worth.

About ten years ago the southern states went through the same thing that they are going through now. Cattle operators in a certain western state were advertising in local papers throughout the south. They lured the prospects on by talking very low prices. In some cases where buyers went to see the cattle they were shown some good cattle and shipped something else. After several years the Department of Justice secured enough evidence to convict some of these men. Wallace's Farmer published at Des Moines, Iowa carried a full account of this racketeering several years ago.

I, personally, know of several people who have made trips to this section of the country and I think without exception they have been robbed. Just last week I saw some cattle in this state that were purchased as a result of one of these advertisements. Three farmers who wanted cattle delegated the man who had had the most experience to make the trip and buy the cattle. As I said they were led on by quotations of  $4\frac{1}{2}$  cents a pound for good and choice feeder steers. When the man in question arrived at his destination he was finally sold some little cattle at \$30.00 per head. I do not know all of the details but when the cattle arrived in North Carolina they were weighed up and it was found that they had cost them in the neighborhood of 12 cents per pound. The quality of the cattle was very poor and they were weak and emaciated. It is true that they had white faces but outside of that very little good could be said about them.

We must be careful to avoid libel suits but I think it is your duty to warn prospective buyers of cattle. My advice to prospective buyers is to wait until next fall when cattle will be cheaper. Quite a large number of surplus steers as well as heifers are sold out of our mountain counties each fall. I will be glad to help prospective buyers locate animals at that time.

Yours very truly,

L. I. Case, Specialist in Beef Cattle.

COOPERATIVE EXTENSION WORK  
IN  
AGRICULTURE AND HOME ECONOMICS  
STATE OF NORTH CAROLINA

NORTH CAROLINA STATE COLLEGE OF  
AGRICULTURE AND ENGINEERING  
NORTH CAROLINA COUNTIES AND  
UNITED STATES DEPARTMENT OF  
AGRICULTURE COOPERATING

EXTENSION SERVICE

State College Station  
Raleigh, N. C.  
September 14, 1938

TO COUNTY AGENTS IN THE ROCKY MOUNT FAT STOCK SHOW TERRITORY.

Looking forward to another fat stock show at Rocky Mount next spring and having in mind assisting you in locating good steers to be fed for that show I found during a recent trip in the western part of the state that there will be quite a number of very good quality steers that will be shown at Asheville and Raleigh by 4-H Club members that are not fat enough to stand high in our shows this fall. Some of these steers will be shown as feeders at Asheville and some will be shown in the fat classes but will grade only as fleshy feeders. Many of these steers are of just as good, or better, conformation and quality as the steers that will stand above them in class. Furthermore, they probably are not fat enough to demand a top price from the butchers and my thought is that your 4-H Club boys could handle them to very good advantage to be carried on for the Rocky Mount Show next spring. Most of them will be too large to be carried over for the state fair in 1939, although there will probably be a few that could be carried that long.

The purpose of writing you this letter is to give you time to get in touch with your prospective feeders for the Rocky Mount Show and to make financial arrangements for buying these steers at the state fair provided they do not go too high. Some of these steers will be sold at Asheville unless I can give the folks in the western counties some assurance that there will be interest in purchasing them by prospective feeders in Eastern North Carolina. I will, therefore, appreciate it very much if you will get in touch with people who are apt to participate in the Rocky Mount Show and line up some buyers and let me hear from you. If you have people who would like to purchase these or other steers to be fed for the Rocky Mount Show and are not financially able to pay cash for them I am sure that arrangements can be made through the Rocky Mount bankers to finance them in case local financial arrangements cannot be made. If you want details in regard to financing by the bankers of Rocky Mount I suggest that you write directly to Mr. E. H. Austin, Secretary, The Rocky Mount Chamber of Commerce, Rocky Mount, N. C.

I am Trusting that I will hear from you within the next week or two,

Yours very truly,

L. I. Case,  
Animal Husbandry Specialist.



COOPERATIVE EXTENSION WORK  
IN  
AGRICULTURE AND HOME ECONOMICS

EXTENSION SERVICE

NORTH CAROLINA STATE COLLEGE OF  
AGRICULTURE AND ENGINEERING  
NORTH CAROLINA COUNTIES AND  
UNITED STATES DEPARTMENT OF  
AGRICULTURE COOPERATING

STATE OF NORTH CAROLINA

State College Station  
Raleigh, N. C.  
November 12, 1938

TO ALL COUNTY AGENTS AND ASSISTANTS:

SUBJECT: Baby Beef Club Work for 1939.

The good shows of fat steers by 4-H Club members at Asheville and the State Fair this year and especially the good sale at the latter show will no doubt add impetus to Baby Beef Club work in 1939.--- More agents planned for work of this kind for 1939 than for any previous year, and undoubtedly many others will want to initiate some of this type of 4-H Club work this coming year. It fits in nicely with the general extension of the beef industry which is very definitely taking place in North Carolina.

Suggestions for Baby Beef Club Work 1939

Get it started at once. Select the boys and girls as well as the calves that are most suitable for this work. If you wait for clubs to be organized and the members to select this project on their own initiative it may be too late to find suitable calves.

Young, grade, cross-bred, or purebred calves of good type and conformation that are still on milk and that are locally bred have proved the most practical and profitable in the past. My advice is to select calves dropped from July 1938 up through January 1939. Of course I would not make these age limits absolute. An outstanding individual somewhat older should not be over looked. Neither should a good February calf be ignored. (The calf that stood first in the light class at Asheville was a March calf.)--- Keep these young calves on an ample supply of milk as long as is practical and get them to eating grain as soon as possible.

THINGS TO REMEMBER

Only steer calves are allowed to show. Use a Burdizzo if possible in altering the bull calf. If a knife is used make two incisions on the front of the scrotum being sure they are deep enough for good drainage.

All calves must be without horns. Use a caustic stick (sodium or potassium hydroxide) when the calf is only a few days old or a calf dehorner on older calves. In all cases where dehorning is done, except with caustic, perform the operation in cool weather and use pine tar or other fly



repellent as a safety measure. Go deep enough to avoid unsightly stubs.

Get accurate initial weights of all calves. In the past too many weights have been guessed at.

See that the club member keeps accurate feed records. The record is a very important part of the project.

Do not overlook the importance of halter breaking and proper training of calves for the show ring. The sooner this is done the easier it is.

#### THE ROCKY MOUNT SHOW

Competition for this show is limited to counties east of and including Granville, Durham, Wake, Harnett, Hoke and Scotland.

Steers for this show should be in good flesh now and be very liberally fed from now on. There is insufficient time to get thin animals in condition.

Details regarding feeding and management of beef calves are given in the circular entitled "Instructions in Baby Beef Production for 4-H Club Members."

Yours very truly,

L. I. Case,  
Animal Husbandry Specialist.

P. S. Several agents have expressed a desire for a Burdizzo Pincer for the bloodless castration of stock. The retail price is \$15.00 plus the shipping charge. I have been offered a 10 percent discount on these instruments in quantities of six or more. If you want one write me sending no money and I will give you the exact cost f.o.b. Raleigh as soon as I learn what it is.

L.I.C.

## SUGGESTIONS FOR FEEDING AND CARE OF LAMBS TILL MARKET TIME

By L. I. Case  
Extension Animal Husbandman

Some lambs are already here and many more will be coming soon. The lamb crop is the sheepman's harvest and it pays to save as high a percentage as possible and to grow and fatten them rapidly up to marketing time.

Care of Ewes: The ewes should be in good strong condition at lambing time. Plenty of green winter cover crops will go a long way toward furnishing feed for the ewe flock. Good green, leafy legume hays should also be fed at will as they furnish the proteins and minerals so necessary for developing the unborn lambs. Corn or oats, or a mixture of the two in amounts of one half to one pound daily may be profitably fed for about one month before lambing time. Unless a good legume hay or plenty of green cover crop is available it is well to add a small amount of a protein feed, such as cotton seed meal, soybean meal or peanut meal to the grain. When grain is being fed in appreciable amounts it is well to reduce this feed for a few days before and after lambing. At this time give the ewes all the green feed, legume hay and water that they want.

If the ewe flock is being housed at night those heavy with lamb should be separated from the others. A lambing pen 4 x 4 feet square will often prevent lambs wandering off and causing the ewes to disown them.

Feeding The Lambs: Of first importance in feeding lambs is milk and plenty of it. See that the ewes are fed for milk production. The same feeds are recommended for pregnant ewes may be fed, only in larger amounts, after the lambs are a few days old.

Creep Feeding the lambs usually pays. Partition off a bright corner of the barn or shed and leave a small opening or two that will admit the lambs yet exclude the ewes. Inside this creep keep a small raised trough supplied with feed. Corn should make up the majority of this ration and often it is the only grain feed. It should be ground until the lambs are six weeks old after which it may be fed shelled. Do not feed corn and cob or corn cob and shuck meal to lambs or ewes. If the ewes are not giving much milk it may pay to feed a more complete ration to the lambs. Four parts corn, two parts oats, and a small amount of a protein feed makes an excellent lamb feed. In addition to grain keep a small rack full of the choicest hay inside the creep where the lambs can nibble it as they like.

Trim The Lambs when they are from one to two weeks old. The docking and castration may both be done at one time. Do not neglect this for the packers usually pay \$1.00 per cwt. more for trimmed lambs than for rams.

Stomach Worm Control can be effected by sanitation, (keeping sheep on ground that is plowed each year) or by regular treatment. As a rule treatments should be started not later than June 1, and be repeated at least every four weeks until frost. Where the flock was not treated regularly the previous summer it may be well to give the ewes two drenchings two weeks apart at this time of the year. If this is done be very careful with ewes heavy with lamb.

Lambs need not be treated prior to June 1, unless the season is unusually early.

Detailed instructions for treating sheep for stomach worms accompany this circular.

Dear Sir: It will pay you to follow the above suggestions and get your lambs fat and ready for market as early as possible.

Cooperative lamb shipments will be made from Tarboro, Plymouth, Shawboro, and New Bern in May and June. Let me know if you want us to handle your lambs.

County Agent.



**COOPERATIVE EXTENSION WORK  
IN**

**NORTH CAROLINA STATE COLLEGE OF  
AGRICULTURE AND ENGINEERING  
NORTH CAROLINA COUNTIES AND  
UNITED STATES DEPARTMENT OF  
AGRICULTURE COOPERATING**

**AGRICULTURE AND HOME ECONOMICS  
STATE OF NORTH CAROLINA**

**EXTENSION SERVICE**

**STOMACH WORM TREATMENT FOR SHEEP**  
(Prepared by the Animal Industry Division)

Dissolve four ounces of copper sulphate (blue stone) in one pint of boiling water, then add enough water to make a total of three gallons. Now add one ounce of a 40 percent solution of nicotine sulphate ("Black Leaf 40") to each gallon of the copper sulphate solution. The three gallons makes enough to dose 100 mature sheep. In as much as copper sulphate will corrode most metals, the solution should be mixed in a glass, porcelain or earthenware receptacle.

**Table of Dosage:**

Yearlings and mature sheep	3 to 4 ounces
Lambs 85 lbs. up	3 ounces
Lambs 65 - 85 lbs.	2½ ounces
Lambs 45 - 65 lbs.	2 ounces
Lambs 30 - 45 lbs.	1 to 1½ ounces

Dose weak animals somewhat lighter than the above.

**Treating Pregnant Ewes** - The above treatment is not injurious to pregnant ewes, but if they are close up to lambing there is some danger due to careless or rough handling.

If there is much parasitic infestation in the flock this treatment should be repeated every month from June to November inclusive, in the mountainous and well drained areas of Western North Carolina, while in the east treatment should be administered every two weeks during this time.

**Method of Treatment** - The treatment may be administered by means of a drenching tube, a metal dose syringe or bottle. The drenching tube consists of a rubber tube about 3½ feet long, and 3/8 inch in diameter, an enamel ware funnel about 5½ inches wide at the top, and a brass or copper tube about 6 inches long and 5/16 of an inch in diameter, all fitted together. The metal tube is placed thru the side of the animal's mouth, over its tongue and between the back teeth.

**Precautions** - Stir the solution occasionally while using. When dosing keep the sheep standing on all four feet, not tipped back on its rump.

Don't raise the head too high. (The nostrils should be above level with the eyes).

Don't try to drench too fast.

Don't put the instrument back too far in the animal's mouth, as it makes it difficult for the animal to swallow.

**Other Control Measures** - The moving of sheep and lambs from permanent pasture to clean fields such as cut over meadows, harvested grain fields, and annual pasture are effective means of controlling stomach worms. In fact, sheep can be carried on annual crops of soybeans, Sudan grass, etc. without treatments.

Breeding ewes early makes it possible to get lambs on the market before warm weather and resulting stomach worm trouble.



## FEEDING AND MANAGEMENT OF THE BEEF HERD

On the well managed farm beef cows are generally bred in the late spring or early summer in order that they may calve at the proper time. In Eastern North Carolina under average conditions the bull is allowed to run with the cow herd during May, June and July, and the calves arrive in February, March and April the following year. During the remainder of the year the bull is kept in a small strongly fenced pasture, or lot either by himself or with a bred cow for company. This same procedure, with perhaps some variations to suit local conditions, is followed in Piedmont and Western North Carolina.

There are several advantages for having the calves come at this time of the year. Dry cows can be much more easily and cheaply wintered than cows nursing calves. Winter and early spring calves usually grow off faster and make better animals than calves dropped in the summer and fall. Calves dropped close together in the spring of the year can all be weaned at the same time. Their uniform ages makes it possible to pasture, house and feed them together.

Winter Feeding and Care of Calves. Beef calves are generally weaned at about eight months of age. Unless the herd is running on excellent pasture it is often practical to have the calves eating some grain before they are weaned. This prevents a set-back that might otherwise occur before or at weaning time.

The first year, and especially the first winter, it is a critical period in the calf's life. If it is to be fattened for the market at an early age it should, where practical, be started on grain when two or three months old and never be allowed to loose its calf fat. On the other hand in the case of the heifer calf that is to be kept for breeding purposes, or steer calves to be carried over, one is more interested in proper growth than degree of fatness. Unless the mother is a poor milker the calf will usually do nicely running on good pasture with her until about weaning time. As previously stated, where is it practical to do so, it is well to have the calf on some supplementary feed prior to weaning. When this is impractical, feeding should by all means start at weaning time and be continued until pasture has made a good start the following spring. An average beef calf dropped in February or March should weigh about 400 pounds at weaning time. He should be wintered in such a way that he will gain from 60 to 75 pounds.

## SUGGESTIONS FOR THE FEEDING, CARE, AND MANAGEMENT OF NEWLY ACQUIRED CATTLE.

Much of the trouble that often accompany cattle that are shipped in from a distance can be prevented by careful feeding, care, and management. It is well to remember that very often there is a wide change in environment and cattle need more careful attention for the first few months than at any other time. Ample feed of good quality will go a long way toward helping them to become acclimatized.

Feed and water upon arrival should be limited. First only allow cattle a small amount of water then more an hour or two later. Feed only roughage at first. A non-leguminous roughage such as grass hay or corn stover is the safest feed to start with. After they have had a good fill, a gradual change can be made to a legume hay and grain or other concentrated feed.

When strange cattle first arrive on the farm they should be isolated from other cattle until it is certain they are not carriers of any infectious disease.

Two common diseases often affecting cattle that are shipped in are described briefly in the following paragraphs.

Hemorrhagic Septicaemia (Shipping Fever) is a disease caused by a microorganism which is widely distributed in nature. Outbreaks of the disease often occur when animals are devitalized from exposure in shipment or otherwise. Hence the name shipping fever is other applied. As a precautionary measure cattle are often treated either before or after shipment. (See U. S. Department of Agriculture Farmers' Bulletin No. 1018). However good care and management will often prevent occurrence of the disease.

Pink Eye or kerratitis is more common in the west than south. The first symptoms are the flow of tears from one or both eyes. Then the eye becomes a grayish or milky white. The disease spreads rapidly and the affected cattle show signs of intense pain and lose weight very rapidly. If caught in its early stages this disease is not hard to control.

Treatment: Isolate the affected animals so as to prevent the spread of the disease as much as possible.

Bath the affected eyes, gently, with a saturated solution of common salt, a saturated solution of boric acid or a 10% Argylol Solution. Gently pull the lower eyelid out filling it with the solution. Repeat this treatment daily until a remedy is effected.

Put affected animals on a light diet and where possible keep them in a darkened barn that is free from drafts.

In stubborn cases where eye becomes intensely inflamed and swollen call the local practicing veterinarian.

For general suggestions see Extension Circular entitled "Feeding and Management of the Beef Herd."



Suggested Daily Wintering Rations.

For 400 Pound Calves

1	2
Corn Silage 12 pounds	Legume Hay 5 pounds
Legume Hay 5 "	Corn Stover 5 "
Corn Stover at will	Corn & Cob Meal 1.5 "
	Cottonseed Meal .5 "
3	4
Corn Silage 12 pounds	Mixed Hay 10 pounds
Mixed Hay 4 "	Corn & Cob Meal 2 "
Cottonseed Meal 1 "	Cottonseed Meal 1 "

For 665 Pound Yearlings

1	2
Corn Silage 20 pounds	Legume Hay 5 pounds
Legume Hay 5 "	Corn Stover - at will
Cottonseed Meal 1 "	Corn & Cob Meal 1 "
	Cottonseed Meal .5 "
3	4
Corn Stover - at will	Corn Stover - at will
Cottonseed Meal 2 pounds	Corn & Cob Meal 1.5 pounds
	Cottonseed Meal 1 "

For 850 Pound Cows

1	2
Corn Silage 25 pounds	Legume Hay 5 pounds
Legume Hay 5 "	Corn Stover - at will
Corn Stover 5 "	
3	4
Corn Silage 25 pounds	Mixed Hay 15 pounds
Corn Stover 7 "	Corn & Cob Meal 1 "
Cottonseed Meal 1.5 "	Cottonseed Meal .5 "

Substitutions: The following substitutions may be made in the above rations: Ground barley, ground wheat or oats for corn and cob meal; soybean meal, peanut meal or other protein rich concentrate for cottonseed meal; grass hay, cottonseed hulls, peanut hay or oat straw for corn stover.

The above rations are for cattle that are kept in dry lot during the wintering period. Much harvested feed can be saved by allowing the cattle the run of stalk fields, winter cover crops, or meadows. Dry cows or two year old cattle in Eastern North Carolina are sometimes carried through the entire winter without any harvested feed or without shelter. To do this, however, one must have ample

feed in the fields and well drained, sheltered ground where the cows may bed comfortably at night.

The younger the cattle the higher the percentage of concentrated feeds they need. Calves can make excellent use of cover crops of grains and winter legumes but as a rule they need some grain in addition.

General Feeding Suggestions: Good Pastures are the basis of economical beef production. The use of both permanent pastures and annual supplementary pastures for summer grazing and both mature and green crops for winter grazing are strongly recommended (See Extension Circular No. 202, "Pastures in North Carolina").

Silage: Made of corn, cane, or even legumes and grasses is becoming more and more popular as a winter feed for cattle. In the Coastal Plains area of the state where much use is made of corn and soybean stalks, velvet beans and green winter grazing crops, silage is excellent for filling in the gaps between permanent pasture and the time the corn fields are ready for gleaning in the fall and between the preparing of the fields and the time permanent pasture is ready for grazing in the spring. In other sections of the state silage preserved either in the trench or upright silo is being used more and more as a winter feed and in some instances as a supplementary summer feed in time of drought. It should not be understood that silage is a complete but is a valuable succulent feed for all classes of cattle.

Water that is clean and fresh should be available at all times.

Salt preferably in the coarsely pulverized form should be accessible to cattle of all ages at all times.

Minerals are playing a more and more important role in the nourishment of livestock as time goes on. The best way to supply minerals is through the feed but in view of the fact that much of our feeds are grown on soils deficient in minerals it is well to keep a mineral mixture where cattle can help themselves to it at will. A simple, inexpensive mixture is: Limestone, ground to a fine powder on part, Steamed Bone Meal one part, Salt one part.

General Suggestions: Regularity in the time of feeding is very important.

Shelter in the form of an open shed or a well lighted and well ventilated barn will conserve manure and make the cattle more comfortable in bad weather if it is kept well bedded. If not the cattle will be better off in the fields or woods where they may select their own bedding ground rather than be forced to lie in the mud and filth.

Cattle barns and sheds should always be provided with gutters and eaves spouts to carry rain water away from the feed lot.

Heifers may be bred when they are 18 to 20 months old providing they have made normal growth at that age. It is a mistake to allow heifers to get bred too young. It generally stunts their growth and often results in calving time trouble and a dead or under developed calf. Do not leave this matter to the discretion of the bull but keep him well away from the heifers that are not old enough for service.



Breed for spring calves unless there is a peculiar situation on the farm that makes fall calves more practical.

The bull is a very important part of the successful herd of cattle. He should be a good individual of the breed represented. The right kind of a bull will improve the herd through his offspring while an inferior animal will in the same way cause the herd to degenerate.

A bull should be at least two years old and well grown for that age before he should be allowed to run with the cow herd during the breeding season. If younger than that hand breeding should be practiced and only one service to the cow allowed. A well grown bull over 14 months of age may be used on 8 or 10 females, one service to each.

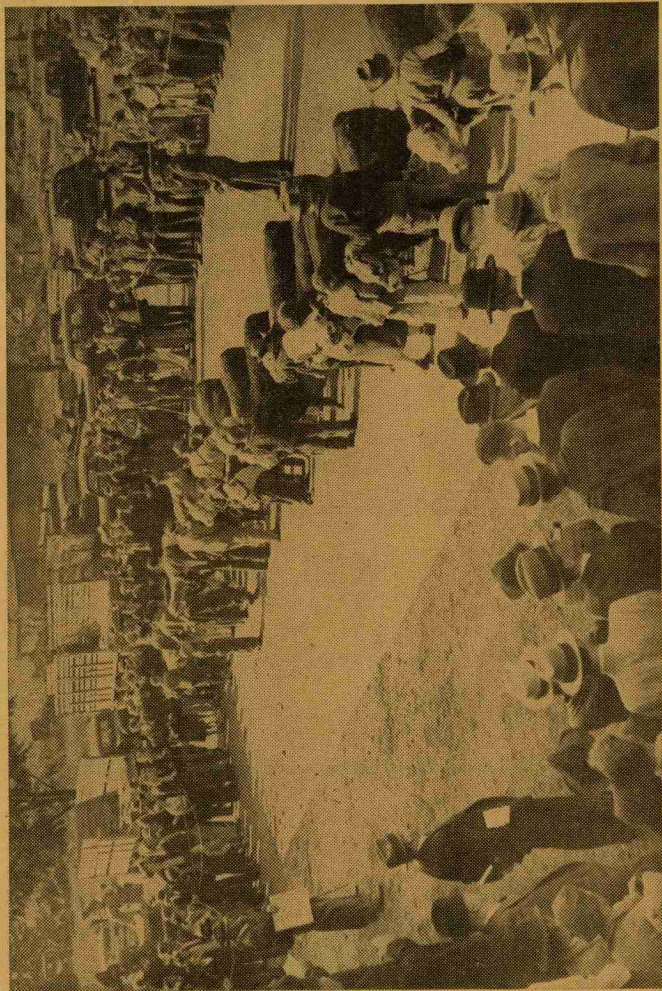
Bulls should be kept in strongly fenced enclosures except during the breeding season when they may be allowed to run with the cow herd.

Dehorning in the commercial herd should be done at the proper time. As a general rule the younger the cattle are when dehorned the better. Caustic Soda or Potash used on the buttons of very young calves will prevent the horn from developing. A small calf dehorner, or gouger as it is sometimes called, can be successfully used on calves up to two or three months of age. From this age up to about 10 months a mechanical dehorner especially designed for calves is best. Beyond this age mechanical clippers or a saw is generally used.

It is advisable that dehorning, when done with anything but caustic, be done during cool weather to avoid fly infestation. Even in cool weather it is a good precaution to use pine tar or other good fly repellent.

Castration of bull calves may be done at any age. As a rule it is best done from a few weeks of age up to five or six months. If postponed much longer than this the calves may develop masculine characteristics to the point they will be "staggy" which is quite objectionable in steers. This operation may be done with bloodless pincers or a knife.

## Large Crowd Attends Fat Stock Show Here



Here is a view of the show ring at the Asheville Fat Stock show, held on Riverside drive here today. The picture was taken while the judging of light weight fat steers was progressing. Two of the judges—J. E. Foster, of Raleigh, and H. T. McKown, of Atlanta, Ga., are shown just behind the row of entries, to the left, and the third judge—J. S. Robinson, of Knoxville, Tenn.—is shown in the center of the picture. The crowd of entrants, exhibitors, and spectators are shown inside the ring on the left side of the picture. The beef cattle are being judged by Mr. Etheridge had for distribution the cash and ribbon awards. A portion of the more than 400 persons who attended the show is shown in the picture.



# Watauga County Sweeps Honors At Cattle Show

## Two Valle Crucis Boys Win Top Prizes With Their Entries

Watauga county 4-H club boys and their Hereford cattle swept honors yesterday in the fourth annual Asheville Fat Stock show, held at the Asheville Livestock Yards, on Riverside drive, under the sponsorship of the chamber of commerce. Haywood county entries were their closest competitors, with Madison, Cherokee, Buncombe, Macon and Transylvania calves also figuring in the award of more than \$500 in cash prizes. A crowd of approximately 400 persons attended the show.

Frank Mast, a 10-year-old Valle Crucis lad, with a steer which weighs ten times more than he does, carried home the grand championship ribbon in addition to approximately \$50 in cash prizes, including \$25 offered by the North Carolina Hereford association for the best animal of that breed exhibited.

### Wins \$15 Prize

Another Valle Crucis boy, Earl Edmisten, 12 years old, took the reserve championship ribbon and the \$15 offered by the State Hereford association for that achievement. A Hereford owned by Way Abel, of Haywood county, placed third in the class of champions and Abel was given \$10 by the same organization.

Thus, Herefords, the handsome white-faced cattle, scored heavily all the way around, although many fine Shorthorns and Aberdeen-Angus calves were on display and won valuable prizes.

Because the boys who raised the prize-winning cattle hope to capture even higher honors with them at the State fair at Raleigh next week, none of these steers was sold in the auction ring following the judging of the 63 fat steers and feeder calves. However, young Mast and Earl Edmisten allowed their champions to be bid upon. A price of \$20 per 100 pounds was recorded on the grand champion and \$12 per 100 on Edmisten's calf before they were bid in by Harry Hamilton, assistant Watauga county farm agent and the man credited with developing the unusual interest in purebred beef cattle in the northwestern corner.

### Other Entries Sold

Others of the prize winning and also-ran steers competing in the morning show were auctioned off to buyers for the White Provision company, of Atlanta, Ga., the East Tennessee Packing company, of Knoxville, Tenn., and to a few local farmers and livestock breeders who took a fancy to particular animals. These were hard-bodded business men buyers, however, and very little sentiment played a part in their bids.

manship by a 4-H club member. The same honor his brother, John, captured last year. John Edmisten of Watauga, was awarded second prize of a leather halter and Miss Hope Tweed, of Madison county, got third prize of a Scotch comb and brush in the showmanship class.

### Winners Listed

Winners in the feeder calf and fat steer classes were:

Feeder class: Frank Taylor, Watauga county, first prize of \$12; C. B. Briggs, Madison county, second prize of \$10; Charles Ferguson, Macon county, third prize of \$9; Rafe Teague, Macon county, fourth and fifth prizes of \$8 and \$7, respectively; Paul Ammons, Macon county, sixth prize of \$6; Miss Carmen Curto, Transylvania county, seventh prize of \$5; Russell Dockery, Weaverville, Buncombe county, eighth prize of \$4; Donald Ramsey, Cherokee, ninth prize of \$3; Robert Lovengood, Cherokee county, tenth prize of \$3.

### Light Weight Steers

Light weight steer class: Maston Hodges, Watauga, first prize of \$15; Joe Bryon, Watauga, second prize of \$12; Burl Greene, Watauga, third prize of \$10; Miss Carmen Curto, Transylvania, fourth prize of \$9; J. D. Wallen, Madison, fifth prize of \$8; Gay Snelson, Buncombe, sixth prize of \$7; Fred Bryan, Madison, seventh prize of \$6; Wayne Thompson, Buncombe, eighth prize of \$5; David Farthing, Watauga, ninth prize of \$4 and Burl Greene, Watauga county, tenth prize of \$3.

Medium weight steer class: Frank Mast, Watauga county, first prize of \$15; Council Henson, Watauga, second prize of \$12; J. C. Dockery, Buncombe, third prize of \$10; Romulus Dockery, Buncombe, fourth prize of \$9; Gilbert Edmisten, Watauga county, fifth award of \$8; Council Henson, Watauga county, sixth prize of \$7; Miss Carmen Curto, Transylvania, seventh prize of \$6; Henry Curto, Transylvania, eighth and ninth prizes of \$5 and \$4; Ben Ownbey, Jr., Buncombe, tenth prize of \$3.

### Heavy Weight Class

Heavy weight steer class: Earl Edmisten, Watauga, first prize of \$15; Way Abel, Haywood, second prize of \$12; Joe Brown, Watauga, third prize of \$10; John Abel, Haywood, fourth prize of \$9; John Edmisten, Watauga, fifth prize of \$8; Asa Reese, Jr., Watauga, sixth prize of \$7; Dennis Franklin, Madison, seventh prize of \$6; Miss Hope Tweed, Madison, eighth prize of \$5; Miss Helen Higgs, Haywood, ninth prize of \$4; Francis Boyd, of Haywood, tenth prize of \$3.

Get of sire class: Watauga county, first prize of \$20; Watauga county, second prize of \$15; Cherokee, third prize of \$10.

To make the Watauga performance more outstanding, the county group championship went to that entry. A \$25 prize accompanied the honor. Haywood county won second, \$20; Buncombe county was third, for \$15;

prizes won by members of their respective breeders. The Tennessee Coal, Iron and Railroad company, of Birmingham, Ala., presented rolls of wire to the owners of the bulls which sired the first two winning groups in the get-of-sire class.

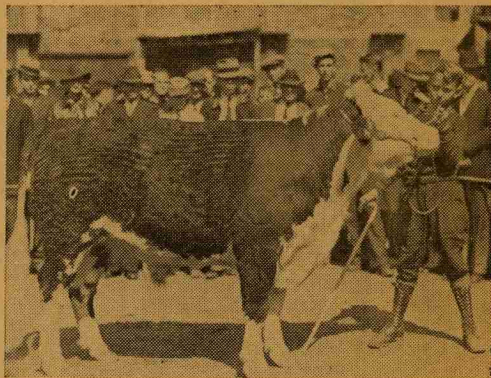
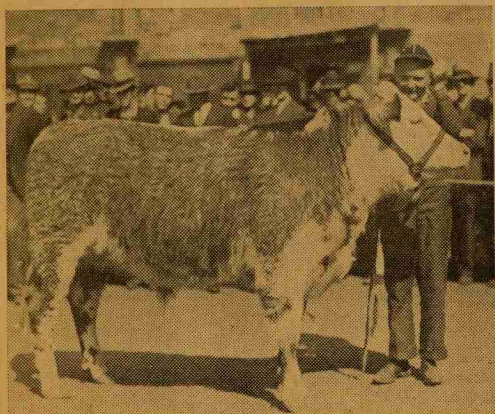
L. I. Case, of Raleigh, beef cattle specialist of the State College Extension Service, who has helped to promote and conduct each of the Asheville shows, was enthusiastic over the good grade of cattle on display yesterday. He said steers which won championships four years ago could hardly place in the money now. George M. Wallis, of Biltmore Farms, was manager of the show. He was assisted by C. Y. Tilson and W. Riley Palmer, Buncombe farm agents; G. D. White, Henderson county farm agent; members of the agricultural committee of the chamber of commerce, of which Mr. Wallis is chairman, and by Fred L. Weede, John D. Topping and Howard Etheridge, of the chamber of commerce administrative staff. Fred S. Sloan, district farm agent of the Extension Service, also was present and assisted with the show.

Judges were: J. E. Foster, of State college, Raleigh; J. S. Robinson, of the University of Tennessee, Knoxville; and Mr. McKown, buyer for the White Provision company.

Prize money and other expenses for the show were made possible through financial contributions from the following organizations, firms, and individuals: Buncombe county commissioners, City of Asheville, Asheville chamber of commerce; Farmers' Federation by James G. K. McClure, president, Coca-Cola Bottling company, Goca Inc., Earle-Chesterfield Mill company, The Man Store, Sears, Roebuck & Company, Elford's Department store, Otis Green Hardware company, Asheville Army Store, Bon Marche, Morris-Austin company, Montgomery Ward & Company, and Ivey's, Inc.



## Crowd And Champions At Fat Stock Show Here



Part of the crowd which attended the fourth annual Asheville Fat Stock show yesterday at the Asheville Livestock Yards, on Riverside drive, is pictured at the top above. The man leaning on his cane in the center of the ring is J. E. Foster, of State college, Raleigh, one of the judges. Walking toward Mr. Foster, wearing boots, is George M. Wallis, of Biltmore Farms, manager of the show. The lower picture on the left shows Frank Mast, of Valle Crucis, with his 190-pound Hereford steer which won the grand championship and the medium weight class. The lower right picture shows Earl Edmisten, also of Valle Crucis, with his 950-pound Hereford which won the reserve championship and the heavyweight title.



## State College Answers Timely Farm Questions

**QUESTION:** Is it economical to grind feed for my beef cattle?

**ANSWER:** Grinding feed does not increase the nutritive value nor does it increase digestability, but corn and cob meal is a safer feed in the hands of an inexperienced feeder than shelled corn. The small hard-coated grains such as rye, wheat and barley should be ground or rolled. Corn stover and other low grade roughages may well be shredded so that the inedible parts may be used for bedding. If feed is ground be sure that it is coarse as fine grinding causes digestive disturbances and the fine ground feed is also more liable to heat and spoil in the bin.

**QUESTION:** When is the best time to sow seeds in hotbeds for early vegetable crops?

**ANSWER:** This will depend upon the time the plants are wanted in the field and the section of the State in which the garden is located. In Eastern North Carolina such hardy crops as cabbages and lettuce are sown in the fall in open beds or cold-frames and transplanted as early as January 15. In the mountain sections these hardy crops are started in the beds about January 1 to 15. For the early crop of tender vegetables such as tomatoes and peppers, the seed should be started in hotbeds or window boxes from eight to ten weeks before it is safe to set in the field.

**QUESTION:** Should grain feed in the poultry flock be increased when artificial lights are used?

**ANSWER:** The use of artificial light naturally lengthens the feeding period and it is therefore necessary to increase grain consumption in order to maintain the body weight and control egg production. Fourteen pounds of grain to each 100 birds per day is the usual amount to feed when lights are used but grain consumption will vary from month to month. The birds should go to roost every night with their crops full of grain. Mash consumption will also be increased and this should be kept before the birds at all times.

## Breeding Control Important in Cattle

Controlled breeding of beef cattle is important in the production of an economical, well-developed herd, says L. I. Case, beef cattle specialist of the State college extension service.

On the well managed farm, beef cows are generally bred in the late spring or early summer in order that they may calve at the proper time. In Eastern North Carolina, under average conditions, the bull is allowed to run with the cow herd during May, June and July, and the calves arrive in February, March and April the following year.

During the remainder of the year the bull is kept in a small, strongly-fenced pasture, or lot, either by himself or with a bred cow for company. This same procedure, with perhaps some variations to suit local conditions, is followed in Piedmont and Western North Carolina.

There are several advantages in having the calves come at the same time of the year. Dry cows can be wintered more easily and cheaply than cows nursing calves. Winter and early spring cows usually grow off faster and make better animals than calves dropped in the summer or fall. Calves dropped at the same time, close together in the spring of the year, can all be weaned at the same time. Their uniform ages makes it possible to pasture, house and feed them together.

Steers of about the same weight and age also can be marketed easier, since buyers will make offers for lots when they don't have to guess at the age of the individual steers.

Of course, if a small herd is kept and beef is slaughtered for home use the year round, it would be more practical to have the calves dropped at different times. However, controlled breeding will aid commercial production.

Other livestock farmers are expected to follow Pate's example when the success of the venture is established, Case said.



## 'RACKETEERS' ARE AFTER NC FARMERS

**Cattle Racketeers Try to Induce  
Farmers to Buy Cattle in  
Middle West**

College Station, Raleigh, Nov. 14.—Cattle "racketeers" are again at work trying to induce North Carolina farmers to come to the Middle West and buy "eight-cent cattle for four cents a pound," reports L. I. Case, extension animal husbandman at State College.

"In my travels over the State, particularly in the East, I have found a large number of post cards advertising beef cattle at bargain prices in Southeastern Iowa, where apparently most of these racketeers ply their trade. Almost without exception investigations have shown that such offers result in the buyer being victimized with cattle not worth even three cents a pound, or paying much more than the advertised price," Case said.

For some time the State College specialist has been combining detective work with his educational duties and has been collecting evidence to help break up the cattle racket. He took up the matter with the Governor of Iowa last summer, who in turn launched an investigation through the Iowa Department of Justice. Since that time the Post Office Department has interested itself in the case, with the view of prosecuting the guilty parties for using the mails to defraud.

Case has been collecting the aforementioned post cards and turning them over to a postal inspector in Raleigh. It is understood that several arrests have been made by Federal agents in Iowa, and trials are scheduled at spring terms of U. S. courts.

"With the large demand for beef calves, especially heifers, in Eastern North Carolina, it is feared that some of our farmers will fall prey to the racketeers," Case said. "If they will consult their county agent, he can tell them whether they are dealing with reliable dealers."

## HEREFORD CATTLE POPULAR IN STATE

**N. C. Gaining Reputation For  
Good Polled Hereford Cattle;  
Many Imports**

College Station, Raleigh, Jan. 2.—North Carolina is gaining a reputation for good polled Hereford cattle. This breed is becoming increasingly popular and several new breeders started herds of the hornless cattle in 1933.

L. I. Case, beef cattle specialist of the State College Extension Service, reports a number of large importations from the western states in the past few months. Dr. R. E. Earp, who owns the large Brookhill Farms near Selma in Johnston County, recently bought 47 head of Polled Herefords, including a hard bull, from John M. Lewis & Sons of Larned, Kansas; George Trenfield of Fort Worth, Texas; M. E. Fry & Sons of Brownwood, Texas; and Halbert & Hogget of Mertzon, Texas.

Cameron Morrison of Carrollcroft Farms near Charlotte, one of the largest Polled Hereford breeders in the State, also shipped in a carload, including a bull, within the past few months. He was aided in the selection of his purchases by B. O. Gammon, secretary of the American Polled Hereford Association of Des Moines, Iowa.

J. Z. Cleveland of Henderson County, a comparatively new breeder, has been buying in the past year from Wyoming and Virginia. R. C. Hunter of Jackson County, another mountain farmer, recently shipped in a carload of heifers and re-sold part of them.

James G. K. McClure and Dr. J. M. Lynch, both of Buncombe County, bought herd bulls from the West within the past year. They are among the leading Polled Hereford breeders in the State.

Other well known breeders of these beef animals include: J. F. Hampton of Linville in Avery County, H. G. Shelton of Speed in Edgecombe County, B. B. Miller at Mt. Ulla in Rowan County, J. A. Whitmire of Broadway in Transylvania County, and W. E. Webb and M. C. Stinson, both of Iredell County.



## Farmers Urged Heed Warnings

### Planting Cover Crop is Foundation; South Has the Advantage

Raleigh, Aug. 29.—North Carolina could be the outstanding livestock State in the Union, in the opinion of L. I. Case, State College extension specialist in animal husbandry.

Some farmers, he said, are taking advantage of this State's climate, rainfall, and soil to build up profitable livestock enterprises on their farms, but a great many are still neglecting their opportunities.

One of the main advantages of this State is that winter cover crops can be used for grazing the animals at a time when growers in northern states have to fall back on hay, silage, grain, and other stored feeds.

He pointed to Hugh MacRae, prominent New Hanover County farmer, who has a fine dairy herd that is fed largely on grazing crops the year round. Good pastures, legumes, and winter cover crops not only produce excellent feed but also cut MacRae's milk production costs to a minimum.

Case also called attention to the experience of J. G. Staton of Williamston with winter cover crops. Last spring, Staton shipped 23 lambs that graded choice and averaged 98 pounds each. The flock from which these lambs came had been fed almost entirely on winter cover crops of oats and vetch.

The year before, Staton grazed a carload of yearlings and two-year-old steers on the same type of winter crops. The animals gained over 200 pounds per head and netted him a profit of \$50 each.

At the State College animal husbandry farm, Case continued, 20 acres of crimson clover and rye grass furnished grazing for yearling steers and sheep last winter. During 84 days, 22 yearlings gained an average of 203.7 pounds each on this feed.

## Case Says Sheep Are Profit Source

"There's profit in sheep."

L. I. Case, extension specialist in animal husbandry at State College, made this statement after looking over records which sheep growers from all parts of North Carolina kept during 1937.

Sixty-one complete records were submitted to State College which show an average gross income per ewe of \$9.36. These incomes range from as low as \$3.54 to as high as \$17.53 Case said.

The records indicated that Piedmont and mountain farmers were able to secure a larger gross income from sheep than were farmers in the Eastern part of the State.

"However," Case declared, "I believe that if we had accurate cost records, the East would show an equal or greater net income than our mountain farmers because eastern farmers are able to keep their flocks during the winter at a much lower cost."

Of the 61 records turned in, 23 showed a gross income per ewe of more than \$10. With one exception, all of these 23 flocks produced better than a 100 per cent lamb crop, or in other words, more than one lamb was raised to market age and weight for each ewe.

Top honors among the records went to the King brothers, Route 2, Statesville, who made a gross income of \$17.53 per ewe. They raised 15 lambs from 10 ewes, controlled stomach worms by treatment and the rotation of pastures, and docked their lambs. The wool clip averaged over eight pounds per head in 1937 and brought an average of 42 cents per pound.

L. C. Hampton, Straford, Alleghany County, made the next best record, his ewes grossing \$14.92 each.



## BEEF CATTLE NET W.N.C. BIG CASH INCOME

Estimate Last Year's Volume of Business at 3 Million Dollars

Sales of beef cattle and sheep brought Western North Carolina farmers an estimated \$3,000,000 cash income last year.

The estimate was made by L. I. Case, animal husbandry specialist of the State College extension service.

Last year, Haywood county farmers sold 6,000 head of beef cattle for close to \$312,000. This number amounted to 31 per cent of the cattle population of the county according to the last federal census.

Working from a similar percentage for the other 16 mountain counties, and striking an average figure for the sale price of an individual animal, he estimated the beef cattle sales for all 17 mountain counties at \$2,750,000 to \$2,800,000.

To this figure he added the \$380,850 income from sheep in the same western counties, which brought the total to more than \$3,000,000, which Case believes is a conservative estimate.

Beef cattle and sheep have been grazing on Western North Carolina mountain slopes for years, gathering the luxuriant grasses and converting them into an edible product.

"They are one of the mainstays of our highland country, and everything possible should be done to improve our pastures and our livestock in this region," Case declared.

## FATHER TEACHES SON LIVESTOCK

Jones County Farmer Learns Cattle Raising From His Father—And Is Good Pupil

Raleigh, Jan. 17.—E. E. Bell learned from his father how to be a good cattleman.

This Jones County farmer who lives near Pollocksville is one of the oldest and most successful cattlemen in Eastern North Carolina, according to L. I. Case, extension animal husbandman at State College.

Bell's father handled large numbers of cattle prior to tick eradication, and it is probably from his early experience that the son received his fondness for cattle and horses, Case said.

At the present time, Bell has about fifty purebred and grade Herefords. Case said that from the stalk fields Bell will transfer his animals into a field of velvet beans which will probably carry them until the middle of February or the first of March. From then until permanent pasture is ready, the cattle will be fed in the lot on silage and soybean hay.

The State College specialist pointed out that the average farmer has difficulty in providing his animals with feed about twice a year. First time is in the fall when permanent pasture is gone and before the corn is gathered and the stalk fields are ready for the cattle.

The other time is in the Spring after the fields have been plowed and before permanent pasture is ready for grazing.

Case declared that this Jones County farmer puts up an abundance of hay and has an upright silo filled with silage to bridge the gap when feed becomes scarce.

## GOOD NATIVE BEEF POSSIBLE

College Station, Raleigh, Oct. 20.—Despite a contrary opinion, native beef as fine as that grown anywhere in the West can be produced in North Carolina, according to L. I. Case, extension animal husbandman at State college.

"Over a period of years," Case said, "Western meats have become more highly regarded than our native meats. This has been due to the superior curing process which the out-of-state packers use.

"If North Carolina produced meats from some of our better animals were allowed to ripen in the same way as the Western beefs,

the same high quality and tenderness would prevail."

The State college specialist pointed out the beef animals exhibited by 4-H club members at the State fair last week and at other shows as good examples of the superior meats which can be grown within the confines of this state.

Not only are the mountain counties producing fine calves now, but many of the eastern counties also are growing excellent cattle. Becoming increasingly important as beef cattle centers are Johnston, Wayne, Franklin, Pitt, Nash, Edgecombe, Durham and Halifax coun-

ties.

"The 4-H club members and their calf projects are pointing the way in our march toward higher grade meat animals," Case declared. "With their achievements in this field, these boys have indicated definitely that North Carolina can become one of the most important livestock states in the Union."

To stimulate interest in the production of quality beef cattle and hogs, the extension service works hand in hand with civic groups in Asheville, Rocky Mount and other towns each year in putting on fat stock shows and livestock meetings.

## Cooperative Grading of Lambs Spreads

Special to News-Argus

College Station, Raleigh, Feb. 24.—The cooperative grading and selling of lambs made its debut in Alleghany county in 1934, but in the few years since, the idea has caught and spread among the farmers through all the sheep producing sections of North Carolina.

L. I. Case, extension animal husbandman at State College, pointed out today that nearly 5,000 lambs were sold under this arrangement in 1937, with shipments being made from 13 counties.

Alleghany and Watauga shipped the bulk of this number, but cooperative sales were made from Ashe, Mitchell, Yancey, and Madison in the west, and from Edgecombe, Nash, Hyde, Washington, Tyrrell, Currituck, Camden, and Hertford counties in the east.

Case attributed the increasing popularity of this method of selling to the fact that growers get exactly what their lambs are worth. If they have choice lambs, they get choice lamb prices. Nothing is subtracted from the price to make up for lower grade lambs which might be moved in the same shipment.

Besides boosting prices, the grading service, conducted under the supervision of county agents of the State College Extension Service, is tending to improve the quality of lambs through the stressing of better production methods.

As an example of this, Case pointed out that in 1935, only 6.5 per cent of the lambs shipped from Alleghany and Watauga counties were graded good or

## THE GLEANERS



Now that eastern Carolina farmers have learned that beef cattle may be used successfully in gleaning fields of corn and velvet beans, corn and soybeans, or other fields where large amounts of coarse roughage are available, there has been a steady increase in the number of such cattle being added. L. I. Case, livestock specialist of the State College Extension Service, says farmers in good financial condition can help this movement by buying cattle in carlots and letting some of the animals out to smaller farmers at cost or at a small nominal profit. The above snapshot was made in Lenoir County, near Kinston, by Extension Agronomist E. C. Blair.

## LIVESTOCK GREAT AID IN SOIL IMPROVEMENT

Proper Care of Manure Would  
Save Farmers In State  
Much Money.

### IT IS OFTEN WASTED

By L. I. CASE.

The agricultural adjustment administration and its soil building program is arousing much interest among farmers in soil conservation and soil improvement, through the growing of legumes, cover crops, terracing, liming and other good practices. This is as it should be, but in addition farmers more generally should become conscious of the value of stable manure and the advantage of keeping livestock for the indirect benefits derived through soil improvement.

North Carolina annually uses about 1,000,000 tons of commercial fertilizer per year. The cost of this fertilizer will no doubt average about \$25 per ton. The state is, therefore, spending approximately \$25,000,000 per year for commercial fertilizers. Much of this expense could be eliminated if feed crops and livestock were more generally combined with our cash crop system of farming. Furthermore, great savings could be effected if the farm manure now produced were better cared for.

The cattle and horses alone in North Carolina annually produce manure which, based on fertilizing elements alone, is worth fully \$15,000,000. In addition there is much value in the organic matter which manures add to the soil. Then too manures contain many kinds of bacteria which bring about chemical changes in the soil itself as well as in the manure, thus releasing plant foods that would not otherwise be available. Furthermore, the humus formed from the organic matter in manure is very valuable in retaining moisture and improving soil texture.

The foregoing serves to emphasize the importance of taking proper care of farm manure in order that its many values may not be lost. On most farms, a large percentage of manure produced fails to reach the fields where it is needed. Instead, it is piled on the ground under the eaves of a barn or trampled into the mud of a barn lot where the rains wash its valuable fertilizing elements into a nearby stream or is otherwise dissipated. No doubt fully half the manure produced on the average farm is lost.

#### Use Plenty of Bedding.

In view of the fact that more than half the nitrogen and potassium contained in manure is in liquid form it is extremely important that ample bedding be used. The amount needed will depend upon how stock are being handled. Where steers or other stock are being fed in a barn or open shed a sufficient amount of dry litter should be scattered each day to keep a dry bed. This will keep the stock comfortable as well as conserve the manure. Under this system the manure may be hauled whenever the weather permits, scattering it on the fields, or it may be allowed to accumulate the entire feeding period.

Where it is necessary, for sanitary reasons, to remove the manure each day, as is the case with dairy cattle, it may be taken directly to the fields or stored in a pit. Such a pit should have concrete or otherwise water-tight floor and walls. When no pit is available and it is necessary to pile manure out of doors, it should be well packed and kept damp to prevent fermentation. The pile should be made high with perpendicular sides and the top sloping toward the center. This allows moisture to soak into the pile rather than drain off.



## BEANS AND BEEF SUITED TO EAST

**Both Velvet And Soybeans  
Are Used Extensively To  
Fatten Steers**

Beans and beef are practically synonymous on many cattle-producing farms in eastern North Carolina. Both velvet beans and soybeans are used extensively to fatten steers.

L. I. Case, beef cattle and sheep specialist of the State College Extension Service, strongly advocates the "steering and hogging down" of velvet beans and corn for winter grazing and soil improvement in Eastern North Carolina, especially on lighter soils.

Two instances where grazing on bean fields is proving successful for beef cattle are cited by Case, one in Robeson county and the other in Cumberland county.

W. H. Marsh, who operates a farm near Fayetteville, recently bought 26 steers and 28 heifers from the Highland Hereford Association of Southwest Texas, with headquarters at Marfa, Texas. The steers averaged 373 pounds in weight and the heifers 427 pounds. Upon their arrival they were placed on a field of soybeans for an hour or two each day and fed in a shed all the corn and cottonseed meal they would eat. Gradually the length of time they were allowed to remain in the bean field was increased each day, until now they are grazing on soybeans four to five hours a day.

Already the 52 head of Herefords have regained the weight they lost in shipping and soon Mr. Marsh plans to follow Case's advice and put the cattle on full feed in the lot.

In this connection, the extension animal husbandman says: "Cattle purchased in the fall for winter feeding do well on soybean stalks. This utilizes feed which might otherwise be wasted and it also gives the cattle a chance to recover from their trip to the farm. They may well be carried under such conditions for from one to three weeks but should be put into the feed lot before they stop making satisfactory gains."

Mr. Marsh, who is president of the Fayetteville Supply company and president of a new Industrial Bank in Fayetteville, plans to fatten the 26 heifers for the spring or early summer market and keep the steers for the late summer or early fall market. He originally intended to select some of the heifers for breeding and start a Hereford herd, but within the past week he told Case he had decided to see what he could do with a quick turnover on this first lot of Western cattle and possibly start his herd the following year.

The other instance where success resulted from the use of beans for winter grazing is on the Raynham farm of George L. Pate, near Rowland in Robeson county. This young farmer, who was recently re-elected chairman of the county AAA committee for 1939, began raising livestock on a large scale in 1930. He has a fine registered Hereford bull on his place and does some breeding. However, he usually buys grade cattle and feeds them out for the market.

Following Case's advice, Young Pate has conducted demonstrations of steering and hogging down velvet beans and corn, keeping accurate records each year. One of his demonstrations resulted as follows:

### Beans and Corn

Twenty acres was planted in velvet beans and corn. One-half of the corn was gathered, leaving approximately 225 bushels of corn on the field. He had a good stand of well fruited beans. He turned 30 head of steers, averaging 604 pounds each, into the field. He left them in the field for 41 days and they gained an average of 2.05 pounds each per day. He then turned 26 hogs averaging 125 pounds each into the field and left them 43 days. They gained 1.105 pounds a head per day.

Pate also reported that his yield of cotton, corn and other crops the following year, was materially increased from this soil building practice.

On the corn yield basis, the demonstration mentioned shows that 269.23 pounds of corn was required to produce 100 pounds of beef and pork.

Mr. Pate recently bought 90 head of steers in western North Carolina, including 25 for David H. Fuller of Lumberton and 12 for Angus Pate, also of Rowland. Mr. Pate now has 87 head of mixed breeds on his farm, 57 of which are on a velvet bean and corn pasture and 30 head in his barns. He has built troughs in a pasture and feeds the pastured steers each day. To the entire lot of 87 he gives 1,000 pounds of crushed corn and 4 1-2 bags of cottonseed meal each feeding.

George Pate is the son of G. M. Pate, prominent Robeson county banker and president of the N. C. Cotton Growers Cooperative association.

### Freezer Locker

David H. Fuller, for whom Mr. Pate bought the 25 head of cattle in the western part of the state, is financing a \$25,000 freezer locker unit at Lumberton, which will be opened about November 21.

R. E. Nance, formerly assistant professor of animal husbandry at State college and more recently assistant farm agent in Robeson

county, will manage the freezer locker plant. Mr. Nance is one of the best informed men on meats and meat-cutting in the south.

Animal Husbandman Case expects the Robeson freezer locker and meat storage plant to greatly increase interest in the livestock industry in that section of the state. "Now farmers can produce livestock, butcher it and store it in the lockers for home use without the danger of spoiling it through improper cutting and curing, as well as eliminate the danger from unfavorable weather," Case says.

The Robeson plant will be the only refrigerated unit for the storage of meats, fruits and vegetables between Wilmington and Florence and is the first freezer locker unit built and designed especially for that purpose in the state.

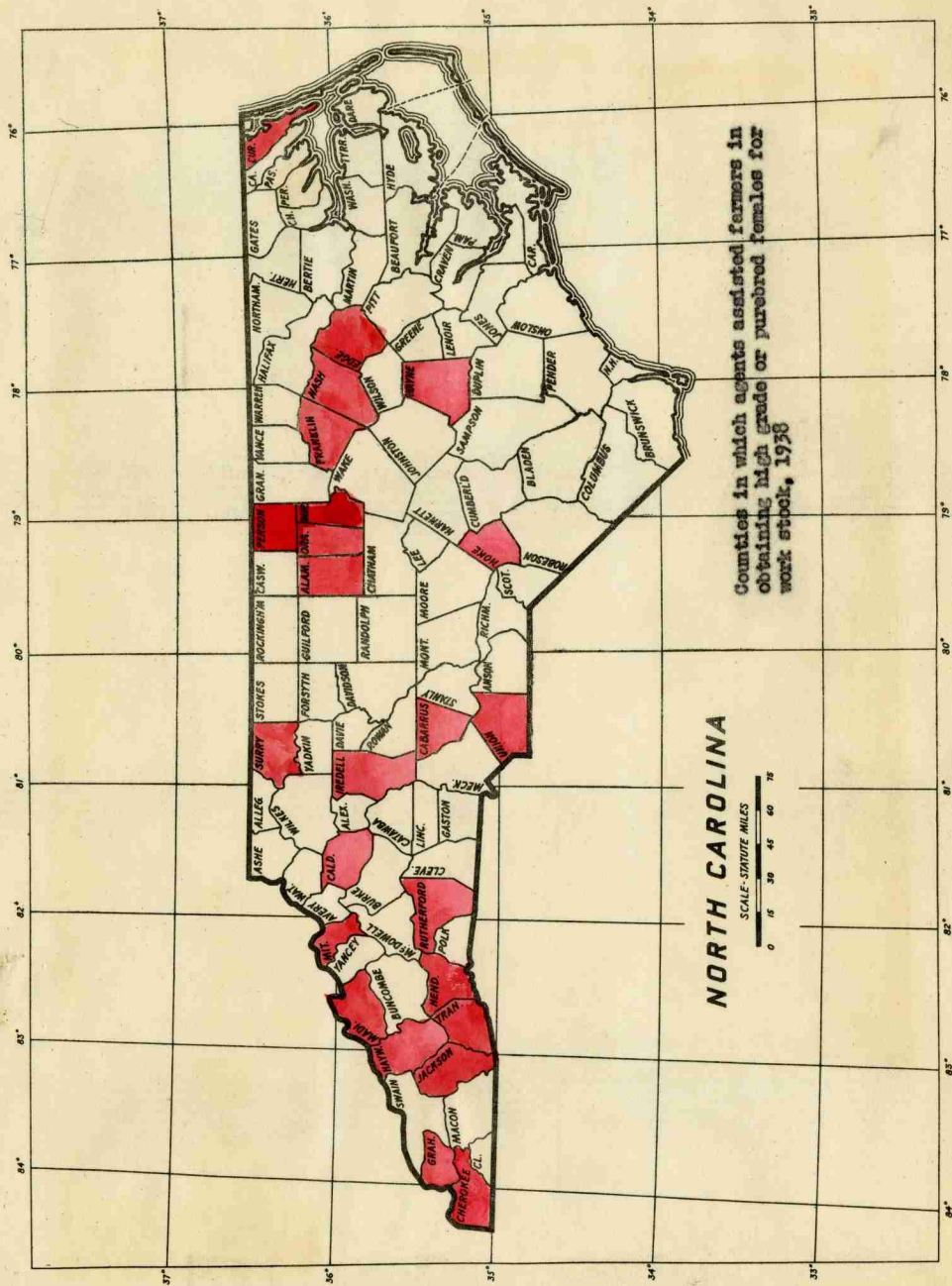
Already the demand for beef calves in eastern North Carolina is exceeding the supply, Case says. "I am having inquiries almost daily for information about the source of beef calves, especially heifers for breeding purposes. Western North Carolina is not overstocked and our best hope is that some large eastern North Carolina cattlemen will buy carload lots of western stock and resell them, in small lots at a fair profit for handling, to nearby farmers."

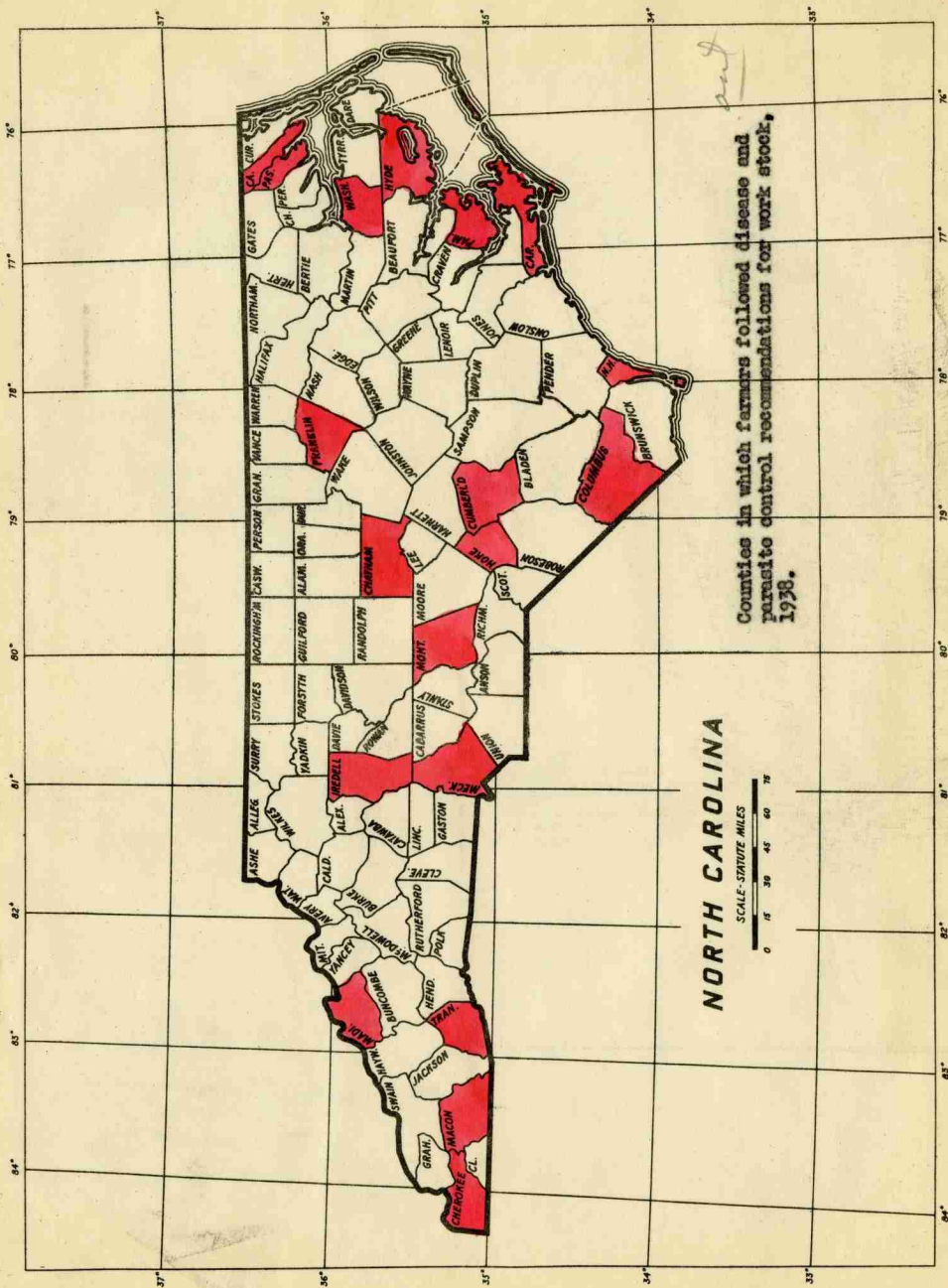
Case reports that, in addition to Mr. Marsh and Mr. Pate, large lots of cattle have recently been shipped in by Clyde Upchurch of Raeford, 19 head from Wytheville, Va.; T. J. Pearsall of Edgecombe county, a load from Alabama, and Rowan Mills of Salisbury, 25 heifers from western North Carolina.

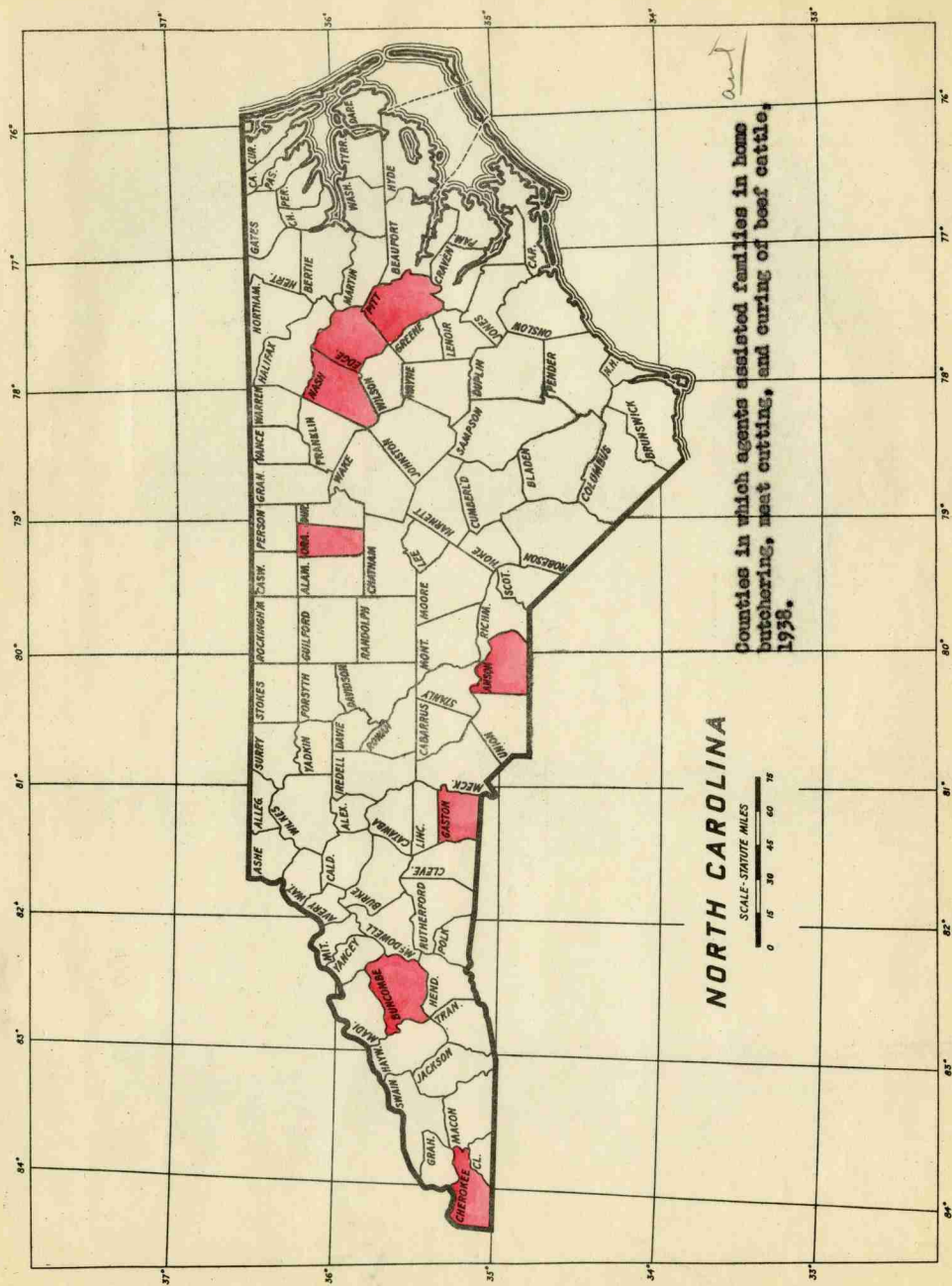
"The two main objects of fattening cattle are the marketing of crops and the production of manure for soil improvement," Case says. "The farmer should determine the number of cattle that he can feed to the best advantage through an average year and make that a part of his regular farm program. In this way cattle feeding will be profitable in the long run, if due credit is allowed for the manure produced."

To illustrate his point, Case quoted a North Carolina farmer as follows: "I very seldom make money feeding cattle, but I never made any money farming until I started feeding cattle as a part of my regular farming program."

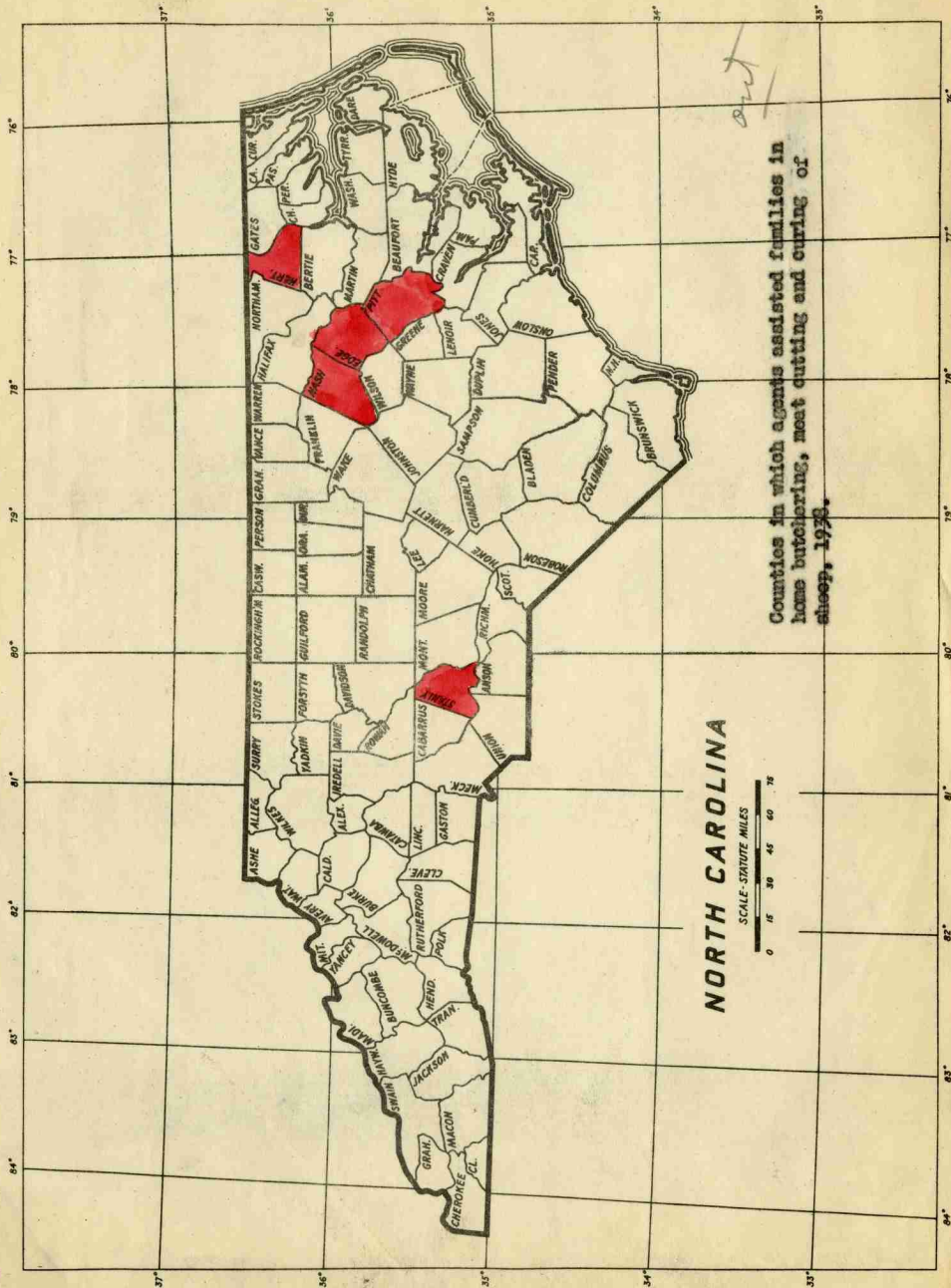












Prepared January 1938

TOTAL SUMMARY OF HOG SALES F.O.B. BURGAW, COFIELD, ELIZABETHTOWN,  
FAYETTEVILLE, FOUR OAKS, GREENVILLE, LUMBERTON, NEW BERN, PLYMOUTH  
ROWLAND, SHAWBORO, TARBORO, WARSAW AND WASHINGTON.

During the period from Jan. 1, 1937 to Nov. 30, 1937

- 4/ Column 4 indicates average price by grades and totals.  
5/ Column 5 indicates percentage of total hogs in each grade.  
6/ Column 6 indicates percentage of total pounds in each grade.  
7/ Column 7 indicates percentage of total money for each grade, local  
expense, etc.

1	2	3	4	5	6	7	8
Grade	No. Head	Weight	Price	Head %	Weight %	Money %	\$-Amount
100/140	3272	404141	8.95	6.77	4.27	3.80	36157.94
140/160	5450	818191	10.01	11.29	8.64	8.60	81863.75
160/180	7062	1189184	10.24	14.62	12.55	12.80	121797.10
180/250	28000	5694749	10.32	57.98	60.11	61.79	587944.92
250/300	1610	438763	9.80	3.33	4.63	4.52	42997.33
300/Up	404	138655	9.50	0.84	1.46	1.38	13165.80
Sows	2233	695444	8.78	4.62	7.34	6.42	61055.48
Stags	266	94916	6.93	0.55	1.00	0.69	6579.38
Total	48297	9474043	10.04	100.00	100.00	100.00	951,561.70
Soft	1707	332854		3.53	3.52	0.31	2961.35
Oily	1056	223813		2.19	2.36	0.41	3871.59
Total	2763	556667		5.72	5.88	0.72	6832.94
Local Expense						1.06	10077.65
Commission						0.25	2380.47
Total Commission & Expense						1.31	12458.12
Total Expense, Soft, Oily & Commission						2.03	19291.06
Net			9.84			97.97	932,270.64

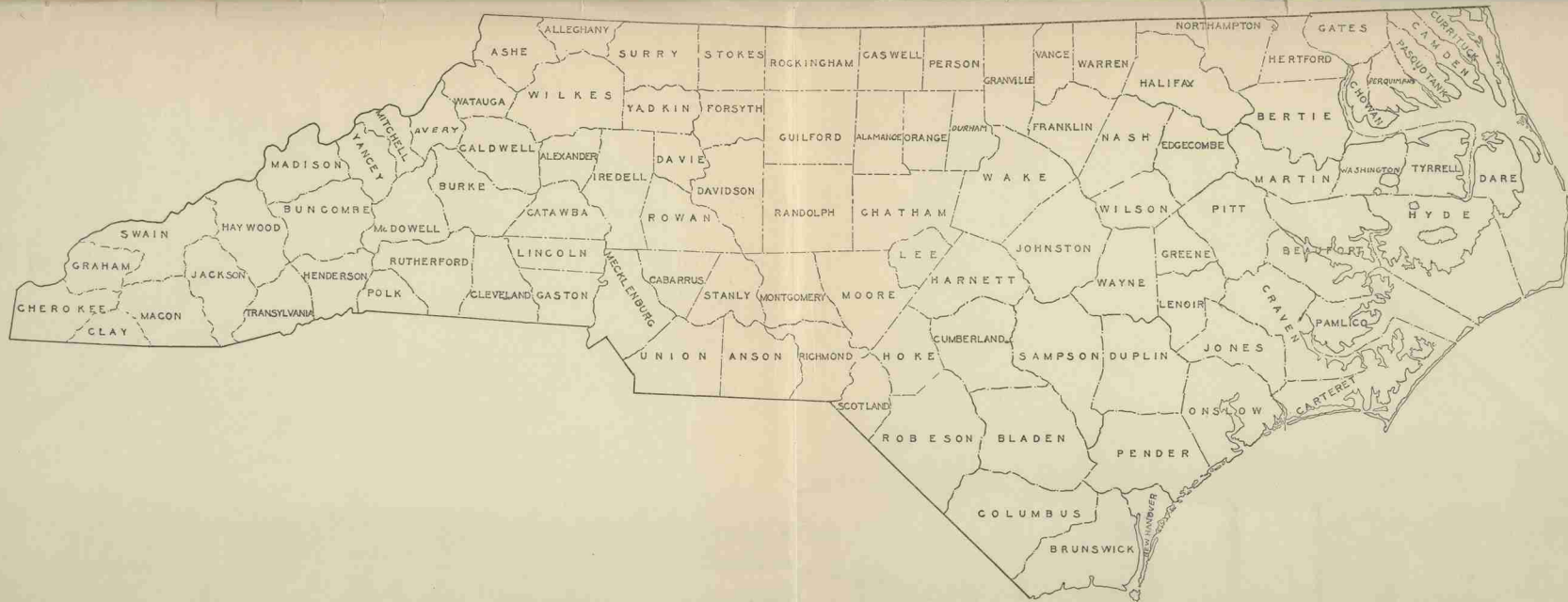
Average Transit Shrink 5.62 percent (Simple Average)

Average Dressed Yield 75.34 percent (Simple Average)

NOTE: Shrink figures secured on 81 percent of shipments.

Yield figures secured on 80 percent of shipments

OFFICE OF SWINE EXTENSION, STATE COLLEGE STATION, RALEIGH, N. C.





# Copy of Trecker Cattle account



2902  
MADE IN U.S.A.

1925

To L. J. Coal  
Geo. L. Galt - Downloaded 7.1.2

1	Oct 1	To Steers on B	70 head 42550# @ 560 + 600 574	241230	1
2	"	" Truck exp		1500	2
3	Dec 15	" Labor to date	+ value of frame	1000	3
4	"	" 1/2 of 25 acres con at 1/5 P. acres	(12 1/2 ac con estimated left pr. acre 1/5 P. con)	18750	4
5	"	" 1/2 of 1/5 " " 120 " "	(7 1/2 ac con estimated left pr. acre 1/5 P. con)	10417	5
6		Weight - 70 head - 54490#	Gain 11940# @ 800 day -		6
7		" 600 head days -	2.13# Pr. Day per head - or		7
8		54490# @ 69 = 3269.40	- 2729.02 = Profit \$540.38		8
9	Dec 15	To total con bought 1166 lbs @ 60¢	(except 22¢ @ 50¢)	67220	9
10		" total labor & binding con & fact		15800	10
11		" 6 Tons C. S. Halls @ 600 + del. 00		3900	11
12		" 17.62 tons C. S. meat @ 2000		35250	12
13		" 22 1/2 tons Hay @ 1000 + 1' @ 800		23000	13
14	Jan 20	" 9 Angus Steers 5570 @ 65		33420	14
15	April 5	" 9 Angus " Hanke @ 6870# @ 84 Baltm.			15
16	Jan 21	By 6 batteries 5970# @ 84		42520	16
17	Mar 20	" 22 " 20720# @ 674		139927	17
18	April 1	" 2 " Killed 1770# Net.		10420	18
19	" 10	" 49 " Baltimore Hanke into 39645# dit		766787	19
20		Sold 2 @ 14 - 22 @ 174 + 25 @ 84 = Total 37750#			20
21		To 1200 tons # 27 + 6.52 @ 690		8739	21
22		" 1200 tons # 350 @ 690		1700	22
23		" Expense. Halls -		3000	23
24				764861	24
25				464657	25
26				103	26
27					27
28					28
29					29
30					30
31					31
32					32
33					33
34					34
35					35
36					36

G. Galt.

We have no records of hog weight.

But have sold #45792 in P. 1/2  
that were raised since October 1st and  
only received droppings for them &  
Lard meat.

Case

## DAIRY CATTLE, BEEF CATTLE, SHEEP, SWINE, AND HORSES

Report Only This Year's Extension Activities and Results That Can Be Verified

ITEM	Dairy cattle (a)	Beef cattle (b)	Sheep (c)	Swine (d)	Horses and mules (e)	Other livestock (f)
214. Days devoted to line of work by:						
(1) Home demonstration agents						
(2) 4-H Club agents						
(3) Agricultural agents		575 <sup>60</sup>	152 <sup>37</sup>		40	
(4) Specialists		68 <sup>28</sup>	9 <sup>7</sup>		154	
215. Number of communities in which work was conducted		214 <sup>33</sup>	100 <sup>26</sup>		123	
216. Number of voluntary local leaders or committeemen assisting		25 <sup>7</sup>	27			
217. Days of assistance rendered by voluntary leaders or committeemen		15 <sup>5</sup>	2 <sup>2</sup>			
218. Number of adult result demonstrations conducted		239 <sup>1</sup>	30		612	
219. Number of meetings at result demonstrations		10 <sup>2</sup>			1	
220. Number of method-demonstration meetings held		125 <sup>5</sup>	24		12	
221. Number of other meetings held		122 <sup>2</sup>	1		2	
222. Number of news stories published		2374 <sup>16</sup>	1218		1025	
223. Number of different circular letters issued		42 <sup>59</sup>	83		58	
224. Number of farm or home visits made		1894 <sup>19</sup>	404		46562	
225. Number of office calls received		3476 <sup>13</sup>	1063		531309	
226. Number of 4-H Club members enrolled		75 <sup>13</sup>	26		56	
(1) Boys		13				
(2) Girls		930 <sup>1</sup>	1		2	
227. Number of 4-H Club members completing		13			2	
(1) Boys						
(2) Girls		1045 <sup>84</sup>	12		211	
228. Number of animals in projects conducted by 4-H Club members completing		2396 <sup>21</sup>	18		1117	
229. Number of farmers assisted in obtaining purebred sires or purebred females		112 <sup>23</sup>	18		718	
230. Number of bull, boar, ram, or stallion circles or clubs organized or assisted		1			22	
231. Number of members in preceding circles or clubs		6			15	
232. Number of herd or flock-improvement associations organized or assisted						
233. Number of members in these associations		120				
234. Number of farmers not in associations keeping performance records of animals		515 <sup>5</sup>	27			
235. Number of families assisted in home butchering, meat cutting, and curing		45	24			
236. Number of families assisted in butter and cheese making			14			
237. Number of farmers following parasite-control recommendations		847 <sup>23</sup>	192		528	
238. Number of farmers following disease-control recommendations		241 <sup>14</sup>	71		427	
239. Number of farmers following marketing recommendations		127 <sup>14</sup>	470		215	
240. Number of farmers assisted in using timely economic information as a basis for readjusting enterprise		122 <sup>14</sup>	35		3132	
241. Number of farms for which production-reduction contracts were signed						
242. Total reduction in number of animals on such farms in accordance with contracts reported in question 242						

\* Include rabbits, goats, game and fur animals.

\* Include all corn and hog contracts. This total should agree with 64(a).



## AGRICULTURAL ECONOMICS

Report Only This Year's Extension Activities and Results That Can Be Verified

ITEM	Public problems and economic planning on county or community basis <sup>1</sup>	FARM MANAGEMENT			Outlook	Marketing, buying, selling, and financing
		Farm records (in-veteries, accounts, etc.)	Individual farm planning	Farm and home financing (short and long time)		
	(a)	(b)	(c)	(d)	(e)	(f)
244. Days devoted to line of work by:						
(1) Home demonstration agents.....						244
(2) 4-H Club agents.....						
(3) Agricultural agents.....						
(4) Specialists.....						
245. Number of communities in which work was conducted.....						245
246. Number of voluntary local leaders or committeemen assisting.....						246
247. Days of assistance rendered by voluntary leaders or committeemen.....						247
248. Number of adult result demonstrations conducted.....						248
249. Number of meetings at result demonstrations.....						249
250. Number of method-demonstration meetings held.....						250
251. Number of other meetings held.....						251
252. Number of news stories published.....						252
253. Number of different circular letters issued.....						253
254. Number of farm or home visits made.....						254
255. Number of office calls received.....						255
256. Number of 4-H Club members enrolled.....	(1) Boys.....	x x x x		x x x x	x x x x	x x x x
	(2) Girls.....	x x x x		x x x x	x x x x	x x x x
257. Number of 4-H Club members completing.....	(1) Boys.....	x x x x		x x x x	x x x x	x x x x
	(2) Girls.....	x x x x		x x x x	x x x x	x x x x
258. Number of farmers keeping farm accounts throughout the year under supervision of agent.....	{(a) Regular..... (b) A. A. A.....}					258
259. Number of farmers keeping cost-of-production records under supervision of agent.....						259
260. Number of farmers assisted in summarizing and interpreting their accounts.....						260
261. Number of farmers assisted in making inventory or credit statements.....						261
262. Number of farmers assisted in obtaining credit.....						262
263. Number of farmers assisted in making mortgage or other debt adjustments.....						263
264. Number of farm credit associations assisted in organizing during the year.....						264
265. Number of farm business or enterprise-survey records taken during year.....						265
266. Number of farmers making recommended changes in their business as result of keeping accounts or survey records.....						266
267. Number of other farmers adopting cropping, livestock, or complete farming systems according to recommendations.....						267
268. Number of farmers advised relative to leases.....						268
269. Number of farmers assisted in developing supplemental sources of income.....						269
270. Number of families assisted in reducing cash expenditure:						
(a) By exchange of labor or machinery.....						270
(b) By bartering farm or home products for other commodities or services.....						
(c) By producing larger part of food on farm.....						
(d) By making own repairs of buildings and machinery.....						
271. Number of urban families moving to farms who have been assisted in getting established.....						271
272. Number of farm families on relief assisted to become self-supporting.....						272

<sup>1</sup> Include taxation, land utilization, rural rehabilitation, economic basis of extension program, drought and flood relief. Insofar as possible, production-adjustment activities should be reported under the crop or livestock concerned.

Take to Nashville

15

C. A. C.

## DAIRY CATTLE, BEEF CATTLE, SHEEP, SWINE, AND HORSES

Report Only This Year's Extension Activities and Results That Can Be Verified

ITEM	Dairy cattle (a)	Beef cattle (b)	Sheep (c)	Swine (d)	Horses and mules (e)	Other livestock <sup>1</sup> (f)	
214. Days devoted to line of work by:							
(1) Home demonstration agents.....							
(2) 4-H Club agents.....		124	1		12		
(3) Agricultural agents.....		880.55	246.40		364	23	214
(4) Specialists.....		92.30	24.40		8		
215. Number of communities in which work was conducted.....		30	52		62	14	215
216. Number of voluntary local leaders or committeemen assisting.....		14	80	10	13	97	216
217. Days of assistance rendered by voluntary leaders or committeemen.....		13	81	9	12	64.2	217
218. Number of adult result demonstrations conducted.....	✓	44	69	25	85	15.2	218
219. Number of meetings at result demonstrations.....		8	15	3	4	12	219
220. Number of meetings at result demonstrations.....		18	35	11	24	4	220
221. Number of other meetings held.....		22	41	13	15	8	221
222. Number of news stories published.....		36	130	18	43	27	222
223. Number of different circular letters issued.....		24	45	18	38	9	223
224. Number of farm or home visits made.....		80	213.7	53	476	881	224
225. Number of office calls received.....		86	456.9	65	1369	5024	225
226. Number of 4-H Club members enrolled.....		19	246	11	20	5	226
(1) Boys.....		5	7			13	
(2) Girls.....		17	96	6	9	4	
227. Number of 4-H Club members completing.....		4	6			11	
(1) Boys.....		16	104	6	37	14	
(2) Girls.....		41	160	25	71	18	
228. Number of animals in projects conducted by 4-H Club members completing.....		27	161	16	29	18	
229. Number of farmers assisted in obtaining purebred sires.....	✓	4	5	1	1	2	
230. Number of farmers assisted in obtaining high-grade or purebred females.....	✓	28	12	1	1	27	
231. Number of bull, boar, ram, or stallion circles or clubs organized or assisted.....		2	2	1	1	26	
232. Number of members in preceding circles or clubs.....		3	40	1	10		
233. Number of herd or flock-improvement associations organized or assisted.....		3	16	4	6	4	
234. Number of members in these associations.....		10	67	2	59		
235. Number of farmers not in associations keeping performance records of animals.....		x x x x	x x x x	x x x x	x x x x	x x x x	
236. Number of families assisted in home butchering, meat cutting, and curing.....		14	134	39	301	11	
237. Number of families assisted in butter and cheese making.....		22	1124	15	106	15	
238. Number of farmers following parasite-control recommendations.....		14	414	17	317	6	
239. Number of farmers following disease-control recommendations.....		22	426	14	185	360	
240. Number of farmers following marketing recommendations.....		22	426	14	185	360	
241. Number of farmers assisted in using timely economic information as a basis for readjusting enterprise.....		22	426	14	185	360	

<sup>1</sup> Include rabbits, goats, game and fur animals.

8-8618

L. D. Case



NORTH CAROLINA EMERGENCY RELIEF ADMINISTRATION  
RALEIGH, N. C.  
EXPENSE ACCOUNT

WEEK ENDING.

19.

TRAVEL AUTHORITY No.

DATE.

		LODGING	MEALS	TOTAL
SUNDAY		\$	\$	\$
MONDAY				
TUESDAY				
WEDNESDAY				
THURSDAY				
FRIDAY				
SATURDAY				
TOTAL LODGING AND MEALS				\$
MISC.—ITEMIZE				\$
TOTAL				\$

[illegible]

TOTAL TRANSPORTATION

\$

**TOTAL EXPENSES**

\$

REMARKS:

I CERTIFY THAT THE ABOVE IS A TRUE STATEMENT OF ACTUAL TRAVELING EXPENSES INCURRED BY ME FOR THE WEEK, AND I HAVE NOT RECEIVED PAYMENT.

APPROVED

TITLE

AUDITED AND APPROVED FOR PAYMENT

DEPARTMENT HEAD

CHECK No. \_\_\_\_\_ DATE \_\_\_\_\_

AMOUNT \$

IF FOR ANY REASON YOU CANNOT FOLLOW THE NEAREST ROUTE TO YOUR DESTINATION, STATE ROUTE FOLLOWED AND WHY.  
MILEAGE BASED ON HIGHWAY MAP DISTANCES. RECEIPTS FOR HOTELS AND MISCELLANEOUS ITEMS MUST ACCOMPANY THIS STATEMENT.  
SPEEDOMETER READINGS SHOULD BE SHOWN ON LEAVING AND ARRIVAL.



# SUGGESTIVE OUTLINE FOR THE 1936 ANNUAL REPORT OF SUBJECT MATTER SPECIALISTS

1. Names of specialists employed on project and how the work is divided among them.
2. Explain current changes in the State extension organization which affect this project, and significant changes in the relation of this project to other extension projects and to the experimental and teaching work in this subject, if any.
3. List adult and junior phases of the project carried on in 1936. Summarize briefly:
  - (a) Factors which determined inclusion in year's program.
  - (b) Ultimate goals and goals for the year.
  - (c) Number of counties in which each phase was conducted during year.
4. Methods and accomplishments. Discuss each phase of work separately, giving most emphasis to those lines of work of greatest relative importance. Where the same general plan is followed in conducting several phases of your work describe fully but once, and show variations from plan in other cases.
  - (a) How the work was done. - Give methods followed, and the extent to which the various teaching means and agencies were utilized. Show cooperation received from: (1) Other specialists, (2) county extension workers, (3) farmers' and farm women's organizations, (4) commercial interests, (5) other agencies.
  - (b) The results obtained. This is the most important part of the report. Make clear-cut statements of definite accomplishments. Discuss extent to which goals were reached, including pertinent statistics. Show significance of accomplishments in terms of State's agriculture and home life. Where applicable express results in terms of economic value. Discuss probable reasons for success or lack of success of certain phases of work. Mention a few counties in which outstanding results were obtained.
5. A.A.A. or Agr'l conservation program and emergency work. Discuss work performed in connection with the regulation of production and distribution under the A.A.A., Agr'l conservation, relief work, and other emergency activities.
6. Include the following exhibits:
  - (a) A few photographs showing methods employed and results of work.
  - (b) A few examples of demonstration outlines and other subject-matter or organization material being used.
  - (c) A few good news articles and circular letters, posters, etc., used in your work.
7. Outlook. Discuss the outlook for the work on this project for the coming year. Will the same phases of the work be stressed? If so, will changes in their organization and conduct be made? What new subprojects will be taken up?
8. Outline the assistance desired from the United States Department of Agriculture, such as personal assistance, publications, and other literature.



## COOPERATIVE EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS

U.S. Department of Agriculture  
and State Agricultural Colleges  
Cooperating

Extension Service, Division  
of Cooperative Extension,  
Washington, D. C.

### ANNUAL REPORT - SUBJECT-MATTER SPECIALISTS

Each leader of an approved extension project or subproject is expected in the interests of the whole cooperative Extension Service to submit an annual report each year, whether supported by State extension funds or by funds of the United States Department of Agriculture, or both cooperating. This report should be an interpretative analysis of what was undertaken, the methods employed, and the accomplishments resulting from the year's work.

This annual inventory enables each specialist to review critically the year's work prior to developing programs and plans for the coming year, and affords an opportunity to place a record of the year's activities and accomplishments before those responsible for the administrative direction of extension work in both the State and the Nation. The annual report is also an accounting to appropriating bodies and the taxpaying public of the use made of public funds.

The annual reports of all subject-matter specialists are read and indexed in the Federal Extension Service each year. The national extension index then makes the worth-while information on plans, methods, and accomplishment contained in annual reports available to Federal and State extension workers, scientists in other bureaus of the Department of Agriculture, members of Congress, agricultural writers, and others.

It is difficult to devise a set of rules by following which any specialist will be able to write a good report. Orderly arrangement, treatment that places emphasis where emphasis is due, definite clear-cut statements, and attractive appearance all contribute to the quality of a report.

Nothing can take the place, however, of definite, worth-while accomplishments supported by records, resulting from intelligent plans systematically executed. Failure to give specific information as to actual accomplishments is the most common fault of extension reports. All too frequently it is necessary to read between the lines to picture the results in terms of improved agriculture and home life, which might be expected to flow from the plans and the activities mentioned in the text of the report.

The annual report outline on the reverse side of this sheet is only suggestive and is offered merely as a helpful guide to the individual specialist in preparing a similar outline for his own annual report.

(Over)

## OUTLINE OF BEEF CATTLE AND SHEEP WORK

### BEEF CATTLE PROJECTS

B. Bull placement

F. Feeds and Feeding

1. Pasture - Establishment, Improvement
2. Silage - (a) Crops (b) Silo construction
3. Velvet Beans
4. Cover Crops for winter grazing
5. Fattening for market (manure for soil improvement)

M. Management

1. Breeding season control
2. Protection of young heifers from exposure to bull
3. Segregation of bull and heifer calves in case of purebreds
4. Dehorning and castrating

4-H Baby Beef Club Work

### SHEEP PROJECTS

R. Ram placement

W. Stomach worm control

D. Docking and castrating

G. Grading and marketing

*Velvet Beans*

*No. beans in 13 - 66*

*No. seedling plants 23 - 675*

*Casters - No. adult result dams 63 - 1402*

*" matings at " 22 - 53*

*" news letters published 58 - 147*

*" circular letters 24 - 55*

*" farmers following fast season 62 - 1970*

*" pasture established 38 - 1179*

COOPERATIVE EXTENSION WORK  
IN  
AGRICULTURE AND HOME ECONOMICS  
STATE OF NORTH CAROLINA

EXTENSION SERVICE

State College Station,  
Raleigh, N. C.

November 6, 1936.

TO SPECIALISTS OF THE EXTENSION SERVICE:

We are enclosing to you a suggested outline for organizing your annual report.

You will need to be considering how to organize the material for showing complete accomplishments in your line of work for the state as a whole. Your analysis should show by counties and projects. Small state maps will be useful in some instances and tabular form in others will be best. In comparing demonstration results with check result charts or graph would be effective.

It is hoped that your report will so present accomplishments that charts, graphs and tabulations and other material could be enlarged and used as teaching material and for farmers' meetings. If your report is thus prepared it will not only adequately serve the needs of the Director and the Washington office, but will be a live and useful pamphlet in promoting your own work.

We are prepared to advise with you as to how to best chart or graph your material and to prepare the copy for your report.

It is our hope that the reports of counties will be tabulated by January 1, 1937. We will furnish each of you with a complete summary. Should you want this summary by counties you will be able to get this from our summary sheets.

We will need all reports by January 15, 1937.

Yours very truly,

John W. Goodman  
Assistant Director.