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To the Graduate Council:

I am submitting herewith a thesis written by George Fletcher Luck entitled "Production and Management Practices of Selected Beef Cattle Producers in Macon County, Tennessee." I recommend that it be accepted for nine quarter hours of credit in partial fulfillment of the requirements for the degree of Master of Science, with a major in Animal Husbandry.

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PRODUCTION AND MANAGEMENT PRACTICES
OF SELECTED BEEF CATTLE PRODUCERS
IN MACON COUNTY, TENNESSEE

A Thesis
Presented to
the Graduate Council of
The University of Tennessee

In Partial Fulfillment
of the Requirements for the Degree
Master of Science

by
George Fletcher Luck

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CHAPTER I

INTRODUCTION

Macon County, Tennessee, located in the northern section of Middle Tennessee had depended on tobacco as the main source of farm income for many years. To increase farm income, dairying became the second largest source of farm income following World War II. At one time, the year 1950, nearly 80 per cent of the farms produced milk for sale, and about 92 per cent of the farms produced tobacco. These two farm enterprises accounted for about 70 per cent of the total farm income.

In the early 1950's industry started moving into Lafayette, the county seat, and farm people became interested in working at industrial jobs to supplement farm income. By 1960 20 per cent of the farms were absorbed by other farmers, and the total number of the dairy farms dropped 50 per cent. Many farmers went from dairy to beef production because they were working an eight hour day at one of the factories in town and did not want to milk cows before going to work and after returning home from work.

Prior to this study no previous formal attempt had been made to determine the Macon County beef production and marketing situation in detail to find out the quality of the brood cows and herd bulls and the production practices being carried out.

The objectives of this study were:

1. To determine the characteristics of cattlemen using the cow-calf system in high, medium, and low production categories. Cattlemen considered in the high categories had sold calves in 1965 averaging more than 433 pounds for the herd. Cattlemen considered in the medium category had sold calves in 1965 averaging between 383 pounds and 432 pounds. Cattlemen considered in the low category sold calves in 1965 that averaged between 180 pounds and 382 pounds per head.

2. To ascertain which of certain practices recommended by the University of Tennessee were or were not followed.

3. To determine some of the important factors influencing cattlemen to adopt or not adopt recommended practices.

Table 1 shows the number of cattlemen in Macon County using the cow-calf system according to pounds of beef weaned per cow in 1965.



TABLE 1. NUMBER OF MACON COUNTY CATTLEMEN USING THE COW-CALF
SYSTEM ACCORDING TO BEEF WEANED IN 1965 PER COW BRED

Average per cow beef weaned production group	Number of producers in Macon County	Range of beef weaned per cow within groups
		Lbs.
Low	19	180 - 382
Medium	19	383 - 432
High	19	433 - 523
Total	57	180 - 523

CHAPTER II

REVIEW OF LITERATURE

Considerable research had been conducted by the University of Tennessee College of Agriculture verifying the worth of certain practices focused on this study. Such recommended practices had been identified with regard to beef breeding, feeding, and management, recognized to be the three most important phases of beef production in the cow-calf system.

At the time of this study, very little research had been done to determine the educational needs of Tennessee cattlemen producing beef in the cow-calf system.

I. CHARACTERISTICS OF BEEF PRODUCERS AND THEIR HERDS

In a study of beef cattle producers in the Elk River Watershed by Ranney (1964) it was found that the number of brood cows per herd averaged seventeen; whereas Keyes (1966) found this characteristic to be 29 brood cows per herd average in Campbell County, Tennessee. Fifty-seven per cent of the herds in the Elk River Watershed study were Herfords; whereas the Campbell County study showed 88 per cent of the herds to be of this breed.

II. PRODUCTION PRACTICES

A 1952 survey of 24 beef producers in a Georgia county used by Boston (1952) as a basis for developing a ten meeting adult teaching unit identified, among others, three main areas needing attention; namely: (1) provision of adequate forage; (2) feeding of protein supplement; and (3) control of diseases and parasites. Boston taught the cattlemen based on this information and was able to get a limited degree of improvement in practice usage.

According to Tyrrell (1962) April 1 to about August 1 normally constitutes the recommended breeding season for commercial herds in Tennessee. The bull should be removed to a separate pasture after this time.

Merriman (1963) noted that pregnancy checks can help the cattlemen: (1) detect cows not pregnant so they can be culled; (2) identify a herd-wide sterility problem; and (3) have a basis for separation of pregnant cows into groups according to time of calving.

Tyrrell (1966) stated that protein should be produced to make up deficiencies in low quality farm grown or non-leguminous roughages, or adequate alfalfa or other legume hay should be grown. Four pounds of good legume hay has been found to equal about one pound of 40 per cent supplement.

Morrison (1950) noted that beef cattle should have salt and other minerals (dicalcium phosphate or steamed bone meal) regularly where they

can consume what they wish. Cattle prefer the softer kinds of block salt to that which is very hard. More loose salt is consumed by the cattle, but also is more expensive.

Tyrrell (1962) stated that the Tennessee Beef Performance Testing program offer breeders a practical measurement to determine differences in animals. It consists of: (1) obtaining performance information to weaning time; (2) recording and analyzing post-weaning performance; and (3) testing of progeny. Tennessee data indicate that there are extreme differences in the ability of beef cattle in the same herd and same environment to gain, that type and rapid economical gains do not always go together, and that through selection, it is possible to combine in one animal the qualities of excellent conformation, regularity of production, heavy weaning weights, economical feed lot gains, and meatiness.

Powell (1965) noted that performance testing was a tool or procedure by which beef cattle breeders can discover and measure differences in the inherited abilities of individual beef animals.

Tyrrell (1962) found that castrated calves returned from \$3 to \$5 per hundred more than calves not castrated; and dehorned calves from \$2 to \$3 per hundred pounds more than horned calves for Tennessee cattlemen who participated in demonstrational feeder cattle sales.

Stanley, et al. (1964) noted that external parasites (lice, ticks, mites, and flies) attack livestock causing slow weight gains, low milk

production, and severely damaged hides, resulting in an estimated annual loss of nearly \$15 million for the Tennessee farmers.

Ranney (1964) noted in the Tennessee Elk River Watershed study that no one factor, or production or marketing practice, by itself, was the sole cause of high or low performance in beef cattle production; but, rather, that a combination of practices results in such performance.

According to Jamison (1967) the Tennessee Beef Cattle Improvement Program will help a farmer to do the following: (1) improve pastures, feeding, and general management of the beef cattle enterprise; (2) determine maximum production of each individual breeding cow; (3) base selection of replacement heifers on average daily gain and quality records both during weaning and post-weaning periods; (4) cull poor producing cows; (5) increase financial returns of the herd by improving growth rate and quality of calves; (6) increase the calving percentage; (7) measure bull productivity by evaluating and comparing records on progeny within the herd; (8) determine post-weaning performance of prospective herd sire and foundation females by means of actual feeding test; (9) provide additional performance information to potential buyers.

III. FACTORS INFLUENCING THE ADOPTION OF PRACTICES

Studies have shown that farmers adopt new ideas or practices at different times. They tend to be at different stages in the adoption

process at different times as it may relate to a given recommended practice or practices.

Most authorities agree that the stages in the adoption process include the following: (1) awareness, (2) interest, (3) evaluation, (4) trial, (5) adoption. Research has indicated, in general terms, that as one proceeds from unawareness to adoption that more and more intensive or personal contacts are required if adoption of a practice is to result.

At the "aware" and "interested" stages, mass media sources, such as farm magazines, newspapers, and radio, are most important. At the "evaluation" and "trial" stages, neighbors and friends are generally more important influences than mass media. When farmers move closer to the adoption stage, personal contacts with representatives of agricultural agencies are of more importance, but may still be secondary to neighbors and friends.

CHAPTER III

EXPERIMENTAL PROCEDURE

With the assistance of other agriculture agency workers, local Production Credit Association representatives, president of the local livestock association, and others a complete list of all Macon County beef producers was assembled. All farmers were eliminated who had less than ten brood cows or the cow herd accounted for less than 30 per cent of his farm income. The names were listed alphabetically and by districts, one name per line, on a shorthand pad. These sheets were turned face down, and a pair of scissors was used to notch every third line. This is the method of farmer selection in this random sample survey of beef producers.

An interview schedule (see Appendix A) was used to obtain the data. The survey instrument was prepared by appropriate staff members in the Department of Animal Husbandry-Veterinary Science and staff members in the Extension Methods Department. The survey instrument was pretested by interviewing some farmers who were not to be interviewed from the survey list. Following the pretesting, necessary adjustments were made in the interview technique. Each beef cattle farmer was personally interviewed in such a manner that he would give an unbiased answer. In addition, six judgment questions were completed by the interviewer after each respondent was interviewed. The questions gave the interviewer's opinion of the respondent's interest, attitude,

and attention to management and how familiar the interviewer was with the respondent's herd.

The data were obtained by looking at the farmer's sale receipts of feeder calf sales, stockyards or in a small number of cases, estimating the weight of the calves based on the total dollars the farmer had received from the sale of calves. The data were analyzed for all producers and for high, medium, and low production thirds in simple number and per cent, and averages were computed where appropriate. Main comparisons in the study were made between high and low producers since largest management differences would be expected between these two extreme groups.

Thirty-one items related to 15 recommended beef production practices were included in the interview schedule as a basis for determining the management levels of producers in the high, middle, and low thirds.

Each of the thirty-one items was rated on a scale running from 0 to 5 points based on the degree to which the cattlemen appeared to have been following University of Tennessee recommendations in 1965. A rating of 0 was given if the individual was unaware of the recommended practice and was not using it to any degree. Other points were assigned as follows: (1) one point for token use of the related practice (1 to 25 per cent); (2) two points for a larger degree (25 to 50 per cent) of application; (3) three points for a medium level (50 to 75 per cent); (4) four points for having used the related practice to a substantial

degree (75 to 99 per cent); and (5) five points for complete (100 per cent) use of the recommended practice.

The data were taken from the individual survey forms and punched into standard 80 column I.B.M. cards. These data were then tabulated by the use of the 1460 I.B.M. computer.

CHAPTER IV

RESULTS AND DISCUSSION

Table 2 shows that the interviewer knew all 57 of the cattlemen. One hundred per cent of the high producers were known very well or fairly well, while 10 per cent of the low producers were not known very well.

Table 3 shows the interviewer's estimate of the attitudes of the cattlemen toward the survey. The interviewer found 91 per cent of the cattlemen to be friendly and nine per cent to be "somewhat friendly". Sixty per cent of the farmers that were "somewhat friendly" toward the survey were in either the medium or low production groups.

The major occupations of all beef cattlemen are shown in Table 4. Sixty-five per cent were full-time farmers, 21 per cent were part-time farmers, seven per cent were retired and seven per cent were wage earners or business or professional people. Seventy-four per cent of the high producers were full-time farmers while 63 per cent of the low producers were full-time farmers.

The major source of income as shown in Table 5, for all Macon County cattlemen interviewed was tobacco on 44 per cent of the farms. Tobacco was the number one income producer on a majority of farms whether they were in the high, medium, or low producer groups. Beef was the major source of income with 19 per cent of all cattlemen, and wages accounted for 12 per cent of the major source of income.

TABLE 2. DEGREE TO WHICH INTERVIEWER KNEW ALL MACON COUNTY
CATTLEMEN INTERVIEWED; HIGH, MEDIUM, AND LOW PRODUCERS
BY NUMBER AND PER CENT^a

Degree to which interviewer knew respondent	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
Very well	47	82	16	84	17	89	14	74
Fairly well	8	14	3	16	2	11	3	16
Not very well	2	4	0	0	0	0	2	10
Total	57	100	19	100	19	100	19	100

^aPer cent is rounded to the nearest whole number.

TABLE 3. INTERVIEWER'S ESTIMATE OF THE ATTITUDES OF ALL MACON COUNTY CATTLEMEN INTERVIEWED; HIGH, MEDIUM, AND LOW PRODUCERS, TOWARD THE SURVEY BY NUMBER AND PER CENT^a

Attitude toward the survey	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
Friendly	52	91	17	89	18	95	17	89
Somewhat friendly	5	9	2	11	1	5	2	11
Total	57	100	19	100	19	100	19	100

^aPer cent is rounded to the nearest whole number.

TABLE 4. MAJOR OCCUPATION OF ALL MACON COUNTY CATTLEMEN INTERVIEWED;
HIGH, MEDIUM, AND LOW PRODUCERS, BY NUMBER AND PER CENT^a

Major occupation	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
Full-time farmer	37	65	14	74	11	58	12	63
Part-time farmer	12	21	4	21	3	16	5	27
Business	1	2	0	0	0	0	1	5
Professional	1	1	0	0	1	5	0	0
Wage earner	2	4	1	5	1	5	0	0
Retired	4	7	0	0	3	16	1	5
Total	57	100	19	100	19	100	19	100

^aPer cent is rounded to the nearest whole number.



TABLE 5. MAJOR SOURCE OF INCOME OF ALL MACON COUNTY CATTLEMEN
INTERVIEWED; HIGH, MEDIUM, AND LOW PRODUCERS, BY NUMBER AND
PER CENT^a

Major sources of income	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
Not answered	1	2	1	5	0	0	0	0
Beef	11	19	3	16	5	26	3	16
Business	5	9	1	5	3	16	1	5
Professional	2	3	0	0	2	11	0	0
Wage earner	7	12	2	11	1	5	4	21
Retired	1	2	0	0	1	5	0	0
Tobacco	25	44	11	58	6	32	8	42
Tobacco- livestock	5	9	1	5	1	5	3	16
Total	57	100	19	100	19	100	19	100

^aPer cent is rounded to nearest whole number.

The average educational level, as shown in Table 6, of all beef cattle farmers interviewed was grade 9.7. The high producers averaged grade .7 more than the low producers. Only 33 per cent had finished high school.

Table 7 shows the average age of the Macon County cattlemen to be 51 years. The high producers averaged 47 years; while the low producers averaged eight years older.

The data in Table 8 shows that 89 per cent of all cattlemen interviewed owned and operated their own farms. There was little difference in the high or low producers as to farm ownership.

It is shown in Table 9 that the average gross family income was \$11,051. The high producers had a gross income of \$6,286; while the low producers gross income was \$8,200. This is an indication that the high producers had to do a better job of farming as they did not have as much income from other sources.

Table 10 shows the median number of total farm acres per farmer to be 187. The high producers had a median of 178 acres; while the low producers had a median of 168.

The data in Table 11 show that all cattlemen had an average of 126 acres of cropland. The high producers had an average of 118 acres, and the low producers had an average of 122 acres of cropland.

Table 12 shows only seventeen cattlemen out of 57 interviewed reported growing orchardgrass-white clover pasture. High producers had 2 acres average more per farm than low producers.

Table 13 shows that 14 of the cattlemen did fertilize their

TABLE 6. EDUCATIONAL LEVELS OF ALL MACON COUNTY CATTLEMEN INTERVIEWED;
HIGH, MEDIUM, AND LOW PRODUCERS, BY NUMBER AND PER CENT^a AND
AVERAGE EDUCATIONAL GRADE LEVELS

Educational grade level	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
1 - 4 elementary	4	7	1	5	1	5	2	11
5 - 7	7	12	2	11	0	0	5	26
8	19	33	9	47	6	32	4	21
9 - 11	9	15	2	11	3	16	4	21
12	12	21	4	21	5	27	3	16
1 - 4 college	2	4	1	5	1	5	0	0
B. S. degree	2	2	0	0	1	5	1	5
M. S. degree	1	4	0	0	1	5	0	0
Doctor (M. D.)	1	2	0	0	1	5	0	0
Total	57	100	19	100	19	100	19	100

^aPer cent is rounded to the nearest whole number.

TABLE 7. AGE GROUPS OF ALL MACON COUNTY CATTLEMEN INTERVIEWED;
HIGH, MEDIUM, AND LOW PRODUCERS, BY NUMBER AND PER CENT^a
AND AVERAGE AGES

Age category	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
Under 25	1	2	1	5	0	0	0	0
25 - 34	3	5	3	16	0	0	0	0
35 - 44	14	25	4	21	7	37	3	16
45 - 54	19	33	6	32	7	37	6	31
55 - 64	13	23	3	16	3	16	7	37
65 or more	7	12	2	10	2	10	3	16
Total	57	100	19	100	19	100	19	100
Average age	51		47		50		55	

^a Per cent is rounded to nearest whole number.

TABLE 8. NUMBER AND PER CENT OF ALL MACON COUNTY CATTLEMEN
INTERVIEWED; HIGH, MEDIUM, AND LOW PRODUCERS, ACCORDING
TO TENURE STATUS OF RESPONDENT^a

Tenure status	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
Owner and operator (landlord)	51	89	16	84	18	95	17	90
Renter and operator (tenant)	2	4	1	5	0	0	1	5
Partner at home	4	7	2	11	1	5	1	5
Total	57	100	19	100	19	100	19	100

^a Per cent is rounded to nearest whole number.

TABLE 9. TOTAL 1965 GROSS FAMILY INCOME OF ALL COUNTY CATTLEMEN
INTERVIEWED; HIGH, MEDIUM, AND LOW PRODUCERS, BY NUMBER
AND PER CENT^a

Total gross family income category in dollars	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
Not answered	18	32	5	26	4	21	9	48
2,000 - 3,999	6	11	2	11	1	5	3	16
4,000 - 5,999	12	21	6	31	4	21	2	11
6,000 - 7,999	5	9	3	16	1	5	1	5
8,000 - 9,999	5	9	1	5	3	16	1	5
10,000 - 11,999	3	5	2	11	1	5	0	0
12,000 - 13,999	2	3	0	0	1	5	1	5
14,000 - 15,999	3	5	0	0	2	11	1	5
16,000 - 17,999	0	0	0	0	0	0	0	0
18,000 - 19,999	1	2	0	0	0	0	0	0
20,000 - 21,999	0	0	0	0	0	0	0	0
22,000 - 23,999	0	0	0	0	0	0	0	0
24,000 - 25,999	0	0	0	0	0	0	0	0
26,000 - 29,999	0	0	0	0	0	0	0	0
30,000 - 49,999	0	0	0	0	0	0	0	0
50,000 - 99,999	2	3	0	0	0	0	0	0
Total	57	100	19	100	19	100	19	100
Total median gross family income for those answering	11,051		6,286		8,538		8,200	

^aPer cent is rounded to nearest whole number.

TABLE 10. TOTAL FARM ACREAGE CATEGORIES OF ALL MACON COUNTY
CATTLEMEN INTERVIEWED; HIGH, MEDIUM, AND LOW PRODUCERS,
BY NUMBER AND PER CENT^a AND AVERAGE FARM ACRES

Total farm acreage interval	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
1 - 49	2	4	0	0	1	5	1	5
50 - 99	8	14	2	11	1	5	5	26
100 - 149	13	23	6	32	3	16	4	21
150 - 199	11	19	6	32	3	16	2	11
200 - 249	11	19	3	15	7	37	1	5
250 - 299	7	12	1	5	2	11	4	21
300 - 399	3	5	0	0	1	5	2	11
400 - 499	1	2	1	5	0	0	0	0
500 - 599	0	0	0	0	0	0	0	0
600 and above	1	2	0	0	1	5	0	0
Total	57	100	19	100	19	100	19	100
Actual average acres	187.3		177.6		215.9		168.5	

^a Per cent is rounded to nearest whole number.

TABLE 11. TOTAL CROPLAND ACREAGE CATEGORIES OF ALL MACON COUNTY
CATTLEMEN INTERVIEWED; HIGH, MEDIUM, AND LOW PRODUCERS, BY
NUMBER AND PER CENT^a AND AVERAGE FARM ACRES

Total cropland acreage interval	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
1 - 49	5	9	0	0	1	5	4	21
50 - 99	13	23	5	26	3	16	5	26
100 - 149	19	33	10	53	6	32	3	15
150 - 199	13	23	3	16	8	42	2	11
200 - 249	4	7	1	5	0	0	3	16
250 - 299	2	3	0	0	0	0	2	11
300 - 399	1	2	0	0	1	5	0	0
Total	57	100	19	100	19	100	19	100
Actual average	126.1		118.0		138.3		122.0	

^aPer cent is rounded to nearest whole number.

TABLE 12. TOTAL ACREAGE OF ORCHARDGRASS-WHITE LADINO CLOVER
FOR PASTURE PRODUCTION FOR BEEF HERDS BELONGING TO ALL
MACON COUNTY CATTLEMEN INTERVIEWED; HIGH, MEDIUM,
AND LOW PRODUCERS, BY NUMBER AND PER CENT^a

Average acreage used for orchard- grass-white clover pasture	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
Not grown	40	70	13	68	16	85	11	57
1 - 14	3	6	0	0	1	5	2	11
15 - 24	8	14	3	16	1	5	4	21
25 - 34	3	5	2	11	1	5	0	0
35 - 44	1	2	1	5	0	0	0	0
45 - 55	2	3	0	0	0	0	2	11
Total	57	100	19	100	19	100	19	100
Average number of acres for those answering	23.4		25.8		17.7		23.7	

^aPer cent is rounded to nearest whole number.

TABLE 13. NUMBER AND PER CENT OF ALL MACON COUNTY CATTLEMEN
INTERVIEWED; HIGH, MEDIUM, AND LOW PRODUCERS, ACCORDING
TO WHETHER THEY FERTILIZED OR DID NOT FERTILIZE
THEIR ORCHARDGRASS-WHITE LADINO CLOVER
PASTURE^a

Fertilized or did not fertilize	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
Not grown	41	72	13	69	16	84	12	63
Did fertilize	14	25	6	31	3	16	5	26
Did not fertilize	2	3	0	0	0	0	2	11
Total	57	100	19	100	19	100	19	100

^aPer cent is rounded to nearest whole number.

orchardgrass-white clover pastures. There was no apparent difference in the high and low producers.

The data in Table 14 shows that 34 cattlemen interviewed grew fescue-white clover for pasture. This is 100 per cent more than grew orchardgrass-white clover. The high producers had 43 acres of fescue-white clover pasture, while the medium and low producers had 58 acres.

Table 15 shows that only three cattlemen failed to fertilize their fescue-white clover. There was no difference in the high or low producers.

Table 16 shows only four of the cattlemen interviewed grew orchardgrass alone for pasture.

Table 17 shows that three of the cattlemen fertilized the orchardgrass and one of them did not.

Table 18 shows 30 per cent of the cattlemen grew fescue pasture without a legume. The high producers grew about 32 acres per farm, and the low producers grew about 17 acres per farm.

Table 19 shows five farms fertilized the fescue pastures. Four of them were either medium or high producers.

Table 20 shows that 32 cattlemen interviewed grew fescue-lespedeza for pasture. The average was 52 acres for all cattlemen while the high and low producers averaged the same with 43 acres. Sixty two per cent of the cattlemen growing fescue-lespedeza pasture had between 10 and 44 acres.

Table 21 shows that more than three times as many high producers fertilized their fescue-lespedeza pastures as low producers.

TABLE 14. TOTAL ACREAGE OF FESCUE-WHITE CLOVER FOR PASTURE
PRODUCTION FOR BEEF HERD OF ALL MACON COUNTY CATTLEMEN
INTERVIEWED; HIGH, MEDIUM, AND LOW PRODUCERS,
BY NUMBER AND PER CENT^a

Average acreage used for fescue- white ladino clover pasture	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
Not grown	23	40	7	37	8	42	8	43
1 - 44	21	37	9	47	4	21	8	42
45 - 84	5	9	0	0	5	26	0	0
85 - 144	6	10	3	16	2	11	1	5
145 - 164	1	2	0	0	0	0	1	5
165 - 184	1	2	0	0	0	0	1	5
Total	57	100	19	100	19	100	19	100
Average number of acres for those answering	53.1		43.4		58.4		58.5	

^aPer cent is rounded to nearest whole number.

TABLE 15. NUMBER AND PER CENT OF ALL MACON COUNTY CATTLEMEN INTERVIEWED; HIGH, MEDIUM, AND LOW PRODUCERS, ACCORDING TO WHETHER THEY FERTILIZED OR DID NOT FERTILIZE THEIR FESCUE-WHITE CLOVER PASTURE^a

Fertilized or did not fertilize	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
Not grown	29	51	10	53	11	58	8	42
Did fertilize	25	44	8	42	8	42	9	47
Did not fertilize	3	5	1	5	0	0	2	11
Total	57	100	19	100	19	100	19	100

^aPer cent is rounded to nearest whole number.

TABLE 16. TOTAL ACREAGE OF ORCHARDGRASS FOR PASTURE PRODUCTION FOR BEEF HERD OF ALL CATTLEMEN INTERVIEWED; HIGH, MEDIUM, AND LOW PRODUCERS, BY NUMBER AND PER CENT^a

Average acreage used for orchard- grass pasture	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
Not grown	53	93	18	95	19	100	16	84
1 - 19	2	4	1	5	0	0	1	5
19 - 30	2	3	0	0	0	0	2	11
Total	57	100	19	100	19	100	19	100
Average number of acres for those answering	20.2		18.0		0		21.0	

^aPer cent is rounded to nearest whole number.

TABLE 17. NUMBER AND PER CENT OF ALL MACON COUNTY CATTLEMEN
INTERVIEWED; HIGH, MEDIUM, AND LOW PRODUCERS, ACCORDING
TO WHETHER THEY FERTILIZED OR DID NOT FERTILIZE
THEIR ORCHARDGRASS PASTURE^a

Fertilized or did not fertilize	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
Not grown	53	93	18	95	19	100	16	84
Did fertilize	3	5	1	5	0	0	2	11
Did not fertilize	1	2	0	0	0	0	1	5
Total	57	100	19	100	19	100	19	100

^aPer cent is rounded to nearest whole number.

TABLE 18. TOTAL ACREAGE OF FESCUE FOR PASTURE PRODUCTION
FOR BEEF HERD BY ALL MACON COUNTY CATTLEMEN INTER-
VIEWED; HIGH, MEDIUM, AND LOW PRODUCERS, BY
NUMBER AND PER CENT^a

Average acreage used for fescue pasture	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
Not grown	40	70	14	74	12	63	14	74
1 - 14	7	13	1	5	3	16	3	16
15 - 24	3	5	1	5	1	5	1	5
25 - 34	4	7	2	11	1	5	1	5
35 - 44	0	0	0	0	0	0	0	0
45 - 54	0	0	0	0	0	0	0	0
55 - 74	3	5	1	5	2	11	0	0
Total	57	100	19	100	19	100	19	100
Average number of acres for those answering	25.4		31.8		26.9		16.8	

^a Per cent is rounded to nearest whole number.

TABLE 19. NUMBER AND PER CENT OF ALL MACON COUNTY CATTLEMEN
INTERVIEWED; HIGH, MEDIUM, AND LOW PRODUCERS, ACCORDING
TO WHETHER THEY FERTILIZED OR DID NOT FERTILIZE
THEIR FESCUE^a

Fertilized or did not fertilize	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
Not grown	40	69	14	73	13	69	13	69
Did fertilize	8	15	3	16	3	15	2	10
Did not fertilize	9	16	2	11	3	16	4	21
Total	57	100	19	100	19	100	19	100

^aPer cent is rounded to nearest whole number.

TABLE 20. TOTAL ACREAGE OF FESCUE-LESPEDeza FOR PASTURE PRODUCTION FOR BEEF HERD BY ALL MACON COUNTY CATTLEMEN INTERVIEWED; HIGH, MEDIUM, AND LOW PRODUCERS, BY NUMBER AND PER CENT ^a

Average acreage used for fescue-lespedeza pasture	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
Not grown	25	44	8	43	9	48	8	43
10 - 44	20	35	5	26	7	37	8	42
45 - 74	6	11	5	26	0	0	1	5
75 - 124	3	5	1	5	1	5	1	5
125 - 174	2	3	0	0	1	5	1	5
175 - 224	0	0	0	0	0	0	0	0
225 - 334	1	2	0	0	1	5	0	0
Total	57	100	19	100	19	100	19	100
Average number of acres for those answering	51.8		43.1		71.1		43.1	

^aPer cent is rounded to nearest whole number.

TABLE 21. NUMBER AND PER CENT OF ALL MACON COUNTY CATTLEMEN
INTERVIEWED; HIGH, MEDIUM, AND LOW PRODUCERS, ACCORDING
TO WHETHER THEY FERTILIZED OR DID NOT FERTILIZE
THEIR FESCUE-LESPEDEZA PASTURE^a

Fertilized or did not fertilize	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
Not grown	25	43	5	27	9	47	11	58
Did fertilize	26	47	14	73	8	42	4	21
Did not fertilize	6	10	0	0	2	11	4	21
Total	57	100	19	100	19	100	19	100

^aPer cent is rounded to nearest whole number.

The data in Table 22 show that only 11 per cent of the cattlemen interviewed grew lespedeza for pasture.

Table 23 shows that only 50 per cent of the cattlemen who grew lespedeza for pasture used fertilizer on the lespedeza.

Table 24 shows that 70 per cent of the cattlemen grew legume hay for the beef herd. Sixteen of the high producers grew legume hay while ten of the low producers grew some. Also, the high producers averaged nearly five times more legume hay per farm.

Table 25 shows that only 9 per cent of the cattlemen purchased legume hay and 7 per cent of these were low producers.

The data in Table 26 showed that high producers grew 30 per cent more tons of grass hay than low producers. Also, the average acreage grown per farm was about 6 acres more on the farm of the high producers than the low producers.

Table 27 shows that 49 per cent of the cattlemen grew a legume-grass hay for the beef herd. The average acreage was about 27 acres for all cattlemen. The high producers grew about the same number of tons on 10 acres less average per farm.

Table 28 shows the average beef management practice diffusion ratings and total average ratings. It is interesting to note that the high producers knew about, and rated higher in, 29 of the 31 recommended production practices. Low producers showed a rating of only .05 more than high producers out of a possible rating of 5.00 in fly control and rated only .21 more than high producers in having a system of working pens, lots and restraining equipment. The high producers had much better bulls than the low producers.

TABLE 22. TOTAL ACREAGE OF LESPEDEZA FOR PASTURE PRODUCTION FOR BEEF HERD BY ALL MACON COUNTY CATTLEMEN INTERVIEWED; HIGH, MEDIUM, AND LOW PRODUCERS, BY NUMBER AND PER CENT^a

Average acreage used for lespedeza pasture	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
Not grown	51	89	17	89	17	90	17	90
5 - 25	5	9	2	11	1	5	2	11
26 - 45	1	2	0	0	1	5	0	0
Total	57	100	19	100	19	100	19	100
Average number of acres for those answering	15.3		7.0		27.5		11.5	

^aPer cent is rounded to nearest whole number.

TABLE 23. NUMBER AND PER CENT OF ALL MACON COUNTY CATTLEMEN INTERVIEWED;
HIGH, MEDIUM AND LOW PRODUCERS, ACCORDING TO WHETHER THEY
FERTILIZED OR DID NOT FERTILIZE THEIR LESPEDEZA^a

Fertilized or did not fertilize	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
Not grown	51	89	16	85	18	95	17	90
Did fertilize	3	6	2	10	0	0	1	5
Did not fertilize	3	5	1	5	1	5	1	5
Total	57	100	19	100	19	100	19	100

^aPer cent is rounded to nearest whole number.

TABLE 24. ACTUAL TONS LEGUME GROWN FOR BEEF HERD BY ALL MACON COUNTY CATTLEMEN INTERVIEWED; HIGH, MEDIUM AND LOW PRODUCERS, BY NUMBER AND PER CENT^a

Actual tons of legume grown	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
None grown	17	30	3	16	5	26	9	47
1 - 49	30	53	14	74	9	48	7	37
50 - 99	8	14	2	10	4	21	2	11
100 - 199	2	3	0	0	1	5	1	5
Total	57	100	19	100	19	100	19	100
Average number of acres for those answering	28.2		26.7		35.9		22.0	

^aPer cent is rounded to nearest whole number.



TABLE 25. TONS OF LEGUME PURCHASED FOR BEEF HERD BY ALL MACON COUNTY
CATTLEMEN INTERVIEWED; HIGH, MEDIUM, AND LOW PRODUCERS,
BY NUMBER AND PER CENT^a

Tons legume purchased	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
None	52	91	19	100	18	95	15	79
1 - 4	1	2	0	0	0	0	1	5
5 - 9	4	7	0	0	1	5	3	16
Total	57	100	19	100	19	100	19	100
Average for those purchasing hay	15.2		0		23.0		8.5	

^aPer cent is rounded to nearest whole number.

TABLE 26. ACTUAL TONS OF GRASS GROWN FOR BEEF HERD BY ALL MACON COUNTY CATTLEMEN INTERVIEWED; HIGH, MEDIUM, AND LOW PRODUCERS, BY NUMBER AND PER CENT^a

Actual tons of grass grown	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
Not grown	29	51	9	48	8	42	12	63
1 - 49	25	44	9	47	9	48	7	37
50 - 99	2	3	1	5	1	5	0	0
100 - 189	1	2	0	0	1	5	0	0
Total	57	100	19	100	19	100	19	100
Average number of acres for those answering	25.3		19.5		38.0		13.6	

^aPer cent is rounded to nearest whole number.

TABLE 27. TONS OF LEGUME-GRASS HAY GROWN FOR BEEF HERD BY ALL MACON COUNTY CATTLEMEN INTERVIEWED; HIGH, MEDIUM, AND LOW PRODUCERS, BY NUMBER AND PER CENT¹

Tons of legume-grass grown	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
None grown	29	51	8	42	9	47	12	63
1 - 24	15	26	7	37	4	21	4	21
25 - 54	12	21	4	21	6	32	2	11
55 - 94	1	2	0	0	0	0	1	5
Total	57	100	19	100	19	100	19	100
Average number of acres for those growing such hay	26.9		21.8		28.9		32.0	

¹Per cent is rounded to nearest whole number.

TABLE 28. AVERAGE BEEF MANAGEMENT PRACTICE DIFFUSION RATINGS AND TOTAL AVERAGE RATINGS
FOR ALL MACON COUNTY CATTLEMEN INTERVIEWED; HIGH, MEDIUM, AND LOW PRODUCERS^a

Beef management practice	All cattlemen	High producers	Medium producers	Low producers
	Average rating - - - - -			
1. Keeping cows on good permanent pasture until late fall and early winter to reduce winter feed costs	5.00	5.00	5.00	5.00
2. Fed brood cows at least 1.5 lbs. of 32-44% protein supplement daily when feeding low quality roughage	4.95	5.00	5.00	4.84
3. Checking of older cows at least once a day during calving season	4.95	5.00	5.00	4.84
4. Following recommended procedures in dehorning	4.93	5.00	4.79	5.00
5. Checking of first-calf heifer at least 2 or 3 times daily during calving season	4.89	5.00	5.00	4.68
6. Waited until replacement heifers were at least 15 months old and had attained a minimum weight of 650 lbs. before breeding	4.88	5.00	5.00	4.63
7. Following recommended procedures in castration	4.88	5.00	4.68	4.95
8. Arranging to have competent help available when calving difficulties occur	4.82	5.00	4.74	4.74
9. Providing extra supplementary grazing for the herd during July, August, and September	4.75	4.58	5.00	4.58

TABLE 28. (CONTINUED)

Beef management practice	All cattlemen	High producers	Medium producers	Low producers
	Average rating			
10. Keeping replacement heifers separate from rest of breeding herd during winter	4.68	5.00	5.00	4.05
11. Following lice control practices	4.67	4.84	4.37	4.79
12. Vaccinating all calves for blackleg and malignant edema during nursing period	4.65	4.89	4.79	4.26
13. Getting the advice of professionals in the area of beef production and marketing	4.61	5.00	4.74	4.11
14. Checking cattle for possible trouble at least 3 times per week throughout year	4.61	4.53	5.00	4.32
15. Following a systematic rotational grazing program	4.53	4.32	5.00	4.26
16. Following recommended fly control practices	4.33	4.32	4.32	4.37
17. Using recommended materials in the control of internal parasites	4.33	4.16	4.68	4.16
18. Provided access to a recommended mineral mixture for all cattle	4.03	4.00	4.42	3.68
19. Use of pasture area for bull(s) during off-breeding season	4.02	4.05	4.42	3.58

TABLE 28. (CONTINUED)

Beef management practice	All cattlemen	High producers	Medium producers	Low producers
	Average rating			
20. Used appropriately and maintained an adequate system of working pens, lots, and restraining equipment	3.91	3.58	3.89	3.79
21. Used a system for identifying each breeding female in the herd	3.89	4.42	3.89	3.37
22. Used system of permanently identifying calves	3.82	4.42	3.63	3.42
23. Feeding more or better quality feed to thin cows and cows recently calved than to others	3.75	4.21	3.74	3.32
24. Used recommended grub control	3.40	3.68	3.37	3.16
25. Used one or more performance tested bulls	2.79	3.05	3.21	2.11
26. Vaccinating all brood cows and replacement heifers for leptospirosis	2.75	2.79	2.95	2.68
27. Bull's records met minimum requirements of the breeders performance test bull sale	2.23	2.47	3.16	1.05
28. Checking of herd cows at least twice a day during breeding season	2.16	2.58	2.26	1.63
29. Enrollment of herd in the Tennessee Beef Cattle Improvement Program	1.26	1.63	1.26	0.89
30. All herd cows pregnancy checked last year	1.19	1.11	1.58	0.89
31. Feeding bulls a concentrate during breeding season while on pasture	0.84	0.74	0.74	1.05

^aIn the rating scale used: 0 = unaware; 1 = aware of the recommended practice; 2 = interested in the practice; 3 = planning to try the practice; 4 = tried the practice but not using; and 5 = using the practice.

Table 29 shows the nine reasons which were given by Macon County cattlemen for their failing to use recommended beef production practices. Forty-seven per cent of the low producers reported that the reasons they did not follow recommended practices were their own neglect and their disbelief in the necessity of the recommended practices.

Table 30 shows the number and per cent of all Macon County cattlemen interviewed; high, medium and low producers, according to evidences of making use of management plans. There were 100 per cent more low producers than high producers showing no evidence in the use of management plans.

The data in Table 31 shows the number and per cent of all Macon County cattlemen interviewed; high, medium and low producers, mentioning reasons for not having any management plans. Eighty-four per cent of the high producers had management plans, compared with 74 per cent of the low producers.

Table 32 shows the breeds of registered cows in herds belonging to all Macon County cattlemen interviewed; high, medium and low producers, by number and per cent.

Table 33 shows breeds of grade cows in herds belonging to all Macon County cattlemen interviewed; high, medium and low producers, by number and per cent. Herefords (both horned and polled) were the predominant breed.

Table 34 shows total number of beef cows belonging to all Macon County cattlemen interviewed; high, medium and low producers, by number and per cent. The average of all cattlemen were 19.9 cows per farm.

TABLE 29. REASONS FOR NOT USING RECOMMENDED BEEF PRODUCTION PRACTICES
 ACCORDING TO ALL MACON COUNTY CATTLEMEN INTERVIEWED; HIGH, MEDIUM,
 AND LOW PRODUCERS, BY NUMBER AND PER CENT^a

Reason for not using recommended practices	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
None given	6	10	3	15	1	5	2	11
Lack of time and/or labor	7	12	1	5	3	16	3	16
Limited capital and/or land	7	12	2	11	4	21	1	5
More rewarding activities claim owner's time and money	2	4	1	5	1	5	0	0
Lack of adequate facilities	2	4	0	0	1	5	1	5
Lack of technical knowledge	9	16	4	21	3	16	2	11
Small margin profit	2	4	2	11	0	0	0	0
Lack of interest	6	10	2	11	3	16	1	5
Neglect	12	21	4	21	2	11	6	31
Do not think recom- mended practices are necessary	4	7	0	0	1	5	3	16
Total	57	100	19	100	19	100	19	100

^aPer cent is rounded to nearest whole number.

TABLE 30. NUMBER AND PER CENT OF ALL MACON COUNTY CATTLEMEN INTERVIEWED;
HIGH, MEDIUM, AND LOW PRODUCERS, ACCORDING TO EVIDENCES OF
MAKING USE OF MANAGEMENT PLANS^a

Evidence of use of management plans	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
No evidence of any kind	12	21	3	16	3	16	6	32
Evidence of using at least <u>one</u> practice	24	42	7	37	9	47	8	42
Evidence of using at least <u>two</u> practices	12	21	7	37	4	21	1	5
Evidence of using at least <u>three</u> pract- ices	5	9	2	10	1	5	2	11
Evidence of using at least <u>four</u> practices	3	5	0	0	2	11	1	5
Evidence of using at least <u>five</u> practices	1	2	0	0	0	0	1	5
Total	57	100	19	100	19	100	19	100

^aPer cent is rounded to nearest whole number.

TABLE 31. NUMBER AND PER CENT OF ALL MACON COUNTY CATTLEMEN INTERVIEWED;
HIGH, MEDIUM, AND LOW PRODUCERS, MENTIONING REASON FOR NOT HAVING
ANY MANAGEMENT PLANS^a

Reason for not having any plans	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
Not answered (had plans)	46	81	16	84	16	85	14	74
Satisfied with present operation	1	2	0	0	1	5	0	0
Doing a good job now	4	7	2	11	1	5	1	6
Physically unable	2	4	1	5	0	0	1	5
Lack of time and desire	2	4	0	0	1	5	1	5
Beef is sideline to the other family enterprise	1	1	0	0	0	0	1	5
Facilities are not suited	1	1	0	0	0	0	1	5
Total	57	100	19	100	19	100	19	100

^aPer cent is rounded to nearest whole number.

TABLE 32. BREEDS OF REGISTERED COWS IN HERDS BELONGING TO ALL MACON COUNTY CATTLEMEN INTERVIEWED; HIGH, MEDIUM, AND LOW PRODUCERS, BY NUMBER AND PER CENT^a

Breed of registered cows	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
Angus	16	28	7	37	1	5	8	42
Hereford (Horned)	4	7	1	5	0	0	3	16
Hereford (Polled)	4	7	2	11	2	11	0	0
Total	24	100	10	100	3	100	11	100

^aPer cent is rounded to nearest whole number.

TABLE 33. BREEDS OF GRADE COWS IN HERD BELONGING TO ALL MACON COUNTY CATTLEMEN INTERVIEWED; HIGH, MEDIUM, AND LOW PRODUCERS BY NUMBER AND PER CENT^a

Breed of grade cows	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
Angus	13	23	2	11	6	31	5	26
Hereford (Horned)	14	25	4	21	3	16	7	37
Hereford (Polled)	9	16	4	21	5	26	0	0
Hereford (Horned and polled)	2	3	0	0	2	11	0	0
Total	38	100	10	100	16	100	12	100

^a Per cent is rounded to nearest whole number.

TABLE 34. ACTUAL TOTAL NUMBER OF BEEF COWS BELONGING TO ALL MACON COUNTY CATTLEMEN INTERVIEWED; HIGH, MEDIUM, AND LOW PRODUCERS, BY NUMBER AND PER CENT^a

Number of beef cows	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
1 - 14	23		10	53	5	26	8	42
15 - 24	18		7	37	6	32	5	26
25 - 34	9		0	0	8	42	1	5
35 - 44	4		2	10	0	0	2	11
45 - 54	3		0	0	0	0	3	16
Total	57		19	100	19	100	19	100
Average number beef cows	19.9		16.5		21.5		21.7	

^aPer cent is rounded to nearest whole number.

The high producers had an average of 16.5 cows per herd while the low producers averaged 21.7 cows per herd.

Table 35 shows the actual number of registered beef cows belonging to all Macon County cattlemen interviewed; high, medium and low producers, by number and per cent. Fifty-eight per cent of all cattlemen had no registered cows. All cattlemen reported registered cows averaged 6.2 registered cows per herd. The high producers averaged 6.1 cows per herd while the low producers averaged 9.7 cows per herd.

Table 36 shows actual number of grade beef cows belonging to all Macon County cattlemen interviewed; high, medium and low producers, by number and per cent. The average number of grade cows of all cattlemen was 13.7 per herd. The high producers averaged 10.4 cows while the low producers averaged 12.0 cows per herd.

Table 37 shows the total number of beef bulls kept by all Macon County cattlemen interviewed; high, medium and low producers, by number and per cent.

Table 38 shows breeds of registered bulls belonging to all Macon County cattlemen interviewed; high, medium and low producers, by number and per cent. The breed of the bull did not seem to relate to production.

Table 39 shows that only one cattlemen had a grade bull and he was a low producer.

Table 40 shows the number of registered bulls belonging to the cattlemen. The number of bulls belonging to each cattlemen did not relate to production.

TABLE 35. ACTUAL NUMBER OF REGISTERED BEEF COWS BELONGING TO ALL MACON COUNTY CATTLEMEN INTERVIEWED; HIGH, MEDIUM, AND LOW PRODUCERS, BY NUMBER AND PER CENT^a

Number of registered beef cows	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
None	33	58	9	47	16	84	8	42
1 - 14	16	28	9	47	2	11	5	26
15 - 24	5	9	1	6	0	0	4	21
25 - 34	3	5	0	0	1	5	2	11
Total	57	100	19	100	19	100	19	100
Average number registered cows	6.2		6.1		2.8		9.7	

^aPer cent is rounded to nearest whole number.

TABLE 36. ACTUAL NUMBER OF GRADE BEEF COWS BELONGING TO ALL MACON COUNTY CATTLEMEN INTERVIEWED; HIGH, MEDIUM, AND LOW PRODUCERS, BY NUMBER AND PER CENT^a

Number of grade cows	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
None	19	33	9	47	3	16	7	37
1 - 14	10	18	2	11	3	16	5	26
15 - 24	16	28	6	32	6	32	4	21
25 - 34	9	16	1	5	7	36	1	5
35 - 44	3	5	1	5	0	0	2	11
Total	57	100	19	100	19	100	19	100
Average number of grade cows	13.7		10.4		18.7		12.0	

^aPer cent is rounded to nearest whole number.

**TABLE 37. TOTAL NUMBER OF BEEF BULLS KEPT BY ALL MACON COUNTY
CATTLEMEN INTERVIEWED; HIGH, MEDIUM, AND LOW PRODUCERS,
BY NUMBER AND PER CENT^a**

Number of beef bulls	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
None	8	14	3	16	3	16	2	11
1	42	74	15	79	14	74	13	68
2	6	11	1	5	2	10	3	16
3	1	1	0	0	0	0	1	5
Total	57	100	19	100	19	100	19	100
Average for those having beef bulls	1.2		1.1		1.1		1.3	

^aPer cent is rounded to nearest whole number.

TABLE 38. BREEDS OF REGISTERED BULLS BELONGING TO ALL MACON COUNTY
CATTLEMEN INTERVIEWED; HIGH, MEDIUM, AND LOW PRODUCERS,
BY NUMBER AND PER CENT^a

Breeds of registered bulls	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
None	3	5	3	16	0	0	0	0
Angus	25	44	7	37	8	42	10	53
Hereford (Horned)	13	23	4	21	3	16	6	31
Hereford (Polled)	16	22	5	26	8	42	3	16
Total	57	100	19	100	19	100	19	100

^aPer cent is rounded to nearest whole number.

TABLE 39. BREEDS OF GRADE BULLS BELONGING TO ALL MACON COUNTY
CATTLEMEN INTERVIEWED; HIGH, MEDIUM, AND LOW PRODUCERS,
BY NUMBER AND PER CENT^a

Breeds of grade bulls	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
None	56	98	19	100	19	100	18	95
Hereford (Polled)	1	2	0	0	0	0	1	5
Total	57	100	19	100	19	100	19	100

^aPer cent is rounded to nearest whole number.

TABLE 40. ACTUAL NUMBER OF REGISTERED BULLS BELONGING TO ALL MACON COUNTY CATTLEMEN INTERVIEWED; HIGH, MEDIUM, AND LOW PRODUCERS, IN 1965 BY NUMBER AND PER CENT AND AVERAGE NUMBER^a

Number of bulls used	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
None	3	5	3	16	0	0	0	0
1	47	82	15	79	17	89	15	79
2	6	11	1	5	2	11	3	16
3	1	2	0	0	0	0	1	5
Total	57	100	19	100	19	100	19	100
Average used by those who used registered bulls	1.2		1.1		1.1		1.3	

^aPer cent is rounded to nearest whole number.

Table 41 shows the number of calves born in 1965 belonging to all Macon County cattlemen interviewed; high, medium and low producers, by number and per cent.

The data in Table 42 shows that the low producers had more calves weaned than the high producers. It was shown in Table 34 (page 51) that the low producers had larger herds than the high producers.

Table 43 shows the total number of calves marketed during last year by all cattlemen interviewed; high, medium and low producers, by number and per cent.

Table 44 shows that 41 per cent of the high producers and 63 per cent of the medium producers marketed their calves in organized feeder calf sales whereas only 21 per cent of the low producers marketed their calves in this recommended manner.

Table 45 shows the total number of calves sold by cattlemen in 1965. The low producers sold more calves than the high producers.

Table 46 shows the estimated weight of calves sold by cattlemen. The low producers sold more pounds than the high producers. Table 34 (page 51) showed that the low producers had larger herds and this accounts for the low producers selling more pounds.

Table 47 shows the average weight of the calf sold by cattlemen. The high producers calves were 125 pounds heavier per calf than the low producers calves.

Table 48 shows the average price received by all cattlemen to be 23 cents per pound. The high producers received an average price of 24 cents per pound as compared to 22 cents per pound by the low producers.

TABLE 41. ACTUAL TOTAL NUMBER OF CALVES BORN LAST YEAR BELONGING
TO ALL MACON COUNTY CATTLEMEN INTERVIEWED; HIGH, MEDIUM, AND
LOW PRODUCERS, BY NUMBER AND PER CENT^a

Number of calves born last year	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
5 - 14	21	36	9	47	4	21	8	42
15 - 24	18	32	8	42	5	26	5	26
25 - 34	6	11	0	0	6	32	0	0
35 - 44	7	12	2	11	3	16	2	11
45 - 54	5	9	0	0	1	5	4	21
Total	57	100	19	100	19	100	19	100
Average number of calves born	21.3		17.7		22.6		23.6	

^aPer cent is rounded to nearest whole number.

TABLE 42. ACTUAL NUMBER OF CALVES, AND ACTUAL AVERAGE, RAISED TO WEANING AGE BY ALL MACON COUNTY CATTLEMEN INTERVIEWED; HIGH, MEDIUM, AND LOW PRODUCERS, BY NUMBER AND PER CENT^a

No. of calves raised to weaning age	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
1 - 9	8	14	2	11	3	16	3	16
10 - 19	26	46	12	63	5	26	9	47
20 - 29	9	16	3	16	5	26	1	5
30 - 39	8	14	1	5	5	26	2	11
40 - 59	6	10	1	5	1	6	4	21
Total	57	100	19	100	19	100	19	100
Average number	20.8		17.2		21.2		22.2	

^aPer cent is rounded to nearest whole number.

TABLE 43. ACTUAL TOTAL NUMBER OF CALVES MARKETED DURING LAST YEAR
BY ALL MACON COUNTY CATTLEMEN INTERVIEWED; HIGH, MEDIUM, AND
LOW PRODUCERS, BY NUMBER AND PER CENT^a

Number of calves marketed last year	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
None marketed	6	11	2	10	1	5	3	16
1 - 9	13	23	7	37	3	16	3	16
10 - 19	19	33	7	37	6	32	6	32
20 - 29	12	21	1	5	8	42	3	16
30 - 39	5	9	2	11	1	5	2	10
40 - 51	2	3	0	0	0	0	2	10
Total	57	100	19	100	19	100	19	100
Average number of calves marketed	16		12		18		18	

^aPer cent is rounded to nearest whole number.

TABLE 44. DIFFERENT PLACES WHERE CALVES WERE SOLD BY ALL MACON COUNTY CATTLEMEN INTERVIEWED; HIGH, MEDIUM, AND LOW PRODUCERS, BY NUMBER AND PER CENT^a

Place of sale	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
None sold	2	3	1	5	0	0	1	5
At the farm	7	12	3	16	1	5	3	16
Stockyard	12	21	1	5	5	27	6	32
Organized feeder sales	24	42	8	42	12	63	4	21
Special stock sales	0	0	0	0	0	0	0	0
At farm and special stock sale	1	2	1	5	0	0	0	0
Stockyards and organized feeder sales	6	11	2	11	0	0	4	21
At farm and organized feeder sales	5	9	3	16	1	5	1	5
Total	57	100	19	100	19	100	19	100

^aPer cent is rounded to nearest whole number.

TABLE 45. TOTAL NUMBER OF 1965 CALVES SOLD BY ALL MACON COUNTY
CATTLEMEN INTERVIEWED; HIGH, MEDIUM, AND LOW PRODUCERS,
BY NUMBER AND PER CENT AND AVERAGE^a

Number of calves sold	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
Not answered	1		0	0	0	0	1	5
1 - 9	12		7	37	2	10	3	16
10 - 15	16		6	32	3	16	7	37
16 - 25	12		4	21	6	32	2	11
26 - 35	12		1	5	7	37	4	21
36 - 55	4		1	5	1	5	2	10
Total	57		19	100	19	100	19	100
Actual average		18.0		14.0		20.8		19.3

^aPer cent is rounded to the nearest whole number.

TABLE 46. TOTAL ESTIMATED WEIGHT OF CALVES SOLD BY ALL MACON COUNTY CATTLEMEN INTERVIEWED; HIGH, MEDIUM, AND LOW PRODUCERS, BY NUMBER AND PER CENT^a

Total weight sold	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
Nona sold	1	2	0	0	0	0	1	5
Under 2,000	6	11	3	16	2	10	1	5
2,000 - 5,999	15	26	4	21	3	16	8	43
6,000 - 9,999	19	33	10	53	6	32	3	16
10,000-14,999	11	19	0	0	7	37	4	21
15,000-19,999	4	7	2	10	1	5	1	5
20,000-29,999	1	2	0	0	0	0	1	5
Total	57	100	19	100	19	100	19	100
Actual average	7,636		6,899		8,496		7,512	

^aPer cent is rounded to the nearest whole number.

TABLE 47. AVERAGE WEIGHT PER CALF SOLD BY ALL MACON COUNTY CATTLEMEN INTERVIEWED; HIGH, MEDIUM, AND LOW PRODUCERS, BY NUMBER AND PER CENT^a

Average weight sold	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
None sold	1	2	0	0	0	0	1	5
300 - 349	3	5	0	0	0	0	3	16
350 - 399	6	11	0	0	1	5	5	26
400 - 449	19	33	2	11	8	43	9	48
450 - 499	16	28	8	42	7	36	1	5
500 - 549	10	18	7	36	3	16	0	0
550 - 599	2	3	2	11	0	0	0	0
Total	57	100	19	100	19	100	19	100
Actual average	432		486		449		361	

^aPer cent is rounded to nearest whole number.

TABLE 48. PRICE PER POUND RECEIVED FOR CALVES SOLD BY ALL MAGON COUNTY CATTLEMEN INTERVIEWED; HIGH, MEDIUM, AND LOW PRODUCERS, BY NUMBER AND PER CENT AND AVERAGE^a

Price per head received	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
None sold	4	7	1	5	0	0	3	15
20 ~ 21	6	11	2	11	2	11	2	11
22 ~ 23	6	11	1	5	3	16	2	11
24 ~ 25	24	42	8	42	9	47	7	36
26 ~ 27	12	21	6	32	4	21	2	11
28 ~ 29	4	7	1	5	1	5	2	11
30 ~ 50	1	1	0	0	0	0	1	5
Total	57	100	19	100	19	100	19	100
Actual average	.23		.24		.25		.22	

^aPer cent is rounded to nearest whole number.

Table 49 shows the total weight of calves kept and/or sold in 1965 by all Macon County cattlemen interviewed; high, medium and low producers, by number and per cent.

Table 50 shows the high producers are keeping more replacement heifers than the low producers; and also that the medium producers are keeping more than the high producers.

Table 51 shows the high producers have replacement heifers weighing about 70 pounds more than the low producers. This is one of the evidences of superior management.

Table 52 shows the average estimated weight of replacement heifers (in pounds) belonging to all Macon County cattlemen interviewed; high, medium and low producers, by number. The average weight of the high producers was 483 pounds. While this is 41 pounds above the average of all cattlemen, the low producers only had an average weight of 414 pounds.

Table 53 shows that cattlemen interviewed had very few registered heifers.

Table 54 shows breeds of grade heifer kept to be about equal among high, medium and low producers.

Table 55 shows that the low producers kept about three times as many heifers under one year of age as did the high producers. This may indicate that the low producers are culling more brood cows than the high producers.

Table 56 shows that 91 per cent of all cattlemen did not keep any registered heifers.

TABLE 49. TOTAL WEIGHT OF CALVES KEPT AND/OR SOLD IN 1965 BY ALL
MACON COUNTY CATTLEMEN INTERVIEWED; HIGH, MEDIUM, AND LOW
PRODUCERS, BY NUMBER AND PER CENT^a

Weight of calves kept and/or sold	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
20- 2,999	5	9	1	5	2	11	2	10
3,000- 4,999	6	10	1	5	1	5	4	21
5,000- 5,999	8	14	3	16	1	5	4	21
6,000- 6,999	8	14	4	21	3	16	1	5
7,000- 8,999	8	14	5	27	1	5	2	10
9,000-12,999	9	16	3	16	6	32	0	0
13,000-15,999	5	9	0	0	3	16	2	11
16,000-18,999	4	7	1	5	1	5	2	11
19,000-20,999	4	7	1	5	1	5	2	11
Total	57	100	19	100	19	100	19	100
Total median weight of calves kept and/or sold	8,981		8,337		9,832		8,774	

^aPer cent is rounded to nearest whole number.

TABLE 50. TOTAL NUMBER OF REPLACEMENT HEIFERS KEPT BY ALL MACON COUNTY CATTLEMEN INTERVIEWED; HIGH, MEDIUM, AND LOW PRODUCERS, BY NUMBER AND PER CENT^a

Number of replacement heifers kept	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
None	24	42	7	37	6	32	11	58
1 - 5	21	37	8	42	8	42	5	27
6 - 10	8	14	4	21	3	16	1	5
11 - 15	3	5	0	0	2	10	1	5
16 - 21	1	2	0	0	0	0	1	5
Total	57	100	19	100	19	100	19	100
Actual average	3.12		2.89		3.68		2.79	

^aPer cent is rounded to nearest whole number.

TABLE 51. ESTIMATED WEIGHTS OF REPLACEMENT HEIFERS KEPT BY ALL MACON COUNTY CATTLEMEN INTERVIEWED; HIGH, MEDIUM, AND LOW PRODUCERS, BY NUMBER AND PER CENT^a

Weights per heifer kept	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
Pounds								
None kept	21	37	7	37	5	27	9	47
300 - 399	7	12	0	0	1	5	6	32
400 - 499	21	37	8	42	9	47	4	21
500 - 599	7	12	3	16	4	21	0	0
600 - 699	1	2	1	5	0	0	0	0
Total	57	100	19	100	19	100	19	100
Actual average	442		483		473		414	

^aPer cent is rounded to nearest whole number.

TABLE 52. AVERAGE ESTIMATED WEIGHT OF REPLACEMENT HEIFERS (IN POUNDS)
 BELONGING TO ALL MACON COUNTY CATTLEMEN INTERVIEWED; HIGH, MEDIUM,
 AND LOW PRODUCERS, BY NUMBER AND PER CENT^a

Estimated weight of replacement heifers	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
Pounds								
None kept	21	37	7	36	5	26	9	47
350 - 449	16	28	2	11	6	32	8	42
450 - 549	17	30	8	42	7	37	2	11
550 - 649	3	5	2	11	1	5	0	0
Total	57	100	19	100	19	100	19	100
Average weight of replacement heifers	442		483		473		414	

^aPer cent is rounded to nearest whole number.

TABLE 53. BREEDS OF REGISTERED HEIFERS BELONGING TO ALL MACON COUNTY CATTLEMEN INTERVIEWED; HIGH, MEDIUM, AND LOW PRODUCERS, BY NUMBER AND PER CENT^a

Breed of registered heifers	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
None	49	86	16	84	18	95	15	78
Angus	4	7	2	11	0	0	2	11
Hereford (Horned)	3	5	1	5	0	0	2	11
Hereford (Polled)	1	2	0	0	1	5	0	0
Total	57	100	19	100	19	100	19	100

^aPer cent is rounded to nearest whole number.

TABLE 54. BREEDS OF GRADE HEIFERS KEPT BY ALL MACON COUNTY CATTLEMEN INTERVIEWED; HIGH, MEDIUM, AND LOW PRODUCERS, BY NUMBER AND PER CENT^a

Breed of grade heifers	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
None	29	51	12	63	6	32	11	58
Angus	9	16	2	11	5	26	2	10
Hereford (Horned)	12	21	2	11	4	21	6	32
Hereford (Polled)	7	12	3	15	4	21	0	0
Total	57	100	19	100	19	100	19	100

^aPer cent is rounded to nearest whole number.

TABLE 55. ACTUAL TOTAL NUMBER OF BEEF HEIFERS UNDER ONE YEAR OF AGE KEPT BY ALL MACON COUNTY CATTLEMEN INTERVIEWED; HIGH, MEDIUM, AND LOW PRODUCERS, BY NUMBER AND PER CENT^a

Number of heifers under one year of age kept	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
None	40	70	13	68	12	63	15	78
1 - 5	12	21	6	32	4	21	2	11
6 - 15	5	9	0	0	3	16	2	11
Total	57	100	19	100	19	100	19	100
Average number kept by those having heifers	4.8		2.7		4.7		8.0	

^aPer cent is rounded to nearest whole number.

TABLE 56. ACTUAL NUMBER OF REGISTERED BEEF HEIFERS UNDER ONE YEAR OF AGE KEPT BY ALL MACON COUNTY CATTLEMEN INTERVIEWED; HIGH, MEDIUM, AND LOW PRODUCERS, BY NUMBER AND PER CENT^a

Number of registered heifers under one year of age kept	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
None	32	91	16	84	18	95	18	95
1 - 5	5	9	3	16	1	5	1	5
Total	37	100	19	100	19	100	19	100
Average of those keeping registered heifers	2.8		2.3		2.0		5.0	

^aPer cent is rounded to nearest whole number.

Table 57 shows that only 16 per cent of the cattlemen kept grade beef heifers under one year of age. Sixteen per cent of high producers kept heifers under one year of age while only 5 per cent of the low producers kept heifers under one year of age.

Table 58 shows the actual number and per cent of beef heifers over one year of age.

Table 59 shows that 86 per cent of cattlemen did not have registered heifers over one year of age.

Table 60 shows the actual number and per cent of grade heifers over one year of age kept by cattlemen.

The data in Table 61 show that cattlemen in all three categories had more cattle in 1965 than they did in 1964.

Table 62 shows all producers to be about equal in the number of additional cows kept in 1965.

Table 63 shows that the major reasons for increased herd expansion in both high and low producers were plenty of feed and keeping replacement heifers.

Table 64 shows that 13 per cent of the cattlemen had fewer cows in 1965 than in 1964.

Table 65 shows that 21 per cent of all cattlemen purchased some cattle in 1965. Sixty-eight per cent of the high producers reported no cattle purchased while 74 per cent of the low producers reported no cattle purchased.

Table 66 shows that the high producers paid on the average \$205 per head for cattle purchased while the low producers paid \$231 per head.

TABLE 57. NUMBER OF GRADE BEEF HEIFERS UNDER ONE YEAR OF AGE KEPT
BY ALL MACON COUNTY CATTLEMEN INTERVIEWED; HIGH, MEDIUM, AND
LOW PRODUCERS, BY NUMBER AND PER CENT^a

Number of grade heifers under one year of age kept	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
None	48	84	16	84	14	74	18	95
1 - 4	5	9	2	11	2	10	1	5
5 - 9	4	7	1	5	3	16	0	0
Total	57	100	19	100	19	100	19	100
Average for those having grade heifers	4.1		3.0		5.2		2.0	

^aPer cent is rounded to nearest whole number.

TABLE 58. ACTUAL TOTAL NUMBER OF BEEF HEIFERS OVER ONE YEAR OF AGE BELONGING TO ALL MACON COUNTY CATTLEMEN INTERVIEWED; HIGH, MEDIUM, AND LOW PRODUCERS, BY NUMBER AND PER CENT^a

Number of beef heifers over one year of age	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
None	23	40	10	52	6	32	7	37
1 - 4	19	33	6	32	8	42	5	26
5 - 14	13	23	3	16	4	21	6	32
	1	2					1	5
15 - 24	0	0	0	0	0	0	0	0
25 - 34	1	2	0	0	1	5	0	0
Total	57	100	19	100	19	100	19	100
Average number	3.6		2.5		4.2		4.1	

^aPer cent is rounded to nearest whole number.

TABLE 59. ACTUAL NUMBER OF REGISTERED BEEF HEIFERS OVER ONE YEAR OF AGE KEPT BY ALL MACON COUNTY CATTLEMEN INTERVIEWED; HIGH, MEDIUM, AND LOW PRODUCERS, BY NUMBER AND PER CENT^a

Number of registered beef heifers over 1 year of age kept	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
None	49	86	16	84	18	95	15	79
1 - 6	3	5	1	5	1	5	1	5
7 - 11	5	9	2	11	0	0	3	16
Total	57	100	19	100	19	100	19	100
Average number kept by those having registered heifers	6.4		7.3		3.0		6.5	

^a Per cent is rounded to nearest whole number.

TABLE 60. ACTUAL NUMBER OF GRADE BEEF HEIFERS OVER ONE YEAR OF AGE KEPT BY ALL MACON COUNTY CATTLEMEN INTERVIEWED; HIGH, MEDIUM, AND LOW PRODUCERS, BY NUMBER AND PER CENT ^a

Number of grade beef heifers over 1 year of age kept	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
None	31	54	13	69	7	37	11	52
1 - 5	18	32	5	26	8	42	5	26
6 - 15	6	10	1	5	3	16	2	11
16 - 25	1	2	0	0	0	0	1	5
26 - 35	1	2	0	0	1	5	0	0
Total	57	100	19	100	19	100	19	100
Average number kept by those having grade heifers	2.7		1.4		4.0		2.7	

^a Per cent is rounded to nearest whole number.

TABLE 61. CHANGES IN THE NUMBERS OF BEEF CATTLE KEPT IN 1965
OVER THE 1964 TOTAL BY ALL MACON COUNTY CATTLEMEN
INTERVIEWED; HIGH, MEDIUM, AND LOW PRODUCERS,
BY NUMBER AND PER CENT^a

Changes in 1965 herd size over the 1964 total	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
More	33	58	10	53	13	68	10	53
Same	17	30	7	37	4	21	6	32
Fewer	7	12	2	10	2	11	3	15
Total	57	100	19	100	19	100	19	100

^a Per cent is rounded to nearest whole number.

TABLE 62. THE NUMBER OF ADDITIONAL COWS KEPT IN 1965 BY ALL
 MACON COUNTY CATTLEMEN INTERVIEWED; HIGH, MEDIUM,
 AND LOW PRODUCERS, BY NUMBER AND PER CENT^a

Additional cows kept	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
None	24	42	9	47	6	32	9	47
Less than 5	18	32	7	37	7	37	4	21
5 - 9	6	10	0	0	4	21	2	11
10 - 14	9	16	3	16	2	10	4	21
Total	57	100	19	100	19	100	19	100

^aPer cent is rounded to nearest whole number.

TABLE 63. REASONS FOR HAVING MORE COWS IN 1965 THAN IN 1964
 REPORTED BY ALL MACON COUNTY CATTLEMEN INTERVIEWED; HIGH,
 MEDIUM, AND LOW PRODUCERS, BY NUMBER AND PER CENT^a

Reason reported having more cows	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
Not answered	24	42	9	47	6	32	9	47
Increasing herd	10	18	1	5	6	32	3	16
Replacement heifers	12	21	6	32	1	5	5	26
Plenty of feed	9	15	3	16	4	21	2	11
Haven't culled	1	2	0	0	1	5	0	0
Changing from beef to dairy	1	2	0	0	1	5	0	0
Total	57	100	19	100	19	100	19	100

^aPer cent is rounded to nearest whole number.

TABLE 64. HOW MANY FEWER CATTLE BELONGED TO ALL MACON COUNTY
CATTLEMEN INTERVIEWED; HIGH, MEDIUM, AND LOW PRODUCERS,
IN 1965 THAN IN 1964 BY NUMBER AND PER CENT^a

How many fewer cattle	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
None	50	87	17	90	17	90	16	85
One	2	3	0	0	1	5	1	5
Two	1	2	0	0	0	0	1	5
Three	1	2	0	0	0	0	1	5
Four	1	2	1	5	0	0	0	0
Five	1	2	1	5	0	0	0	0
Eight	1	2	0	0	1	5	0	0
Total	57	100	19	100	19	100	19	100

^aPer cent is rounded to nearest whole number.

TABLE 65. NUMBER AND PER CENT OF ALL MACON COUNTY CATTLEMEN
INTERVIEWED; HIGH, MEDIUM, AND LOW PRODUCERS,
CONCERNING WHETHER OR NOT ANY COWS WERE
PURCHASED IN 1965^a

Cows were purchased last year	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
Yes	12	21	6	32	1	5	5	26
No	45	79	13	68	18	95	14	74
Total	57	100	19	100	19	100	19	100

^a Per cent is rounded to nearest whole number.

TABLE 66. ACTUAL APPROXIMATE PRICE PER COW BOUGHT BY ALL MACON COUNTY CATTLEMEN INTERVIEWED; HIGH, MEDIUM, AND LOW PRODUCERS BY NUMBER AND PER CENT^a

Approximate price per cow bought	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
None bought	45	79	13	68	18	95	14	74
100 - 149	3	5	1	5	1	5	1	5
150 - 249	5	9	3	16	0	0	2	11
250 - 349	3	5	2	11	0	0	1	5
350 - 400	1	2	0	0	0	0	1	5
Total	57	100	19	100	19	100	19	100
Actual approximate price per cow bought	\$210		\$205		\$128		\$231	

^aPer cent is rounded to nearest whole number.

Table 67 shows that eleven low producers sold cows last year while only seven high producers sold cows.

Table 68 shows actual number of cows sold by cattlemen.

Table 69 shows the approximate sale price. The high producers received \$20 more per head than the low producers.

Table 70 shows that 23 per cent of all cattlemen purchased bulls in 1965.

Table 71 shows that the high producer paid \$400 for a bull when the six low producers paid on the average \$352 per bull.

Table 72 shows that high producers received \$289 per head while low producers received \$221 per head for bulls sold. Seventy-two per cent of all cattlemen sold no mature bulls.

Table 73 shows the high producers averaged 19 cows per herd while the medium and low producers averaged over 25 cows per herd.

Table 74 shows the high producers bred 18.1 cows to calve in 1965 whereas the low producers bred 25 cows to calve in 1965.

Table 75 shows that 88 per cent of all cattlemen used only one bull. The high producers averaged 1.0 bulls per herd while the low producers averaged 1.2 bulls per herd.

Table 76 shows that all cattlemen who bred heifers bred their heifers naturally.

Table 77 shows that 93 per cent of the cattlemen answering used beef bulls.

Table 78 shows that the high producers used 1.0 bulls breeding their heifers while the low producers used 1.2 bulls.

TABLE 67. NUMBER AND PER CENT OF ALL MACON COUNTY CATTLEMEN
INTERVIEWED; HIGH, MEDIUM, AND LOW PRODUCERS, IF ANY COWS
WERE SOLD LAST YEAR^a

Any cows sold last year	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
Yes	27	47	7	37	9	47	11	58
No	30	53	12	63	10	53	8	42
Total	57	100	19	100	19	100	19	100

^aPer cent is rounded to nearest whole number.

TABLE 68. ACTUAL NUMBER OF COWS SOLD BY ALL MACON COUNTY CATTLEMEN
INTERVIEWED; HIGH, MEDIUM, AND LOW PRODUCERS, BY
NUMBER AND PER CENT^a

Number of cows sold	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
None	30	53	12	63	10	53	8	42
1 - 2	12	21	3	15	4	21	5	26
3 - 4	8	14	0	0	4	21	4	21
5 - 6	4	8	2	11	0	0	2	11
7 - 8	3	4	2	11	1	5	0	0
Total	57	100	19	100	19	100	19	100
Actual average	1.6		1.7		1.5		1.6	

^aPer cent is rounded to nearest whole number.

TABLE 69. ACTUAL APPROXIMATE SALE PRICE PER COW SOLD LAST YEAR BY
ALL MACON COUNTY CATTLEMEN INTERVIEWED; HIGH, MEDIUM, AND LOW
PRODUCERS, BY NUMBER AND PER CENT^a

Approximate sale price per cow	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
None sold	30	53	12	63	10	53	8	42
30 - 49	1	2	0	0	0	0	1	5
50 - 79	1	2	0	0	0	0	1	5
80 - 149	13	22	3	16	3	15	7	37
150 - 249	12	21	4	21	6	32	2	11
Total	57	100	19	100	19	100	19	100
Average sale price per cow for those answering	\$141		\$147		\$152		\$127	

^aPer cent is rounded to nearest whole number.

TABLE 70. NUMBER AND PER CENT OF MATURE BULLS PURCHASED IN 1965
BY ALL MACON COUNTY CATTLEMEN INTERVIEWED; HIGH, MEDIUM,
AND LOW PRODUCERS^a

Number of bulls purchased	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
None	44	77	18	95	13	68	13	69
1	12	21	1	5	6	32	4	26
2	1	2	0	0	0	0	1	5
Total	57	100	19	100	19	100	19	100

^aPer cent is rounded to nearest whole number.

TABLE 71. ACTUAL APPROXIMATE PRICE OF MATURE BULLS BOUGHT IN 1965
BY ALL MACON COUNTY CATTLEMEN INTERVIEWED; HIGH, MEDIUM, AND
LOW PRODUCERS, BY NUMBER AND PER CENT^a

Price paid for mature bulls purchased	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
None bought	44	78	18	95	13	68	13	68
100 - 245	4	7	0	0	0	0	4	21
250 - 445	5	9	1	5	3	16	1	5
450 - 645	2	3	0	0	2	11	0	0
650 - 1100	2	3	0	0	1	5	1	6
Total	57	100	19	100	19	100	19	100
Average price paid for bull for those answering	\$404		\$400		\$457		\$352	

^aPer cent is rounded to nearest whole number.

TABLE 72. ACTUAL APPROXIMATE PRICE OF MATURE BULLS SOLD IN 1965 BY
ALL MAGON COUNTY CATTLEMEN INTERVIEWED; HIGH, MEDIUM, AND LOW
PRODUCERS, BY NUMBER AND PER CENT^a

Price of mature bull sold	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
None sold	41	72	16	84	14	74	11	58
100 - 199	4	7	0	0	1	5	3	16
200 - 299	10	18	2	11	3	16	5	26
300 - 399	2	3	1	5	1	5	0	0
Total	57	100	19	100	19	100	19	100
Average price for bull sold for those answering	\$242		\$289		\$247		\$221	

^a Per cent is rounded to nearest whole number.

TABLE 73. ACTUAL NUMBER FEMALES OF BREEDING AGE IN BEEF HERD IN 1965
 BELONGING TO ALL MACON COUNTY CATTLEMEN INTERVIEWED; HIGH, MEDIUM,
 AND LOW PRODUCERS, BY NUMBER AND PER CENT^a

Number of females of breeding age	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
1 - 14	18	32	8	42	4	21	6	32
15 - 24	19	33	8	42	4	21	7	37
25 - 44	15	26	2	11	11	58	2	10
45 - 65	5	9	1	5	0	0	4	21
Total	57	100	19	100	19	100	19	100
Average number of females of breed- ing age	23.4		19.0		25.5		25.7	

^aPer cent is rounded to nearest whole number.

TABLE 74. ACTUAL NUMBER OF FEMALES THAT WERE BRED TO CALVE IN 1965
 BELONGING TO ALL MACON COUNTY CATTLEMEN INTERVIEWED; HIGH, MEDIUM,
 AND LOW PRODUCERS, BY NUMBER AND PER CENT^a

Number of females bred to calve	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
1 - 14	18	31	8	42	4	21	6	31
15 - 24	20	35	9	48	4	21	7	37
25 - 34	7	12	0	0	7	37	0	0
35 - 44	6	11	1	5	3	16	2	11
45 - 60	6	11	1	5	1	5	4	21
Total	57	100	19	100	19	100	19	100
Average number females bred to calve	22.6		18.1		24.8		25.0	

^aPer cent is rounded to nearest whole number.

TABLE 75. ACTUAL NUMBER OF BULLS USED DURING THE BREEDING SEASON
BY ALL MACON COUNTY CATTLEMEN INTERVIEWED; HIGH, MEDIUM, AND
LOW PRODUCERS, BY NUMBER AND PER CENT^a

Number of bulls used during breeding	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
1	50	88	18	95	17	89	15	79
2	7	12	1	5	2	11	4	21
Total	57	100	19	100	19	100	19	100
Average number bulls used	1.0		1.0		1.1		1.2	

^aPer cent is rounded to nearest whole number.

TABLE 76. NUMBER AND PER CENT OF ALL MACON COUNTY CATTLEMEN
INTERVIEWED; HIGH, MEDIUM, AND LOW PRODUCERS, IN 1965
BY METHOD OF BREEDING HEIFERS^a

Method of breeding heifers	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
None bred	23	40	9	47	6	32	8	42
Naturally	34	60	10	53	13	68	11	58
Total	57	100	19	100	19	100	19	100

^aPer cent is rounded to nearest whole number.

TABLE 77. NUMBER AND PER CENT OF ALL MACON COUNTY CATTLEMEN
INTERVIEWED; HIGH, MEDIUM, AND LOW PRODUCERS, IN 1965 BY
THE TYPES OF BULL USED ON HEIFERS^a

Types of bulls	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
Not answered	4	7	1	5	0	0	3	16
Beef	53	93	18	95	19	100	16	84
Total	57	100	19	100	19	100	19	100

^aPer cent is rounded to nearest whole number.

TABLE 78. TOTAL NUMBER OF BULLS USED ON HEIFERS BY ALL MACON COUNTY
CATTLEMEN INTERVIEWED; HIGH, MEDIUM, AND LOW PRODUCERS,
BY NUMBER AND PER CENT^a

Number of bulls used	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
Not answered	6	11	2	11	0	0	4	21
1	44	77	16	84	17	89	11	58
2	6	11	1	5	2	11	3	16
8	1	1	0	0	0	0	1	5
Total	57	100	19	100	19	100	19	100
Actual average	1.1		1.0		1.1		1.2	

^aPer cent is rounded to nearest whole number.

Table 79 shows the shelter provided the cow herds. Seventy-four per cent of the high producers provided shelter in winter while 53 per cent of the low producers furnished shelter.

Table 80 shows the number of all cattlemen; high, medium and low producers who had restraining equipment.

Table 81 shows the number of cattlemen; high, medium and low producers who had scales, back rubbers, and shelters for the herd.

Table 82 shows that 98 per cent of cattlemen did not have silos whereas only 2 per cent had a trench silo.

The data in Table 83 shows the number and per cent of the cattlemen by average management level ratings and total averages. All of the high producers were above a 2.5 rating, and about 80 per cent were above a 3.5 rating. Only 58 per cent of the low producers were above a 3.5 rating.

Table 84 shows the sources of water for the herd.

Table 85 shows that all groups of producers were about equal in the practice of creep feeding calves.

Table 86 shows 72 per cent of all cattlemen did not creep feed. The other 28 per cent used various rations with more farmers using crushed corn and cottonseed meal than any other ration.

Table 87 shows the kinds of concentrates purchased and fed last year. Over half of the cattlemen purchased and fed no concentrates. A majority of cattlemen who purchased and fed concentrates fed concentrates other than cottonseed meal.

TABLE 79. NATURE OF SHELTER PROVIDED BY ALL MACON COUNTY
CATTLEMEN INTERVIEWED; HIGH, MEDIUM, AND LOW PRODUCERS,
BY NUMBER AND PER CENT ^a

Nature of shelter provided	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
Not answered	1	2	0	0	0	0	1	5
Year round	11	19	3	16	4	21	4	21
Winter only	35	61	14	74	11	58	10	53
None	10	18	2	10	4	21	4	21
Total	57	100	19	100	19	100	19	100

^aPer cent is rounded to nearest whole number.

TABLE 80. TYPES OF RESTRAINING EQUIPMENT IN WORKABLE CONDITION
USED BY ALL MACON COUNTY CATTLEMEN INTERVIEWED; HIGH,
MEDIUM, AND LOW PRODUCERS, BY NUMBER AND PER CENT^a

Types of restraining equipment ^b	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
Chutes and corrals	30	53	11	58	8	42	11	58
Headgate	27	47	9	47	8	42	10	53
Squeeze chute	5	9	1	5	1	5	3	6

^aPer cent is rounded to nearest whole number.

^bNumber and per cent add up to more than totals since some cattlemen reported having two or more types of equipment in workable condition.

TABLE 81. TYPES OF SELECTED EQUIPMENT IN WORKABLE CONDITION USED
BY ALL MACON COUNTY CATTLEMEN INTERVIEWED; HIGH, MEDIUM, AND
LOW PRODUCERS, BY NUMBER AND PER CENT^a

Type of equipment ^b	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
Scales	52	91	19	100	17	89	16	84
Back rubber	29	51	10	53	11	56	8	42
Shelter for herd	42	74	15	79	13	68	14	74

^aPer cent is rounded to nearest whole number.

^bNumber and per cent add up to more than total since some cattlemen reported having two or more types of equipment in workable condition.

TABLE 82. NUMBER AND PER CENT OF ALL MACON COUNTY CATTLEMEN
INTERVIEWED; HIGH, MEDIUM, AND LOW PRODUCERS, HAVING
DIFFERENT KINDS OF SILOS^a

Kind of silo	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
None	56	98	19	100	18	95	19	100
Trench silo	1	2	0	0	1	5	0	0
Total	57	100	19	100	19	100	19	100

^aPer cent is rounded to nearest whole number.

TABLE 83. NUMBER AND PER CENT OF ALL MACON COUNTY CATTLEMEN
INTERVIEWED; HIGH, MEDIUM, AND LOW PRODUCERS, BY AVERAGE
MANAGEMENT LEVEL RATINGS AND TOTAL AVERAGE^a

Management level rating interval ^b	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
2.00 - 2.49	1	1	0	0	0	0	1	5
2.50 - 3.49	14	25	4	21	3	16	7	37
3.50 - 4.49	38	67	14	74	13	68	11	58
4.50 - 5.00	4	7	1	5	3	16	0	0
Total	57	100	19	100	19	100	19	100
Total average rating	3.87		4.03		4.02		3.55	

^aPer cent is rounded to nearest whole number.

^bIn the rating scale used, 0 = unaware; 1 = aware of the 23 recommended practices; 2 = interested in the practices; 3 = planning to try the practices; 4 = tried the practices, but not using; and 5 = using the practices.

TABLE 84. NUMBER AND PER CENT^a OF ALL MACON COUNTY CATTLEMEN INTERVIEWED; HIGH, MEDIUM, AND LOW PRODUCERS, ACCORDING TO SOURCES OF WATER FOR THE HERD^b

Source of water for herd	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
Water in barn	13	23	3	16	7	37	3	16
Water outside barn	17	30	4	21	8	42	5	26
Pond	50	88	16	84	17	89	17	89
Stream	46	81	18	95	16	84	12	63
Average number of sources per person	2.6		2.4		2.9		2.2	

^aPer cent is rounded to nearest whole number.

^bNumber and per cent add up to more than totals since some cattlemen reported having more than one source for water.

TABLE 85. CREEP FEEDING OF CALVES REPORTED BY ALL MACON COUNTY
CATTLEMEN INTERVIEWED; HIGH, MEDIUM, AND LOW PRODUCERS
BY NUMBER AND PER CENT^a

Calves creep fed	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
Creep fed calves	16	28	5	26	6	32	5	26
Did not creep feed calves	41	72	14	74	13	68	14	74
Total	57	100	19	100	19	100	19	100

^a Per cent is rounded to nearest whole number.

TABLE 86. ACTUAL CREEP RATION USED IN 1965 BY ALL MACON COUNTY
CATTLEMEN INTERVIEWED; HIGH, MEDIUM, AND LOW PRODUCERS,
BY NUMBER AND PER CENT^a

Creep ration used	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
None used	41	72	14	74	13	69	14	73
Cottonseed meal and crushed ear corn	7	12	3	16	4	21	0	0
Cottonseed meal, oats and corn	1	2	1	5	0	0	0	0
Cottonseed meal, barley and corn	1	2	1	5	0	0	0	0
Corn and steer fatina	1	2	0	0	1	5	0	0
Crushed ear corn w/molasses	1	2	0	0	1	5	0	0
Crushed ear corn	2	3	0	0	0	0	2	11
Omolene and shelled corn	1	2	0	0	0	0	1	5
Oats, wheat bran, cracked corn, molasses and protein	2	3	0	0	0	0	2	10
Total	57	100	19	100	19	100	19	100

^aPer cent is rounded to nearest whole number.

TABLE 87. KINDS OF CONCENTRATES PURCHASED AND FED LAST YEAR
BY ALL MACON COUNTY CATTLEMEN INTERVIEWED; HIGH,
MEDIUM, AND LOW PRODUCERS, BY NUMBER AND PER
CENT^a

Kinds of concentrates purchased and fed last year	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
None purchased nor fed	31	54	10	53	9	48	12	63
Cottonseed meal	2	4	0	0	0	0	2	11
Other	23	40	9	47	9	47	5	26
Cottonseed meal and other	1	2	0	0	1	5	0	0
Total	57	100	19	100	19	100	19	100

^aPer cent is rounded to nearest whole number.

Table 88 shows the amounts of concentrates fed in 1966 by all cattlemen; high, medium and low producers. The high producers fed more pounds of concentrates than the low producers.

Table 89 shows "things liked most about beef production" of all cattlemen interviewed; high, medium and low producers.

Table 90 shows "things disliked most about beef production" of all cattlemen interviewed; high, medium and low producers.

Table 91 shows the stage in adoption of new beef management practices, in the opinion of the interviewer.

Table 92 shows the number and per cent of all cattlemen interviewed; high, medium and low producers, who had talked to anyone about their beef cattle enterprise. Fifty-five of the 57 cattlemen interviewed reported that they had talked to someone.

Table 93 shows that the cattlemen had received more advice from the County Agent and the local veterinarian than anyone else.

Table 94 shows the source or sources from which they reported receiving useful information.

TABLE 88. ACTUAL AMOUNTS OF CONCENTRATES FED IN 1965 BY ALL MACON COUNTY CATTLEMEN INTERVIEWED: HIGH, MEDIUM, AND LOW PRODUCERS, BY NUMBER AND PER CENT^a

Amounts of concentrates fed last year	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
None fed	31	54	10	53	9	47	12	63
100 - 399	5	9	1	5	2	11	2	11
400 - 599	5	9	1	5	1	5	3	15
600 - 1,999	9	16	4	21	3	16	2	11
2,000 - 4,099	7	12	3	16	4	21	0	0
Total	57	100	19	100	19	100	19	100

^aPer cent is rounded to nearest whole number.



TABLE 89. NUMBER AND PER CENT^a OF ALL MACON COUNTY CATTLEMEN INTERVIEWED; HIGH, MEDIUM, AND LOW PRODUCERS, MENTIONING THINGS THEY LIKE MOST ABOUT BEEF CATTLE PRODUCTION SYSTEM

Things liked most about beef production	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
Income from cattle	7	12	2	11	4	21	1	5
Require less labor	25	44	7	37	7	37	11	58
More time for other jobs	6	10	1	5	4	22	1	5
Like working with cattle	5	9	2	11	1	5	2	11
Can utilize rough pasture	7	12	4	21	1	5	2	11
No milking	5	9	3	15	1	5	1	5
Beef utilize soil building crops	2	4	0	0	1	5	1	5
Total	57	100	19	100	19	100	19	100

^aPer cent is rounded to nearest whole number.

TABLE 90. NUMBER AND PER CENT^a OF ALL MACON COUNTY CATTLEMEN
INTERVIEWED; HIGH, MEDIUM, AND LOW PRODUCERS, MENTIONING
THINGS THEY DISLIKED MOST ABOUT BEEF CATTLE
PRODUCTION SYSTEM

Things disliked most about beef production	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
Low income per head	25	44	12	63	7	37	6	32
Management problems (breeding, calving, etc.)	7	12	1	5	2	11	4	21
Income only once a year	5	8	0	0	2	11	3	16
Happy with it - no dislikes	10	18	2	11	5	26	3	16
Caring for cattle in cold weather	3	5	1	5	1	5	1	5
Watching fences	2	4	1	5	0	0	1	5
Herd too small	3	5	2	11	1	5	0	0
Too old	1	2	0	0	0	0	1	5
Land that could not produce crops	1	2	0	0	1	5	0	0
Total	57	100	19	100	19	100	19	100

^aPer cent is rounded to nearest whole number.

TABLE 91. INTERVIEWER'S OPINION OF STAGES OF THE ADOPTION PROCESS REPRESENTED BY ALL MACON COUNTY CATTLEMEN INTERVIEWED; HIGH, MEDIUM, AND LOW PRODUCERS, IN TERMS OF CERTAIN RECOMMENDED BEEF PRACTICES, BY NUMBER AND PER CENT^a AND AVERAGE RATING

Stage in adoption of new beef management practices	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
Among the first few (5 points)	1	2	0	0	1	5	0	0
Soon after the first few (4 points)	5	9	3	16	1	5	1	5
Sooner than average (3 points)	30	53	9	47	11	58	10	53
A little later than most (2 points)	19	33	7	37	5	27	7	37
Among the last few (1 point)	2	3	0	0	1	5	1	5
Total	57	100	19	100	19	100	19	100
Average rating	2.7		2.8		2.8		2.6	

^aPer cent is rounded to nearest whole number.

TABLE 92. NUMBER AND PER CENT^a OF ALL MACON COUNTY CATTLEMEN INTERVIEWED; HIGH, MEDIUM, AND LOW PRODUCERS, ACCORDING TO WHETHER THEY TALKED TO ANYONE ABOUT BEEF CATTLE OPERATION, PRODUCTION AND MARKETING

Talked to anyone or not	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
Yes	55	96	19	100	18	95	18	95
No	2	4	9	9	1	5	1	5
Total	57	100	19	100	19	100	19	100

^a Per cent is rounded to nearest whole number.

TABLE 93. NUMBER AND PER CENT^a OF ALL MACON COUNTY CATTLEMEN INTERVIEWED; HIGH, MEDIUM, AND LOW PRODUCERS, BY FREQUENCY WITH WHICH THEY REPORTED HAVING SOUGHT ADVICE CONCERNING BEEF PRODUCTION OF CERTAIN INDIVIDUALS^b

Persons from whom advice was sought	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
None	24	42	0	0	12	63	12	63
County agent	49	86	16	84	17	89	16	84
Assistant or special agent	24	42	7	37	7	37	10	53
Extension animal husbandman	9	16	4	21	3	16	2	11
Local veterinarian	40	70	10	53	15	79	15	79
Artificial breeding technician	1	2	0	0	0	0	1	5
Vo-Ag teacher	6	11	1	5	2	11	3	16
Cattle buyer	23	40	9	47	4	21	10	53
Feed dealer or salesman	14	25	5	26	4	21	5	26
Banker or PCA representative	8	14	2	11	3	16	3	16
Neighbor or friend (cattlemen)	37	65	12	63	11	56	14	74
Equipment dealer	3	5	1	5	1	5	1	5
Breed association fieldman	1	2	0	0	0	0	1	5
Actual number of individuals giving advice	4.2		3.5		4.2		4.9	

^aPer cent is rounded to nearest whole number.

^bNumbers and per cent add up to more than totals since some cattlemen reported two or more sources.

TABLE 94. NUMBER AND PER CENT^a OF ALL MACON COUNTY CATTLEMEN INTERVIEWED; HIGH, MEDIUM, AND LOW PRODUCERS, BY FREQUENCY WITH WHICH THEY REPORTED RECEIVING INFORMATION USEFUL IN MANAGEMENT OF THEIR BEEF HERDS FROM DIFFERENT SOURCES DURING THE PAST YEAR^b

Source of useful information	All cattlemen		High producers		Medium producers		Low producers	
	No.	%	No.	%	No.	%	No.	%
None	10	18	10	53	0	0	0	0
University bulletins and publications	31	54	11	56	13	68	7	37
Commercial (Feed Co.) bulletins	17	30	6	32	6	32	5	26
Farm magazine	45	79	14	74	15	79	16	84
Daily newspaper	16	28	3	16	5	26	8	42
Weekly newspaper	30	53	12	63	10	53	8	42
Radio	21	37	2	11	7	37	12	63
Television	8	14	2	11	2	11	4	21
Farm meetings	40	70	12	63	16	84	12	63
Field days and tours	35	61	12	63	15	79	8	42
Newsletters	12	21	2	11	4	21	6	32
Actual number of sources of information	4.6		4.5		4.9		4.5	

^aPer cent is rounded to nearest whole number.

^bNumbers and per cent add up to more than totals since some cattleman reported two or more sources.

CHAPTER V

SUMMARY

Fifty-seven Macon County beef cattle farmers were interviewed for this study. The main purposes of the study were to find the characteristics of these cattlemen; to ascertain which University of Tennessee recommended production practices were followed; and to determine what some of the more important factors were in influencing cattlemen to adopt or not adopt the recommended practices.

Most of the cattlemen interviewed were full time farmers. The major source of family income on these beef cattle farms was tobacco. The beef cattle enterprise was the second major source of income. Practically all of the farmers interviewed were very friendly toward the survey. An unfriendly attitude of a few cattlemen was probably related to personal conflicts with the interviewer on subjects unrelated to this study. The farmers who were interviewed had an educational level 25 per cent above the average of the educational level of the county. The high producers had approximately one grade higher educational level than the low producers.

The main pasture was fescue or some combination of fescue and a legume for all farms. It was interesting to note that more farmers grew fescue-white clover than fescue-lespedesa. Twice as many of the high producers grew fescue-white clover for pasture as did low producers. There appeared to be no difference in the rotational grazing program between high and low producers. Three times as many high producers

fertilized their pastures as did low producers. Approximately seventy-five per cent of the cattlemen grew legume hay. The high producers grew more acres and had a higher yield per acre than the low producers. Low producers had to purchase some legume hay as a protein supplement for their cows in their winter feeding program while high producers had to purchase none. Only one farmer reported having a silo. No farmers grew or fed any silage to their beef cattle. No cows were fed grain but about one-fourth of the farmers fed grain to their calves in a creep feeder while on pasture. More of the high producers obtained the protein for their cattle in winter by feeding home grown legume hay than the low producers.

The overall herd management level of the high producers was superior to the low producers in practically all University of Tennessee recommended practices. The high producers were superior by one-third over the low producers in the use of performance tested bulls. High producers used bulls that had twice the quality rating as bulls used by the low producers. Twice as many high producers kept herd production records as low producers. More high producers had their cows calving at the proper time of the year (January, February, March) so as to gain the highest net dollar return per cow.

The four factors listed in the above paragraph, along with a high quality hay and a good pasture program, appeared to be the principal factors placing these farmers into the high production category.

A large number of high producers sought advice from professionals in beef production and marketing than low producers. There were several

reasons given to the interviewer by the farmers for not adopting recommended practices. Forty-seven per cent of the low producers said that the reasons they did not follow recommended practices was their own neglect and their disbelief in the necessity of the recommended practices.

CRANES  CREST

LITERATURE CITED

CRANES  CREST

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APPENDIX

THE AGRICULTURAL EXTENSION SERVICE, UNIVERSITY OF TENNESSEE
Knoxville, Tennessee

TENNESSEE BEEF CATTLE PRODUCTION SURVEY

INTRODUCTION: I am working on a survey to assist the County Extension Staff in making plans to give more help to beef cattle producers in production and management practices. The answers you give will be confidential and will be added to those given by other beef cattlemen who are being interviewed in this county. We hope to get an overall picture of the beef production situation last year. Could I have a small portion of your time to go over these questions?

1. Total acres in farm _____ Cropland acres _____
2. Major occupation of the respondent
 - a. Full-time farmer _____
 - b. Part-time farmer _____
 - c. Business (specify) _____
 - d. Professional (specify) _____
 - e. Wage earner _____
 - f. Housewife or widow _____
 - g. Retired _____
 - h. Other (specify) _____
3. Is beef production your major source of income?
 - a. Yes _____
 - b. No _____
4. If your answer to question #3 above is NO, what is your major source of income? _____
5. Would you please complete this sentence? (Hand respondent card)

"The thing I like most about beef production is _____

TO THE INTERVIEWER: If the respondent mentions more than one thing, write down all of them, and ask him "which is most important?" Then underscore it.

6. Would you please complete this sentence? (Hand respondent card)

"The thing I dislike most about beef production is _____

TO THE INTERVIEWER: If the respondent mentions more than one thing, write down all of them, and ask him "which is most important?" Then underscore it.

7. How many females of breeding age were in your beef herd last year?

_____ (number)

8. How many of the females were bred to calve last year? _____ (number)

9. How many bulls did you use during the breeding season? _____ (number)

10. How many calves were raised to weaning age in your herd last year?

_____ (number)

11. How many beef cattle in each of the following classifications did you have last year?

	<u>Total</u>	<u>Registered</u>	<u>Grade</u>
a. Beef cows bred	_____	_____	_____
b. Beef heifers over 1 year of age	_____	_____	_____
c. Beef heifers under 1 year of age	_____	_____	_____
d. Beef bulls	_____	_____	_____

12. How many beef cattle in each of the classifications did you have in the following breeds? (Check with question #11 to see totals are the same)

<u>Breed</u>	<u>Number/cows</u>		<u>Number/heifers</u>		<u>Number/bulls</u>	
	<u>Regis.</u>	<u>Grade</u>	<u>Regis.</u>	<u>Grade</u>	<u>Regis.</u>	<u>Grade</u>
a. Angus	_____	_____	_____	_____	_____	_____
b. Hereford (Horned)	_____	_____	_____	_____	_____	_____
c. Hereford (Polled)	_____	_____	_____	_____	_____	_____
d. Shorthorn	_____	_____	_____	_____	_____	_____
e. Other (please specify)	_____	_____	_____	_____	_____	_____

13. Do you now have more, the same or fewer beef cattle than you did last year?

a. More _____	i. If so, how many more? _____	ii. If so, why _____
b. Same _____	i. If so, why _____	
c. Fewer _____	i. If so, how many fewer? _____	ii. If so, why? _____

14. How were your heifers bred last year?

a. Artificially _____ (no.) b. Naturally _____ (no.)

(i) Reasons for never trying practice OR not using it after trying _____

	Read or heard of		Inter-ested		Plans to try		Has Tried		Is Using	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
(3) Had herd enrolled in the Tennessee Beef Cattle Improvement Program										

(i) Reasons for never trying practice OR not using it after trying _____

- (4) Used separate pasture area for bull(s) during off-breeding season (August through March)

--	--	--	--	--	--	--	--	--	--	--

(i) Reasons for never trying practice OR not using it after trying _____

- (5) Waited until replacement heifers were at least 15 months of age and had attained a minimum weight of 650 lbs. before breeding.

--	--	--	--	--	--	--	--	--	--	--

(i) Reasons for never trying practice OR not using it after trying _____

- (6) Had all herd cows pregnancy checked last year

--	--	--	--	--	--	--	--	--	--	--

(i) Reasons for never trying practice OR not using after trying _____

- (7) Checked herd cows at least twice a day during breeding season

--	--	--	--	--	--	--	--	--	--	--

(i) Reasons for never trying practice OR not using it after trying _____

	Read or Heard of		Inter- ested		Plans to try		Has tried		Is using	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
(8) Had and used a system for identifying each breeding female in the herd	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)

(i) Reasons for never trying practice OR not using it after try-
ing _____

- (9) Checked first-calf
heifers at least 2
or 3 times daily dur-
ing calving season

--	--	--	--	--	--	--	--	--	--	--

(i) Reasons for never trying practice OR not using it after try-
ing _____

- (10) Checked older cows at
least once a day during
calving season

--	--	--	--	--	--	--	--	--	--	--

(i) Reasons for never trying practice OR not using it after try-
ing _____

- (11) Arranged to have com-
petent help available
when calving difficul-
ties occurred

--	--	--	--	--	--	--	--	--	--	--

(i) Reasons for never trying practice OR not using it after try-
ing _____

- (12) Had and used a system
for permanently iden-
tifying calves

--	--	--	--	--	--	--	--	--	--	--

(i) Reasons for never trying practice OR not using it after try-
ing _____

- (13) Followed recommended
procedures in castra-
tion

--	--	--	--	--	--	--	--	--	--	--

(i) Reasons for never trying practice OR not using it after try-
ing _____

	Read or Heard of		Inter- ested		Plans to try		Has tried		Is using	
	Yes (a)	No (b)	Yes (c)	No (d)	Yes (e)	No (f)	Yes (g)	No (h)	Yes (i)	No (j)
(14) Followed recommended procedures in dehorning										
(i) Reasons for <u>never trying</u> practices OR <u>not using</u> it after trying										
(15) Provided access to a recommended mineral mixture for all cattle										
(i) Reasons for <u>never trying</u> practice OR <u>not using</u> it after trying										
(16) Followed a systematic rotational grazing program										
(i) Reasons for <u>never trying</u> practice OR <u>not using</u> it after trying										
(17) Provided extra or supplementary grazing for the herd during July, August and September										
(i) Reasons for <u>never trying</u> practice OR <u>not using</u> it after trying										
(18) Kept cows on good permanent pasture sod until late fall and early winter to reduce winter feed costs										
(i) Reasons for <u>never trying</u> practice OR <u>not using</u> it after trying										
(19) Kept replacement heifers separate from rest of breeding herd during winter										
(i) Reasons for <u>never trying</u> practices OR <u>not using</u> it after trying										

	Read or heard of		Inter-ested		Plans to try		Has tried		Is using	
	Yes (a)	No (b)	Yes (c)	No (d)	Yes (e)	No (f)	Yes (g)	No (h)	Yes (i)	No (j)
(20) Fed more or better quality feed to thin cows and cows recently calved than to others										

(1) Reasons for never trying practice OR not using it after trying _____

- (21) Fed brood cows at least 1.5 lbs. of 32-44% protein supplement daily when feeding low quality roughages such as hulls, straw and poor quality grass hay

--	--	--	--	--	--	--	--	--	--	--

(1) Reasons for never trying practice OR not using it after trying _____

- (22) Fed bulls a concentrate during breeding season while on pasture

--	--	--	--	--	--	--	--	--	--	--

(1) Reasons for never trying practice OR not using it after trying _____

- (23) Followed recommended fly control practices

--	--	--	--	--	--	--	--	--	--	--

(1) Reasons for never trying practice OR not using it after trying _____

- (24) Followed recommended lice control practices

--	--	--	--	--	--	--	--	--	--	--

(1) Reasons for never trying practice OR not using it after trying _____

- (25) Used recommended grub control practices

--	--	--	--	--	--	--	--	--	--	--

(1) Reasons for never trying practice OR not using it after trying _____

	Read or heard of		Inter-ested		Plans to try		Has tried		Is using	
	Yes (a)	No (b)	Yes (c)	No (d)	Yes (e)	No (f)	Yes (g)	No (h)	Yes (i)	No (j)
(26) Used recommended materials in the control of internal parasites										
(i) Reasons for <u>never trying</u> practice OR <u>not using</u> it after trying										
(27) Vaccinated all brood cows and replacement heifers for leptospirosis										
(i) Reasons for <u>never trying</u> practice OR <u>not using</u> it after trying										
(28) Vaccinated all calves for blackleg and malignant edema during nursing period										
(i) Reasons for <u>never trying</u> practice OR <u>not using</u> it after trying										
(29) Checked cattle for possible trouble at least 3 times per week throughout the year										
(i) Reasons for <u>never trying</u> practice OR <u>not using</u> it after trying										
(30) Had, used appropriately, and maintained an adequate system of working pens, lots and restraining equipment										
(i) Reasons for <u>never trying</u> practice OR <u>not using</u> it after trying										
(31) Got the advice of professionals in the area of beef production and marketing										
(i) Reasons for <u>never trying</u> practice OR <u>not using</u> it after trying										

18. During the past year have you talked to anyone about your beef cattle operation (production and marketing)?

a. Yes _____

b. No _____

TO THE INTERVIEWER: If No, skip to Question #20. If Yes, ask question #19 first.

19. With whom have you talked? (Check one or more of the following. If respondent gives names, write them at the side and check list later.)

a. County Agent _____

b. Assistant or Special Agent _____

c. Extension Animal Husbandman _____

d. Local veterinarian _____

e. Artificial breeding technician _____

f. Vo-Ag teacher _____

g. Cattle buyer _____

h. Feed dealer or salesman _____

i. Banker or PCA representative _____

j. Neighbor or friend (cattleman) _____

k. Equipment dealer _____

l. Other (specify) _____

20. From which of the following other sources did you receive information useful in the management of your beef herd during the past year?

a. Univ. bulletins & publications _____

b. Commercial (feed co.) bulletins _____

c. Farm Magazines _____

d. Daily newspapers _____

e. Weekly newspapers _____

f. Radio _____

g. Television _____

h. Farm meetings _____

i. Field days and tours _____

j. Newsletters _____

21. What was the highest grade level that you completed? (Circle one)

0 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 Bachelor's Master's Doctor's
None Grade School H. S. Col. Underg. Degree Degree Degree

22. Age of Respondent?

a. Under 25 _____

b. 25 - 34 _____

c. 35 - 44 _____

d. 45 - 54 _____

e. 55 - 64 _____

f. 65 - 74 _____

g. 75 or more _____

23. What plans do you have for the future management of your beef herd? (including 31 practices listed earlier plus any others mentioned)

24. (If respondent says he has no plans in Question #23, ask why not.)

25. Did you buy any cows last year?

a. Yes _____

b. No _____

26. If yes to Question #25, how many? _____ Approximate price per cow? _____

27. Did you sell any cows last year?

a. Yes _____

b. No _____

28. If Yes to Question #27, how many? _____ Approximate price per cow? _____

29. Did you buy any mature bulls last year?

a. Yes _____

b. No _____

30. If Yes to Question #29, how many? _____ Approximate price per bull? _____

31. Did you sell any mature bulls last year?

a. Yes _____

b. No _____

32. If Yes to Question #31, how many? _____ Approximate price per bull? _____

33. How many heifer calves were dropped last year? _____ (number)

34. How many were kept as replacement heifers? _____ (number) _____ (Avg. weight per heifer)

35. How many total calves were dropped last year? _____ (number)

36. How many total calves were sold last year? _____ (number) _____ Total weight sold) _____ (Average weight per calf sold) _____ (Average price received per pound)

37. Where and about how many calves did you market last year?

a. At the farm _____ (number)

d. Special stock sale _____ (number)

b. Stockyards _____ (number)

e. Other _____ (number)

c. Organized feeder sales _____ (number)

38. What kinds and amounts of pasture did you have? Did you fertilize?

- a. Orchardgrass-white or ladino clover_____ (acres)
 (i) Fertilized_____ (ii) Did not fertilize_____
- b. Fescue-white or ladino clover_____ (acres)
 (i) Fertilized_____ (ii) Did not fertilize_____
- c. Orchardgrass alone_____ (acres)
 (i) Fertilized_____ (ii) Did not fertilize_____
- d. Fescue alone_____ (acres)
 (i) Fertilized_____ (ii) Did not fertilize_____
- e. Fescue-laspadaza_____ (acres)
 (i) Fertilized_____ (ii) Did not fertilize_____
- f. Laspadaza_____ (acres)
 (i) Fertilized_____ (ii) Did not fertilize_____
- g. Woodland_____ (acres)
 (i) Fertilized_____ (ii) Did not fertilize_____
- h. Other (Specify)_____ (acres) _____ (acres)
 (i) Fertilized_____ (ii) Did not fertilize_____
- i. Total (check to see others add to total)_____ acres

39. What kinds and amounts of hay did you grow or purchase for your cow herd?

- a. Legume_____ (tons grown)_____ (tons purchased)
 b. Grass_____ (tons grown)_____ (tons purchased)
 c. Legume-grass_____ (tons grown)_____ (tons purchased)

40. What kinds and amounts of silage did you grow or purchase for your cow herd? Was it fed?

- a. Corn_____ (tons grown)_____ (tons purchased)_____ (tons fed)
 b. Grass_____ (tons grown)_____ (tons purchased)_____ (tons fed)
 c. Other (kind _____) _____ (tons grown)_____ (tons purchased)_____ (tons fed)

41. What sources of water do you have for your herd?
- a. Water in barn _____ b. Water outside barn _____ c. Pond _____
 d. Stream _____ e. Other (Specify _____) _____
42. What kinds and amounts of concentrates did you purchase and feed last year?
- a. Cottonseed meal _____ (lbs.)
 b. Soybean oil meal _____ (lbs.)
 c. Other (Specify) _____ (lbs.)
43. Did you creep feed calves last year?
- a. Yes _____ b. No _____
44. If Yes to Question #43 above, what was your creep ration? (grains used)
- _____
45. Did you use feed additives last year?
- a. Yes _____ b. No _____
46. If Yes to Question #45 above, what kind and amount?
- a. Kind _____ b. Amount _____
47. Which of the following items do you have in workable condition?
- a. Upright silo _____ d. Chutes & corrals _____ g. Scales _____
 b. Trench silo _____ e. Head gate _____ h. Back rubber _____
 c. Other silo _____ f. Squeeze chute _____ i. Shelter for herd _____
48. How much of the year do you provide shelter for your herd?
- a. Year-round _____ b. Winter only _____ c. None _____
49. Cattlemen very often are known not to use recommended beef production practices. Why do you believe they do not use better practices? (Circle most important reason.)
- _____
- _____
- _____

50. (OPTIONAL) About what was your total gross family income last year?
(Hand card to respondent and ask him to select a category.)

a. 0 - 1,999 _____	i. 16,000-17,999 _____
b. 2,000-3,999 _____	j. 18,000-19,999 _____
c. 4,000-5,999 _____	k. 20,000-21,999 _____
d. 6,000-7,999 _____	l. 22,000-23,999 _____
e. 8,000-9,999 _____	m. 24,000-25,999 _____
f. 10,000-11,999 _____	n. 26,000-29,999 _____
g. 12,000-13,999 _____	o. 30,000-49,999 _____
h. 14,000-15,999 _____	p. 50,000-99,999 _____

Name of Respondent _____

Address _____ County _____

Date _____ Number _____ Tenure Status _____



QUESTIONS FOR THE INTERVIEWER TO ANSWER (not in interview)

Name of Respondent _____

Address _____ County _____

46. Pounds of beef sold last year per cow herd _____

47. All people do not adopt practices at the same time. About where would you place the respondent with respect to adopting new recommended beef practices?

- | | |
|-----------------------------------|-----------------------------------|
| a. Among the first few _____ | d. A little later than most _____ |
| b. Soon after the first few _____ | e. Among the last few _____ |
| c. Sooner than the average _____ | |

48. Interest of respondent in improving his beef management (In interviewer's judgment)

- | | |
|------------------------------|-------------------------|
| a. Very interested _____ | c. Indifferent _____ |
| b. Somewhat interested _____ | d. Not interested _____ |

49. Respondent's attitude toward survey (In interviewer's judgment)

- | | |
|----------------------------|-----------------------|
| a. Friendly _____ | c. Indifferent _____ |
| b. Somewhat friendly _____ | d. Antagonistic _____ |

50. Should the respondent pay more attention to management of his beef herd in light of his situation?

- | | | |
|--------------|-------------|--------------------|
| a. Yes _____ | b. No _____ | c. Uncertain _____ |
|--------------|-------------|--------------------|

51. How well do you know the respondent?

- | | |
|----------------------|------------------------|
| a. Very well _____ | c. Not very well _____ |
| b. Fairly well _____ | d. Not at all _____ |

52. How familiar are you with the respondent's beef situation?

- | | |
|--------------------------|----------------------------|
| a. Very familiar _____ | e. Not very familiar _____ |
| b. Fairly familiar _____ | d. Not familiar _____ |

53. If very or fairly familiar with their beef situation, how would you rate the present condition and value of his dairy herd?

- | | |
|--------------------|---------------|
| a. Excellent _____ | c. Fair _____ |
| b. Good _____ | d. Poor _____ |