May 20, 1957

To the Graduate Council:

I am submitting herewith a thesis written by Yin Huai Wang entitled "Class, Type and Grade of Cattle and Calves Sold on Tennessee Livestock Auction Markets." 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 Agricultural Economics.

M. B. Badenhope
Major Professor

We have read this thesis
and recommend its acceptance:

Irving Dubow

Cleland F. Scroggs

D.M. Thorpe

Accepted for the Council:

Charles P. White for
Dean of the Graduate School

CLASS, TYPE AND GRADE OF CATTLE AND CALVES SOLD ON TENNESSEE LIVESTOCK AUCTION MARKETS

A THESIS

Submitted to
The Graduate Council
of
The University of Tennessee
in
Partial Fulfillment of the Requirements
for the degree of
Master of Science

---

by

Yin Huai Wang

June 1957

2 R
337

ACKNOWLEDGEMENT

The writer expresses his appreciation and indebtedness to the staff of the Department of Agricultural Economics and Rural Sociology for their encouragement and help throughout this study. Special appreciation is expressed to Dr. M. B. Badenhop for his constructive criticism and intellectual stimulation in the preparation of the manuscript and in the formulation of the study.

I am also indebted to Dr. Irving Dubov, Dr. Claud L. Scroggs and Mr. Frank J. Williams who while serving on my committee encouraged me in many ways. I am grateful to Dr. Erven J. Long and Dr. D. M. Thorpe for their efforts in making it financially possible for me to complete this study. Appreciation is also extended to Mr. George A. Wagoner, Head of the Department of Business Education and Office Administration, for his helpful suggestions in the tabulation of the data and in the use of the IBM equipment. The writer also thanks Mr. J. Thomas Romans for proofreading, Mrs. Frank P. Chambers for typing, and Mrs. William R. Backus for the drawing of the figures.

To these and many others to whom I am indebted, I extend my deepest gratitude.

376855

TABLE OF CONTENTS

CHAPTER		PAGE
I.	INTRODUCTION	1
	Importance of cattle and calves to Tennessee agriculture	1
	Purpose of the study	2
	Source of data	2
	Definition of terms	4
II.	CATTLE AND CALVES SOLD ON TENNESSEE AUCTION MARKETS	8
	Class of cattle and calves sold	8
	Market classes purchased by different type of buyers	11
	Class of cattle and calves sold directly for slaughter	11
	Type of cattle and calves sold	13
	Grade distribution of cattle and calves sold	16
	Vealers	18
	Calves	18
	Steers	21
	Heifers	21
	Cows	24
	Cattle and calves sold directly to slaughter	24
	Fall and spring sales	30
III.	SUMMARY	33

PAGE

BIBLIOGRAPHY 38

APPENDIX 41

LIST OF TABLES

TABLE PAGE

I. Number and Percent of Cattle and Calves Sold On Six Tennessee Auction Markets, by Market Class, Fall 1953 and 1954, Spring 1954 and 1955 9

II. Percent of Cattle and Calves Purchased in Each Market Class by Type of Buyer, Six Auction Markets in Tennessee, Fall 1953, Spring and Fall 1954, and Spring 1955 12

III. Class of Cattle and Calves Sold for Slaughter on Six Tennessee Auction Markets, Fall 1953 and 1954, Spring 1954 and 1955 14

IV. Type of Cattle and Calves Sold by Class on Six Tennessee Auction Markets, Fall 1953 and 1954, Spring 1954 and 1955 15

V. Proportion of Cattle and Calves Sold to Packer Buyers, Local Slaughterers and Speculators by Class, Grade and Type, Six Tennessee Markets, Fall 1953, Spring and Fall 1954, and Spring 1955 26

LIST OF FIGURES

FIGURE		PAGE
1.	Distribution of Livestock Sold Through Various Types of Markets by 275 Tennessee Farmers, 1951	3
2.	Percent of Cattle and Calves by Market Class Sold at Six Selected Tennessee Auction Markets, Fall Sales 1953 and 1954, Compared with Spring Sales 1954 and 1955	10
3.	Grade of Vealers by One-Third Grade Sold on Six Tennessee Markets by Type, Fall 1953, Spring and Fall 1954, and Spring 1955	19
4.	Grade of Calves by One-Third Grade Sold on Six Tennessee Markets by Type, Fall 1953, Spring and Fall 1954, and Spring 1955	20
5.	Grade of Steers by One-Third Grade Sold on Six Tennessee Markets by Type, Fall 1953, Spring and Fall 1954, and Spring 1955	22
6.	Grade of Heifers by One-Third Grade Sold on Six Tennessee Markets by Type, Fall 1953, Spring and Fall 1954, and Spring 1955	23
7.	Grade of Cows by One-Third Grade Sold on Six Tennessee Markets by Type, Fall 1953, Spring and Fall 1954, and Spring 1955	25
8.	Grade Distribution of Cattle and Calves by One-Third Grade Sold Directly to Slaughterers on Six Tennessee	

FIGURE PAGE

Markets, Fall 1953, Spring and Fall 1954, and Spring 1955 29

9. Grade Distribution of Cattle and Calves by One-third Grade Sold on Six Tennessee Markets, Fall of 1953 and 1954, and Spring of 1954 and 1955 31

LIST OF APPENDIX TABLES

TABLE PAGE

I. Veal Calves: Grade by Type Sold at Six Tennessee Auction Markets, Fall 1953, Spring and Fall 1954, and Spring 1955 41

II. Calves: Grade by Type Sold at Six Tennessee Auction Markets, Fall 1953, Spring and Fall 1954, and Spring 1955 42

III. Steers: Grade by Type Sold at Six Tennessee Auction Markets, Fall 1953, Spring and Fall 1954, and Spring 1955 43

IV. Heifers: Grade by Type Sold at Six Tennessee Auction Markets, Fall 1953, Spring and Fall 1954, and Spring 1955 44

V. Cows: Grade by Type Sold at Tennessee Auction Markets, Fall 1953, Spring and Fall 1954, and Spring 1955 45

VI. Veal Calves: Grade by Type and Season, Sold to Packers and Local Slaughterers and Speculators, Six Tennessee Auction Markets, Fall 1953 and 1954, and Spring 1954 and 1955 46

VII. Slaughter Calves: Grade by Type and Season, Sold to Packers, Local Slaughterers and Speculators, Six Tennessee Auction Markets, Fall 1953 and 1954, and Spring 1954 and 1955 47

TABLE PAGE

VIII. Steers: Grade by Type and Season, Sold to Packers, Local Slaughterers and Speculators, Six Tennessee Auction Markets, Fall 1953 and 1954, and Spring 1954 and 1955 48

IX. Heifers: Grade by Type and Season, Sold to Packers, Local Slaughterers and Speculators, Six Tennessee Auction Markets, Fall 1953 and 1954, and Spring 1954 and 1955 49

X. Cows: Grade by Type and Season, Sold to Packers, Local Slaughterers and Speculators, Six Tennessee Auction Markets, Fall 1953 and 1954, and Spring 1954 and 1955 50

XI. Veal Calves: Grade by Type and Season, Six Tennessee Auction Markets, Fall 1953 and 1954, and Spring 1954 and 1955 51

XII. Calves: Grade by Type and Season, Six Tennessee Auction Markets, Fall 1953 and 1954, and Spring 1954 and 1955 52

XIII. Steers: Grade by Type and Season, Six Tennessee Auction Markets, Fall 1953 and 1954, and Spring 1954 and 1955 53

XIV. Heifers: Grade by Type and Season, Six Tennessee Auction Markets, Fall 1953 and 1954, and Spring 1954 and 1955 54

TABLE PAGE

XV. Cows: Grade by Type and Season, Six Tennessee Auction Markets, Fall 1953 and 1954, and Spring 1954 and 1955 55

CHAPTER I

INTRODUCTION

Importance of Cattle and Calves to Tennessee Agriculture

The production of cattle and calves is an important farming enterprise in Tennessee. The greatest number of cattle and calves are produced on farms located in the Central Basin, in the corn producing counties of Northwest Tennessee and in the principal agricultural areas of the East Tennessee Valley. The general trend in number of cattle and calves on Tennessee farms has not varied significantly from national trends. Present tabulation exceeds the peak record number on farms during the World War II period. In 1952 the estimated population of cattle and calves on farms was 1,658,000; in 1954, 1,845,000; and in 1956, 1,753,000. On January 1, 1957, the estimated number was 1,771,000.[1]

The importance of the livestock industry is further indicated by farmers' cash receipts from the sale of livestock and livestock products. In 1955, 49 percent of the total farmers' cash receipts, or $210,582,000, was obtained from this source. The combined income from the sale of cattle and calves comprised 15 percent of the total

---

[1]United States Department of Agriculture, Tennessee State Department of Agriculture, Office of the State Agri-Statistician, Federal-State Cooperative Crop Report Service, (Nashville: Office of the Agricultural Statistician, 1950-1957 Reports.)

farmers' cash receipts, or $63,761,000.[2]

Most of the cattle and calves produced in Tennessee are sold through auction markets with approximately one-half of them being sold through this outlet (Figure 1). However, in East Tennessee about three-fourths of the cattle and calves are sold at auction by the farmers. Local dealers, the terminal markets at Nashville and Memphis, and other farmers were about of equal importance as market outlets.

Purpose of the Study

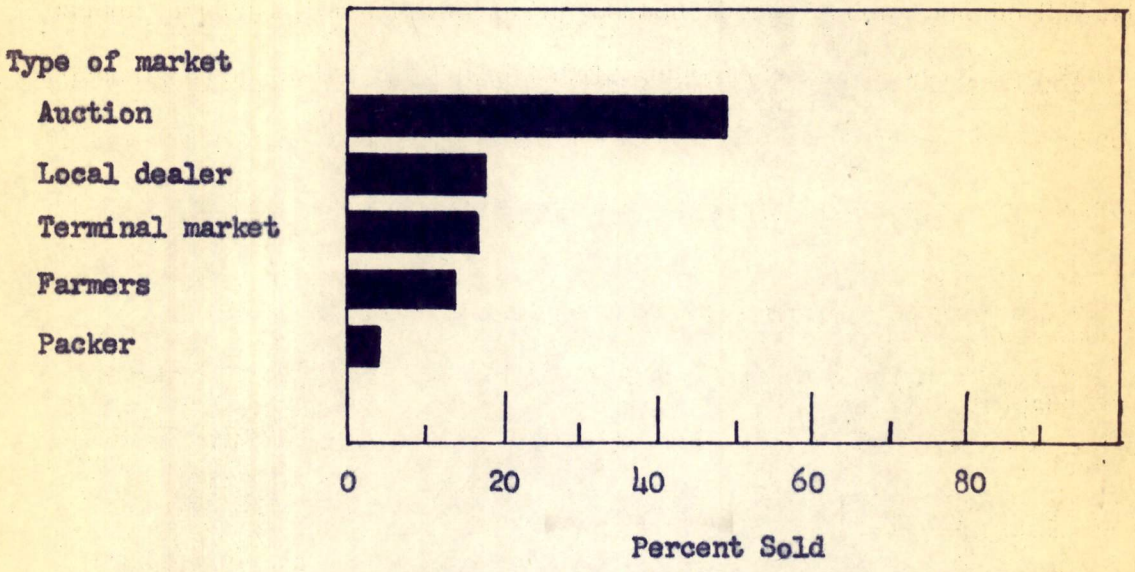
Little is known about the characteristics of the cattle and calves sold through the auction markets of the state. Because of imperfect knowledge with respect to the animal characteristics, this study was undertaken with the following objective in mind: To present information on the class, type of breeding and grade distribution by class and type of cattle and calves sold through the auction markets. It is hoped that the information gained will be of considerable value to the Tennessee livestock industry.

Source of Data

Secondary data were used for this study. The data were obtained from records of a previous survey made by the Department of Agricultural

---

[2]United States Department of Agriculture, Agricultural Marketing Service, The Farm Income Situation, September 1956, Table 19, p. 61.



Source: M. B. Badenhop, "Selling and Buying Livestock by Tennessee Farmers", Bulletin No. 233 (Knoxville: University of Tennessee Agricultural Experiment Station, June, 1953), p. 11.

Figure 1. Distribution of livestock sold through various types of markets by 275 Tennessee farmers, 1951.

Economics and Rural Sociology of the University of Tennessee Agricultural Experiment Station. The original data were collected as part of a regional plan of livestock marketing research in which a number of Southern States and the Agricultural Marketing Service, United States Department of Agriculture, were cooperating. The original data were from sales of cattle and calves at six selected auction markets in Tennessee.[3] Observations were recorded for two sales at each of the six markets during the fall of 1953, spring and fall of 1954 and the spring of 1955. These data were collected on prepared schedules, edited, coded and punched on IBM cards for processing and analysis. For this study, the IBM card data were used. The work of sorting and tabulating data from the cards was done on equipment in the Department of Business Education in the College of Business Administration.

Definition of Terms

The lack of uniformity in terms applied to different types of markets tends to cause confusion. The terms used in one area may not be understood in another area. It seems desirable, therefore, to define and briefly characterize the terms to be used in this study:

1. Breed: All animals graded were identified as to breed type according to the following designations.

---

[3]For a complete statement on procedures used for collecting the original data see, M. B. Badenhop, "Marketing Cattle and Calves Through Auction Markets in Tennessee", Tennessee Agricultural Experiment Station, Bulletin No. 247, June 1956.

(a) Beef: Three-fourths or more beef breeding (both dam and sire of predominantly beef breeding type). Dual purpose cattle were classified as beef breeding.

(b) Dairy: Three-fourths or more dairy breeding.

(c) Mixed: Mixed beef and dairy breeding includes all animals not in the above groups.

2. Market Class: All animals graded were identified as to market class according to the following designations which are in general agreement with USDA standards.

(a) Veal calves: Calves between two weeks and three months of age and weighing less than 250 pounds.

(b) Slaughter calves: Calves three to ten months of age and weighing less than 450 pounds.

(c) Steers: All male animals except veal and slaughter calves as defined above, stags and bulls.

(d) Heifers: All female animals which have never had calves or are not in an advanced stage of pregnancy, except veal and slaughter calves as defined above, and barren cows.

(e) Cows: All female animals which have had one or more calves or are not in an advanced stage of pregnancy, or are of calf-bearing age and barren.

Animals not normally suited or intended for slaughter were excluded from the study. Specific exclusions included: (1) cows and heifers of dairy breeding which were bought for milk-production purposes, (2) cows with young calves which were returned to farms, (3) bulls and stags, and (4) other animals not normally considered suitable for slaughter which

were being returned to the farm as stockers. Certain "two-way" animals suitable for slaughter, such as partly finished calves, heifers or steers, but purchased for feeder or stocker use were included.

3. Grade: Animals were graded according to United States Department of Agriculture standards for slaughter cattle except that, in order to further refine the grading, each official grade was subdivided into three parts, or one-third grade--high, middle and low.[4]

4. Type of buyer: Buyers were classified according to the following designations:

   (a) Packer buyer: A person who is employed by a packing plant to buy cattle and/or calves at the auction. Normally, these buyers are full-time employees of the packer, are compensated by salary and/or commission, and visit the auction regularly. Independent buyers who occasionally substitute for regular packer buyers are considered packer buyers. (Packing plants are defined as establishments that slaughter livestock for processing and/or sale of fresh meat and serve the wholesale trade in a trade area greater than their local community. This group would include slaughterers which are normally called either "national, regional, or local packers".)

   (b) Local Slaughterer: A person who buys cattle and/or calves for slaughter and sale in the local community. Local slaughterers

---

[4]For a statement on the specifications for official United States standard grades of slaughter steers, heifers and cows, see United States Department of Agriculture, Production and Marketing Administration, Service and Regulatory Amendments No. 112, Washington, D.C., December 1950.

consist primarily of wholesale and retail butchers who handle mainly fresh meat and do little or no processing.

(c) Order buyer: An independent buyer who purchases cattle and/or calves on order from a second party who normally is not otherwise represented at the auction.

(d) Speculator: An independent buyer who buys cattle and/or calves at the auction for the purpose of reselling them at a future date with a hope of making a profit from the transaction.

(e) Management: The auction operator or his representative. Purchase may be made on order, to support the market, for speculative purposes, or for other reasons.

(f) Other buyers: All other buyers, such as dealers and farmers.

CHAPTER II

CATTLE AND CALVES SOLD ON TENNESSEE AUCTION MARKETS

Class of Cattle and Calves Sold

Cattle and calves were classified as (1) vealers, (2) slaughter calves, (3) steers, (4) heifers, and (5) cows. Cows and heifers sold specifically for milking purposes, bulls, and baby calves (under two weeks of age) were excluded from the study. All calves and cattle were classified as they were sold on the basis of appearance characteristics and weight.

Vealers and steers were the two most important market classes sold. These two classes accounted for more than one-half of all sales. The remaining market classes in order of importance were calves, cows and heifers (Table I). Variations in the relative importance of the various market classes were associated with the seasons of marketing. As shown in Figure 2, 38 percent of all animals sold in the spring were vealers while only 22 percent of all animals sold in the fall were vealers. The same percentages of all animals sold in the two seasons, or 22 percent, were steers. Slaughter calves were considerably more important in terms of total animals sold in the fall than in the spring. Sales during the fall seasons of 1953 and 1954 were considerably larger than the spring season sales in 1954 and 1955. Generally from 40 to 50 percent of all slaughter cattle and calves move to market during August,

TABLE I

NUMBER AND PERCENT OF CATTLE AND CALVES SOLD ON SIX TENNESSEE AUCTION MARKETS, BY MARKET CLASS, FALL 1953 AND 1954, SPRING 1954 AND 1955[a]

Class	Fall Sales		Spring Sales		Combined Sales	
	Number	Percent	Number	Percent	Number	Percent
Vealers	2440	22.24	2559	38.17	4999	28.28
Calves	2421	22.06	771	11.50	3192	18.06
Steers	2487	22.66	1479	22.06	3966	22.43
Heifers	1613	14.70	1043	15.56	2656	15.02
Cows	2013	18.34	852	12.71	2865	16.21
Total	10974	100.00	6704	100.00	17678	100.00

[a]Data represent two sales for each season on each market. All cattle and calves except baby calves, bulls, and cows sold as either springers or milkers were included in the classification.

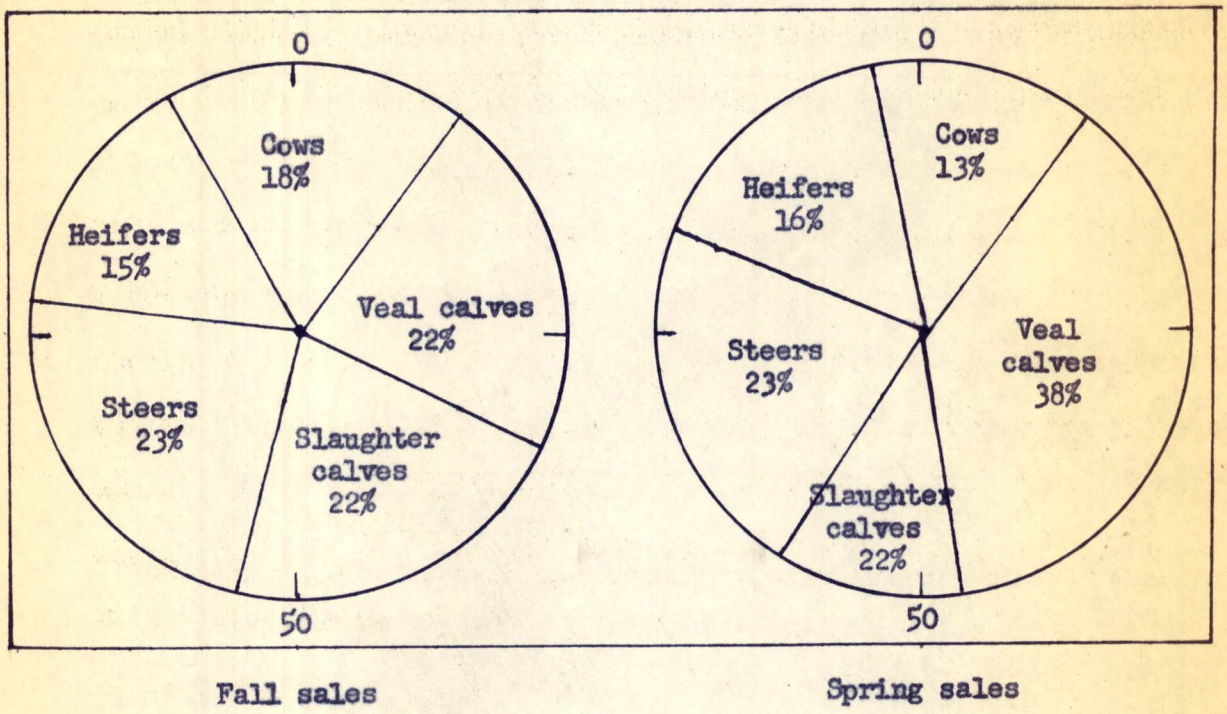


Figure 2. Percent of cattle and calves by market class sold at six selected Tennessee auction markets, fall sales, 1953 and 1954, compared with spring sales, 1954 and 1955.

September and October.[5]

Market Classes Purchased by Different Types of Buyers

All types of buyers purchased some animals of each market class. Even though it was necessary to grade all cattle and calves as slaughter animals in order to obtain usable data, it is apparent that many of these animals did not go directly into slaughter. One out of four animals in the fall sales and nearly one out of every five animals in the spring sales were purchased by speculators (Table II). Local slaughterers, order buyers and management purchased 15 percent of these classes in the spring sales and 19 percent in the fall. As expected, packer buyers bought a large proportion of the all market classes, 35 percent of the fall sales and 48 percent in the spring sales. Others, which includes primarily farmers, purchased approximately 20 percent of all the classes in terms of total sales. The fact that farmers purchased many of these animals as stockers and feeders indicated that many animals were returned to farms for further finishing. Preference for different market classes varied considerably between each type of buyer.

Class of Cattle and Calves Sold Directly for Slaughter

For the purpose of this study, it was considered that animals

---

[5] M. B. Badenhop, Selling and Buying Livestock by Tennessee Farmers, Bulletin No. 233, (Tennessee: University of Tennessee Agricultural Experiment Station, Knoxville, Tennessee, June 1953), p. 8-9.

TABLE II

PERCENT OF CATTLE AND CALVES PURCHASED IN EACH MARKET CLASS BY TYPE OF BUYER, SIX AUCTION MARKETS IN TENNESSEE, FALL 1953, SPRING AND FALL 1954, AND SPRING 1955[a]

Type of Buyer	Animals Sold		Percent in Each Market Class				
	Number	Percent of Total	Veal Calves	Calves	Steers	Heifers	Cows
			Fall seasons, 1953 and 1954				
Packer Buyer	3,868	35	48	32	25	32	40
Local Slaughterer	222	2	2	1	1	5	2
Order Buyer	778	7	7	4	10	8	6
Speculator	2,721	25	20	28	28	26	22
Management	1,129	10	17	7	5	8	14
Other[b]	2,256	21	6	28	31	21	16
Total	10,974	100	100	100	100	100	100
			Spring seasons, 1954 and 1955				
Packer Buyer	3,222	48	82	36	13	26	45
Local Slaughterer	130	2	1	3	1	2	5
Order Buyer	383	6	7	7	6	5	3
Speculator	1,228	18	2	21	31	32	25
Management	446	7	5	8	8	6	8
Other[b]	1,295	19	3	25	41	29	14
Total	6,704	100	100	100	100	100	100

[a]Source: M. B. Badenhop, Marketing Cattle and Calves Through Auction Markets in Tennessee, Bulletin 247, (Tennessee: University of Tennessee Agricultural Experiment Station, Knoxville, June 1956), p. 12.

[b]Includes primarily farmers who purchased these animals for feeder or breeding purposes.

bought by packer buyers, local slaughterers and speculators were being moved directly for slaughter. Speculators were included because most of the animals purchased by them would be moved to other markets for resale to slaughtering plants within a relative short period of time. The percentages of cattle and calves sold directly for slaughter by class is presented in Table III. Vealers and cows were the most important classes bought directly for slaughter with 85 percent of the calves and 74 percent of the cows being sold for slaughter during the spring season. Even for calves, steers and heifers, from 45 to 63 percent were sold for slaughter during both the fall and spring seasons.

Average weights of the animals sold for slaughter were as follows: for veal calves, 175 pounds; for slaughter calves, 305 pounds; steers, 575 pounds; heifers, 540 pounds; and cows, 775 pounds.

Type of Cattle and Calves Sold

In order to determine the relationship between breed-type and other selected factors, all cattle and calves were classified by an experienced livestock grader according to type of breeding as beef, dairy and mixed. The distribution by type sold is shown in Table IV. The distribution varied considerably. Forty-one percent of all cattle and calves were classified as beef, 16 percent as dairy and 43 percent as mixed. Slaughter calves, steers and heifers were predominately beef-type, whereas most vealers were mixed. Cows were about equally distributed between the beef and dairy-type. The large proportion of mixed vealers reveals that beef-type bulls were used to up grade the

TABLE III

CLASS OF CATTLE AND CALVES SOLD FOR SLAUGHTER ON SIX TENNESSEE AUCTION MARKETS, FALL 1953 AND 1954, SPRING 1954 AND 1955[a]

Class	Fall Sales		Spring Sales		Combined Sales		Percent of Total Sold to Slaughterers		
							Fall Sales	Spring Sales	Combined Sales
	Number	Percent	Number	Percent	Number	Percent			
Vealers	1685	24.74	2187	47.75	3872	33.99	69.06	85.46	77.46
Calves	1471	21.60	462	10.09	1933	16.97	60.76	59.92	60.56
Steers	1352	19.85	671	14.65	2023	17.76	54.36	45.37	51.01
Heifers	1012	14.86	627	13.69	1639	14.39	62.75	60.12	61.71
Cows	1291	18.95	633	13.82	1924	16.89	64.13	74.30	67.16
Total	6811	100.00	4580	100.00	11391	100.00	62.06	68.32	64.44

[a]Includes only cattle and calves sold to buyers which the auction management classified as packers, local slaughterers and speculators. Speculators were included because most of the livestock purchased by them moved to slaughtering plants within a relatively short time.

TABLE IV

TYPE OF CATTLE AND CALVES SOLD BY CLASS ON SIX TENNESSEE AUCTION MARKETS, FALL 1953 AND 1954 SPRING 1954 AND 1955

Class	Fall Sales					
	Beef-type		Dairy-type		Mixed-type	
	Number	Percent	Number	Percent	Number	Percent
Vealers	309	12.67	460	18.85	1671	68.48
Calves	1575	65.05	129	5.33	717	29.62
Steers	1510	60.72	95	3.82	882	35.46
Heifers	800	49.60	185	11.47	628	38.93
Cows	509	25.28	941	46.75	563	27.97
Total	4703	42.86	1810	16.49	4461	40.65
Class	Spring Sales					
	Beef-type		Dairy-type		Mixed-type	
	Number	Percent	Number	Percent	Number	Percent
Vealers	330	12.90	287	11.21	1942	75.89
Calves	371	48.12	88	11.41	312	40.47
Steers	1037	70.12	61	4.12	381	25.76
Heifers	507	48.61	183	17.55	353	33.84
Cows	242	28.40	429	50.35	181	21.25
Total	2487	37.10	1048	15.63	3169	47.27
Class	Combined Sales					
	Beef-type		Dairy-type		Mixed-type	
	Number	Percent	Number	Percent	Number	Percent
Vealers	639	12.78	747	14.94	3613	72.28
Calves	1946	60.96	217	6.80	1029	32.24
Steers	2547	64.22	156	3.93	1263	31.85
Heifers	1307	49.21	368	13.86	981	36.93
Cows	751	26.21	1370	47.82	744	25.97
Total	7190	40.67	2858	16.17	7630	43.16

beef qualities of a base cattle population with large numbers of dairy and mixed-type animals.

Some differences in type occurred between the two seasons compared. In the fall season, beef and mixed-types made up 43 percent and 41 percent, respectively, of total sales while in the spring season they made up 37 and 47 percent, respectively. Dairy-type animals comprised about 16 percent of the total sales in both the fall and spring seasons.

Grade Distribution of Cattle and Calves Sold

The official grades of cattle and calves were determined by United States Department of Agriculture grading standards for slaughter cattle. The official grades for vealers and slaughter calves were prime, choice, good, commercial, utility and cull. For slaughter steers and heifers, the grades were prime, choice, good, commercial, utility, cutter and canner. For slaughter cows they were good, commercial, utility, cutter and canner. Further classification of grades assigned was done by designating animals as high, middle and low within the grade, except for the cull grade of vealers and slaughter calves which were not so designated. All cattle and calves were classed in terms of slaughter grades. Feeder grades are not identical with slaughter grades and frequently the quality in terms of beef-type breeding is much higher than that indicated by the slaughter grade. Nevertheless, all cattle and calves, after they reach the minimum age for veal, are potential slaughter animals at any stage of the life cycle or feeding period. In the market place the number of cattle and calves sold for slaughter,

stockers or feeders depends upon the relative demand for each class. Since buyers representing slaughter interests have a reservation price for slaughter animals, feeder and stocker buyers can purchase animals only at prices exceeding the prevailing slaughter prices.

Classification of cattle and calves as slaughter, or as feeders and stockers is impossible until the nature of the buyer is determined. Good guesses are often possible, but a large proportion of animals could be bought for either slaughter or for feeders and stockers. In general, the most desirable beef comes from cattle and calves that are graded as prime, choice or good. Prime cattle more closely approach the ideal beef-type in terms of conformation, degree of fatness, and quality. Choice cattle are similar to prime but with a lesser degree of fatness. Good grade cattle have an even lesser degree of fatness and not as much ideal conformation and quality. Utility and commercial cattle and calves produce acceptable beef upon slaughter but the beef is deficient in tenderness, marbling, and flavor. Cutter and canner cattle, and cull calves produce beef unacceptable to the fresh meat trade unless the demand for fresh meat is exceedingly high. In general beef from cutter, canner, and cull grades is used largely in canned and processed meat.

Cattle and calves sold on Tennessee markets by grades varied considerably by class, type, and seasons. The grade distribution in terms of one-third grades is presented in graphic form by classes, and types for all cattle and calves sold in both spring and fall sales to all types of buyers. The grade distribution for spring and fall are shown separately, and cattle and calves sold for slaughter are

presented in graphic form by classes only. A more detailed breakdown on the grade distribution by classes, types, seasons and type of buyer is presented in the Appendix Tables.

Vealers. Thirteen percent of the vealers were beef-type vealers, 15 percent were dairy-type and 72 percent of the mixed-type. The grade distribution for vealers is shown in Figure 3 and Appendix Table I. Over half of the vealers graded in the good and commercial grades with over one-fourth of them grading utility or lower. Less than 18 percent of them graded choice or higher. Mixed-type vealers graded higher than the beef or dairy-type animals. Over three-fourths of the dairy-type vealers graded utility or lower. A large proportion of mixed-type vealers graded from low choice to low commercial, but none graded prime. The bulk of mixed-type vealers graded low choice which consisted of 17 percent of all mixed-type vealers.

Calves. Of the calves, 61 percent were of the beef-type, seven percent were dairy-type and 32 percent of the mixed-type. The grade distribution of calves is shown in Figure 4 and Appendix Table II. The proportion of beef-type calves in each one-third grade increased from low prime to middle utility and then declined from middle utility to cull with the largest proportion of them grading from middle good to middle utility and only a small proportion grading choice or better. The proportion of dairy-type calves in each one-third grade increased from middle prime to cull, with cull being the predominate grade and containing a third of the animals. Most of the mixed-type calves graded commercial or lower, with less than 20 percent grading good or higher.

When all types of calves were combined, about five percent graded

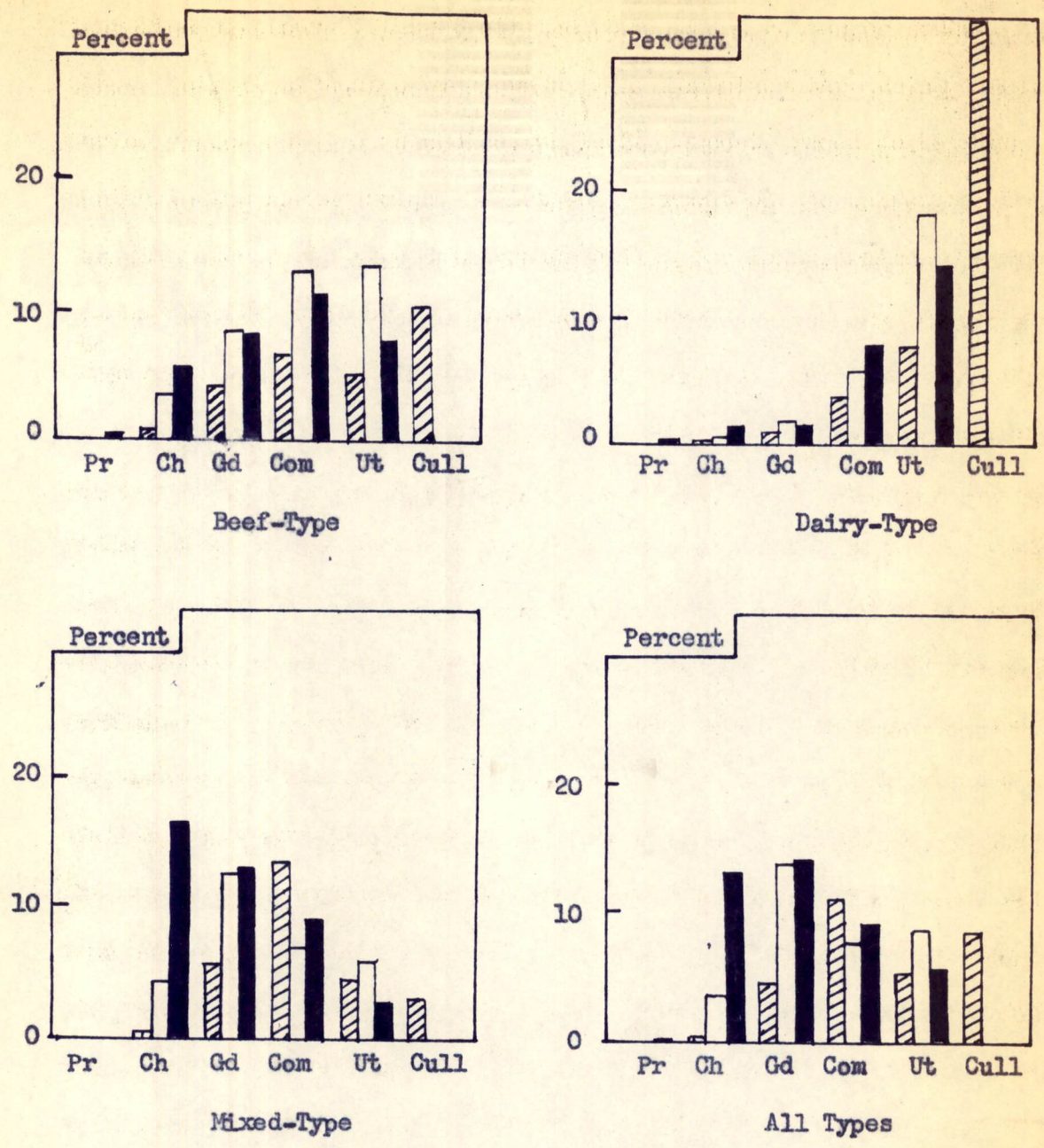


Figure 3. Grade of vealers by one-third grade sold on six Tennessee markets by type, fall 1953, spring and fall 1954, and spring 1955.

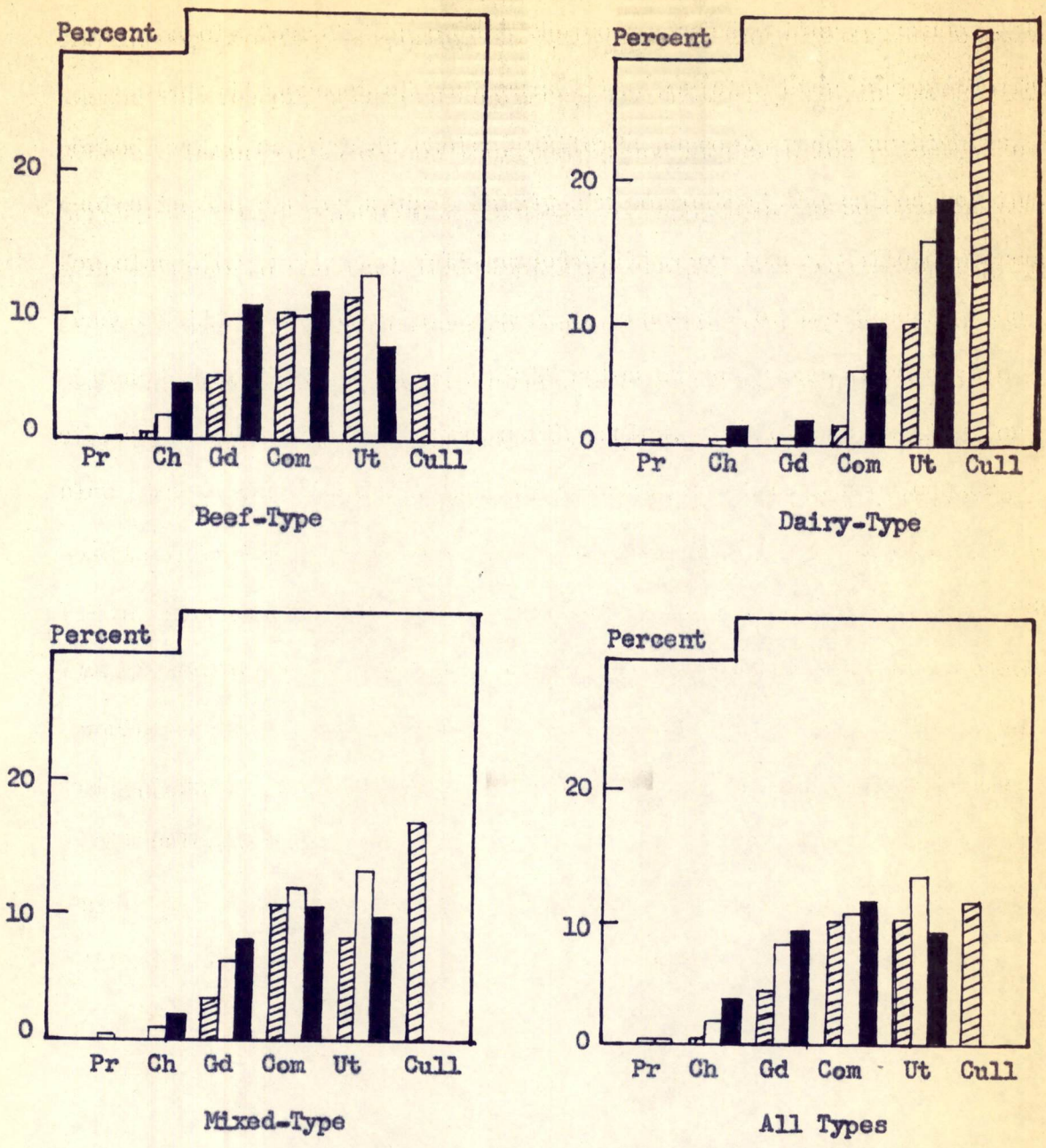


Figure 4. Grade of calves by one-third grade sold on six Tennessee markets by type, fall 1953, spring and fall 1954, and spring 1955.

choice or higher. Approximately one-fifth of them were in the good grade, 30 percent in the commercial grade and one-third in the utility grade. More than twice as many graded cull as graded choice or higher.

Steers. Sixty-four percent of the steers were of the beef-type, four percent of the dairy-type, and 32 percent of the mixed-type. The proportion of beef-type steers increased from middle choice to low commercial and then decreased from low utility to low canner (Figure 5 and Appendix Table III). The bulk of the beef-type steers graded from high good to low utility. Eighty-six percent of the dairy-type steers graded below high utility with a third of the total being in the utility grade. The proportion of mixed-type steers increased from middle choice to middle utility and then declined from middle utility to low canner. The bulk of the mixed-type steers graded utility and commercial. When all types were combined, 68 percent of the steers were graded in the commercial and utility grade. Only a small proportion of steers graded choice and none graded prime. About 16 percent of them graded as cutters and canners.

Heifers. Heifers were classed according to type with 49 percent being of the beef-type, 14 percent of the dairy-type and 37 percent of the mixed-type. The grade distribution of heifers is shown in Figure 6 and Appendix Table IV. The proportion of beef-type heifers increased from low prime to low commercial and then declined from low commercial to canner. Most of the beef-type heifers graded from low good to low utility while 85 percent of dairy-type heifers graded between middle utility and middle canner. Less than eight percent of the dairy-type heifers graded higher than utility. Only five percent of the mixed-

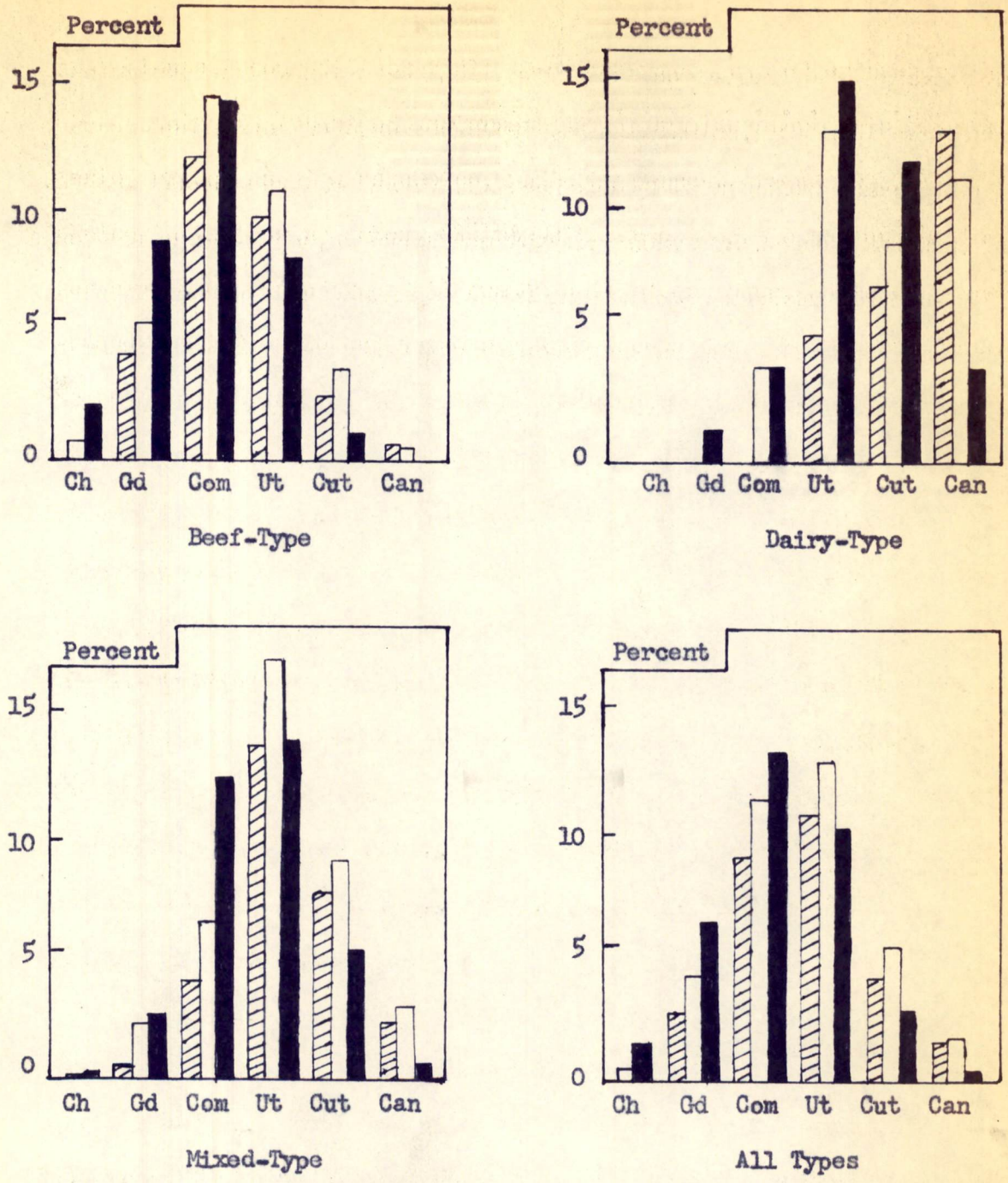
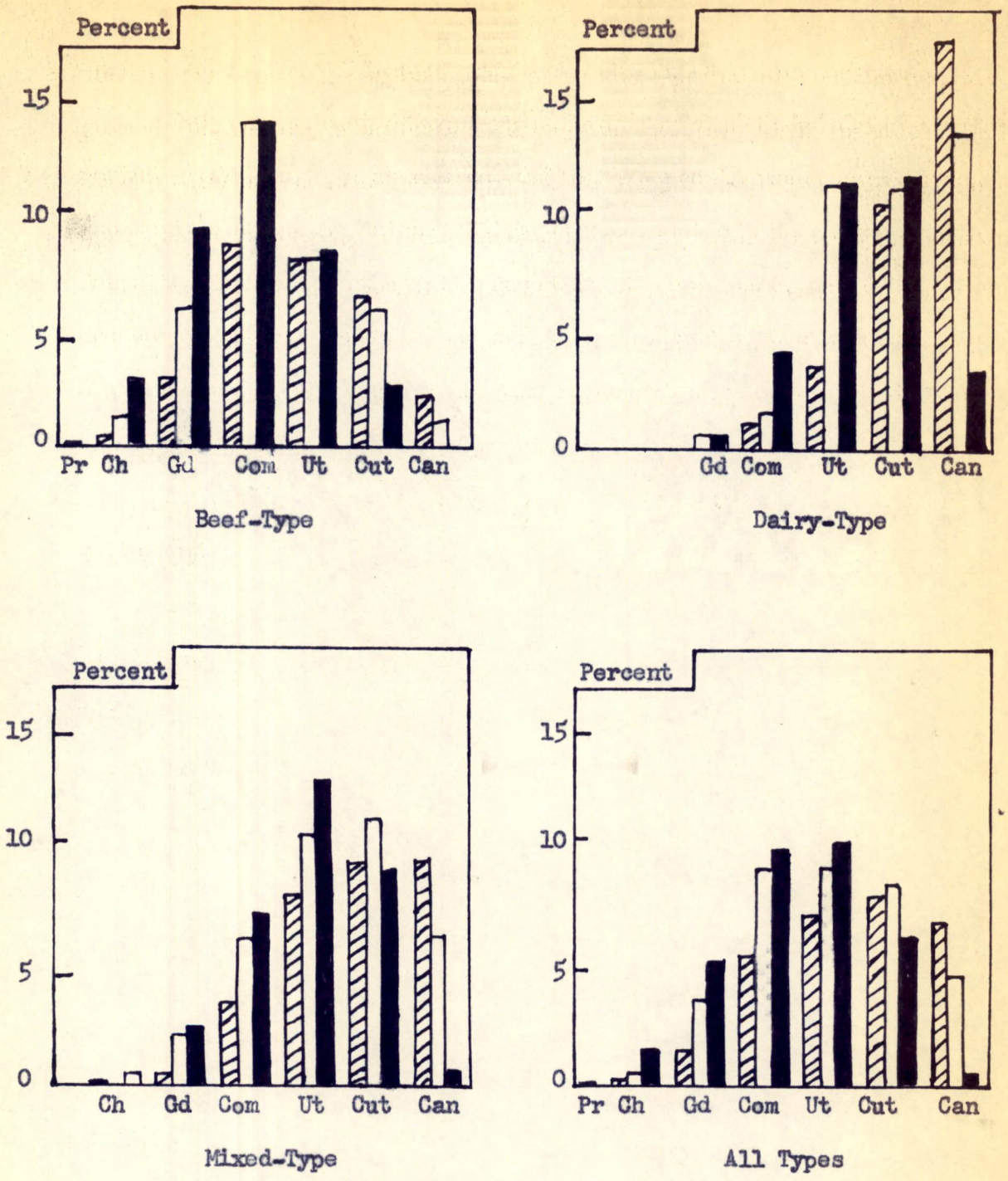


Figure 5. Grade of steers by one-third grade sold on six Tennessee markets by type, fall 1953, spring and fall 1954, and spring 1955.



Pr = Prime, Ch = Choice, Gd= Good, Com = Commercial, Ut = Utility, Cut = Cutter, Can = Canner

High Middle Low

Figure 6. Grade of Heifers by one-third grade sold on six Tennessee markets by type, fall 1953, spring and fall 1954, and spring 1955.

type heifers graded better than commercial with the bulk of them, or 61 percent, grading utility and cutter. When all types of heifers were considered, 76 percent of them graded between middle commercial and high canner. Slightly more than 10 percent graded good and higher.

Cows. Twenty-six percent of the cows were classed as beef-type, 48 percent as dairy-type and 26 percent as mixed-type. The grade distribution for cows is shown in Figure 7 and Appendix Table V. The proportion of beef-type cows increased from high good to low cutter and then declined from low cutter to low canner. Eleven percent of the beef-type cows graded commercial. Over a fourth of them graded utility while more than 40 percent were classified as cutters. Of the dairy-type cows, 89 percent graded as cutter or canner. Grade for mixed-type cows followed closely the same pattern as the grade distribution for the dairy cows with the exception that a large percentage fell in the low utility and cutter grade. When all types of cows were combined, the bulk graded from low utility to low canner with about 40 percent in each of the grades. The proportion in each one-third grade increased consistently from high good to middle canner.

Cattle and Calves Sold Directly to Slaughter. All buyers at the auction markets purchased some cattle and calves from each of the market classes and grades. This distribution is shown in Table V. Slaughter house operators bought more of the higher grades of livestock than they did of the lower grades. Nearly two-thirds of all livestock sold moved direct to slaughter. The higher grades of stock (in terms of slaughter grades) is more valuable for slaughter than for feeding or breeding purposes. Occasionally, high grade calves and vealers are valuable for

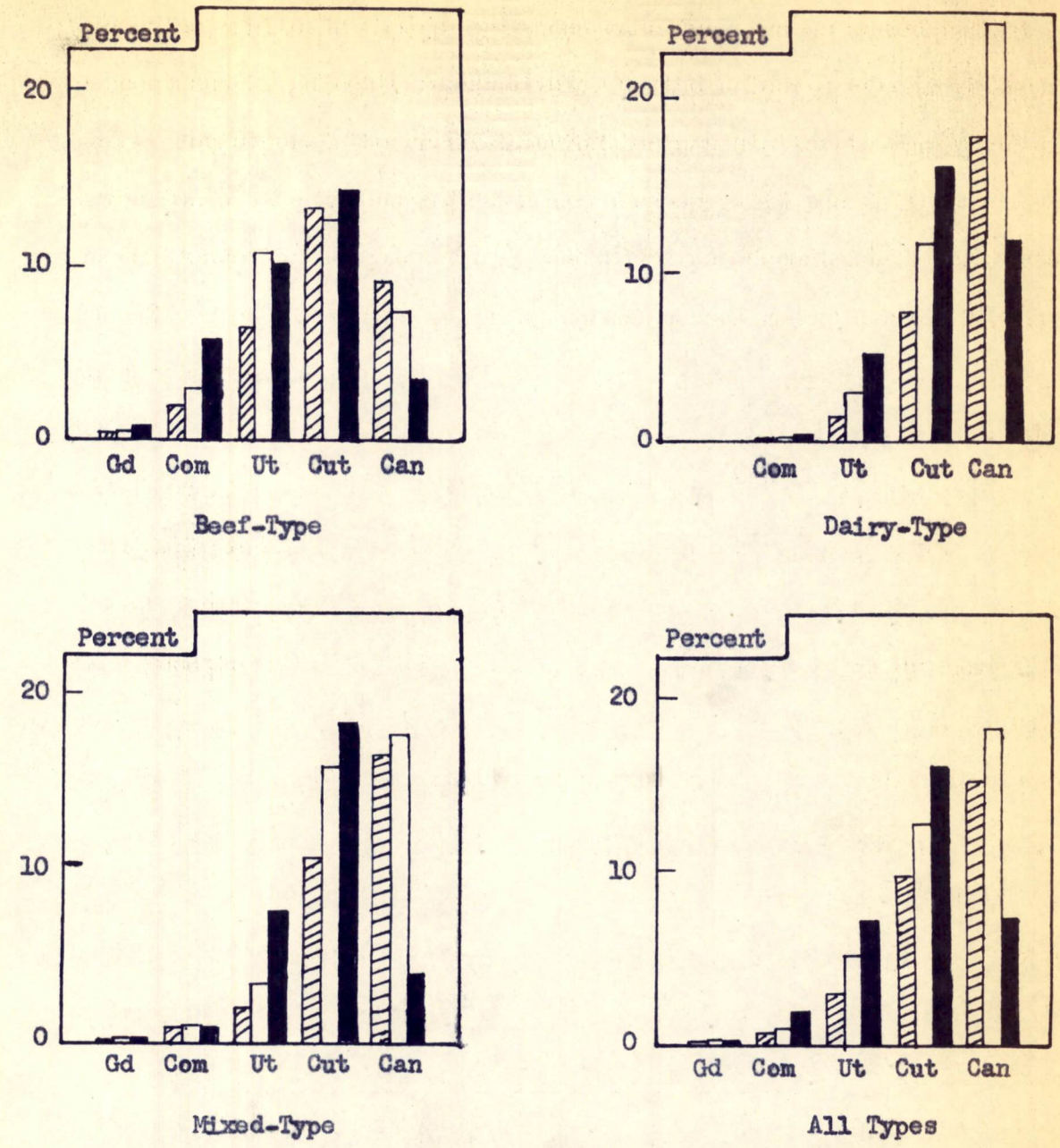


Figure 7. Grade of cows by one-third grade sold on six Tennessee markets by type, fall 1953, spring and fall 1954, and spring 1955.

TABLE V

PROPORTION OF CATTLE AND CALVES SOLD TO PACKER BUYERS, LOCAL SLAUGHTERERS AND SPECULATORS BY CLASS, GRADE AND TYPE SIX TENNESSEE AUCTION MARKETS, FALL 1953, SPRING AND FALL 1954, AND SPRING 1955

Class and Grade	Beef-Type			Dairy-Type			Mixed-Type		
	Total	Bought for Slaughter	Percent Bought for Slaughter	Total	Bought for Slaughter	Percent Bought for Slaughter	Total	Bought for Slaughter	Percent Bought for Slaughter
	Number	Number	Percent	Number	Number	Percent	Number	Number	Percent
Veal Calves									
Prime	2	0	0	2	2	100.0	0	0	0
Choice	66	34	51.5	14	7	50.0	787	762	96.8
Good	136	106	77.9	32	17	53.1	1151	745	64.7
Commercial	198	151	76.3	128	104	81.3	1074	891	83.0
Utility	170	121	71.2	323	246	76.2	485	366	75.5
Cull	67	29	43.3	248	213	85.9	116	78	67.2
Calves									
Prime	1	1	100.0	1	1	100.0	1	1	100.0
Choice	137	111	81.0	4	4	100.0	28	26	92.9
Good	491	334	68.0	5	3	60.0	172	129	75.0
Commercial	604	336	60.6	38	30	78.9	336	235	69.9
Utility	610	244	40.0	98	65	66.3	316	212	67.1
Cull	103	35	34.0	71	41	57.7	176	95	54.0
Steers									
Choice	76	59	77.6	0	0	0	3	2	66.7
Good	469	325	69.3	2	1	50.0	68	56	82.4
Commercial	1050	505	48.1	12	7	58.3	286	188	65.7
Utility	737	276	37.4	53	27	50.9	558	280	50.2
Cutter	185	82	44.3	44	24	54.5	276	126	45.7
Canner	30	12	40.0	45	28	62.2	72	25	34.7

TABLE V (continued)

PROPORTION OF CATTLE AND CALVES SOLD TO PACKER BUYERS, LOCAL SLAUGHTERERS AND SPECULATORS BY CLASS, GRADE AND TYPE SIX TENNESSEE AUCTION MARKETS, FALL 1953, SPRING AND FALL 1954, AND SPRING 1955

Class and Grade	Beef-Type			Dairy-Type			Mixed-Type		
	Total	Bought for Slaughter	Percent Bought for Slaughter	Total	Bought for Slaughter	Percent Bought for Slaughter	Total	Bought for Slaughter	Percent Bought for Slaughter
	Number	Number	Percent	Number	Number	Percent	Number	Number	Percent
Heifers									
Prime	1	1	100.0	0	0	0	0	0	0
Choice	59	47	79.7	0	0	0	5	5	100.0
Good	230	163	70.9	4	4	100.0	51	42	82.4
Commercial	469	296	63.1	25	14	56.0	165	117	70.9
Utility	311	185	59.5	95	63	66.3	307	170	55.4
Cutter	192	120	62.5	120	57	47.5	291	172	59.1
Canner	45	26	57.8	124	71	57.3	162	86	53.1
Cows									
Good	11	9	81.8	0	0	0	4	3	75.0
Commercial	81	46	56.8	10	10	100.0	19	14	73.7
Utility	205	134	65.4	135	101	74.8	98	63	64.3
Cutter	304	221	72.7	483	354	73.3	336	210	62.5
Canner	150	90	60.0	742	502	67.7	287	167	58.2
Total	7,190	4,129	57.4	2,858	1,996	69.8	7,630	5,266	69.0

feeding or breeding purposes, but this depends largely on the relative demand for feeder, stockers and slaughter cattle. This is particularly true of two-way cattle when they can be bought for a low price. The large share of dairy animals purchased by slaughter house operators is probably due to the fact that most high quality dairy animals for milking and breeding purposes are sold at other markets and at private sales which are restricted to dairy stock, and thus they do not appear in the general livestock auction sales.

Figure 8 shows the grade distribution of cattle and calves of all types purchased directly by the slaughterers in terms of one-third grade. The grade distribution of cattle and calves bought for slaughter can be seen by comparing Figure 3 through 7 with the comparable classes in Figure 8. The data from which these figures were constructed are presented in Appendix Tables I through X.

The grade distribution of cattle and calves sold directly for slaughter by type and season is shown in Appendix Tables VI to X. More than 43 percent of the vealers graded good or better with 30 percent grading commercial and 27 percent utility or lower. There was some variation in grades sold for slaughter between the fall and spring seasons. In the fall, 15 percent of the vealers graded commercial and 36 percent graded utility, while in the spring up to 25 percent were commercial and 21 percent were utility.

One-third of the calves graded commercial with 32 percent grading good or higher and 36 percent utility or lower. There was also a seasonal variation in the sale of slaughter calves. In the fall season, the good and cull made up 29 percent and four percent, respectively, of

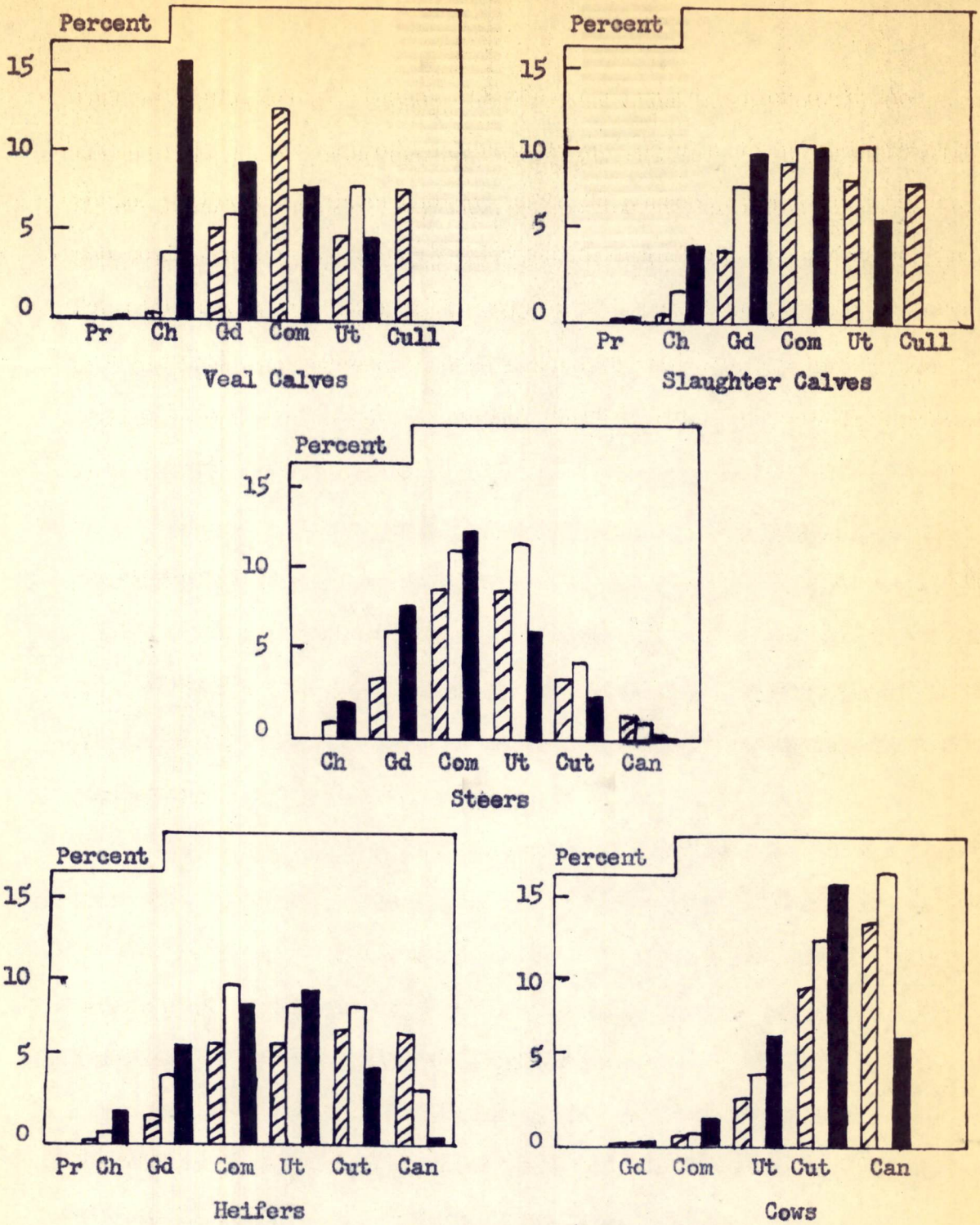


Figure 8. Grade distribution of cattle and calves by one-third grade sold directly to slaughterers on six Tennessee markets, fall 1953, spring and fall 1954, and spring 1955.

the sales, while in the spring these same two grades made up eight percent and 25 percent, respectively, of the sales.

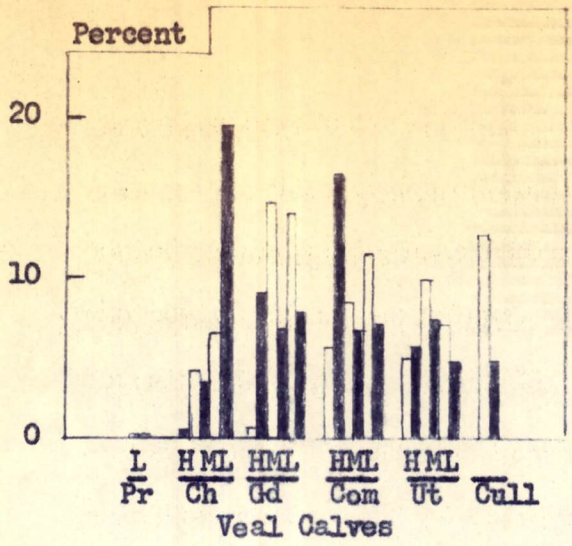
For steers, the grade distribution was similar to the grade distribution of the steers sold for all purposes. In the fall season, 40 percent were in the commercial grade and nine percent in the cutter or canner grades while in the spring season these grades made up 23 and 26 percent, respectively, of the total.

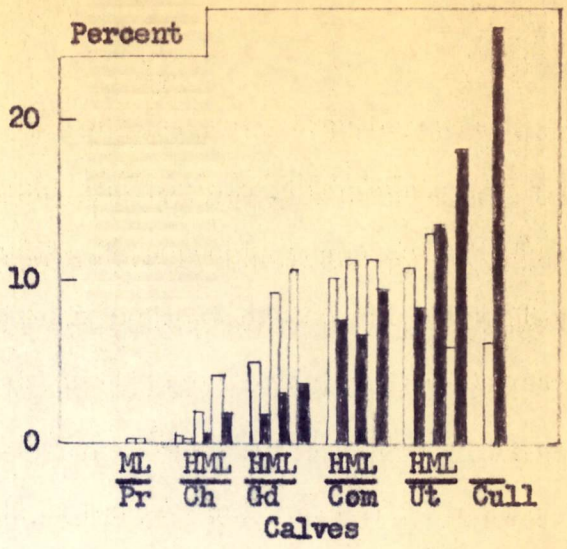
Over half of the heifers sold for slaughter graded commercial or utility and one-third graded cutter or canner. Less than 16 percent graded higher than commercial.

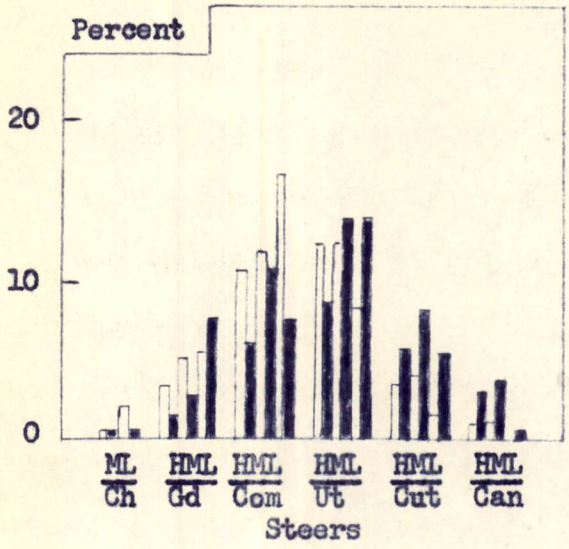
The proportion of cows sold for slaughter purposes increased from high good to middle canner and then declined. Cutter and canner grades consisted of 80 percent of all the cows sold for slaughter. There were no apparent differences in the percent of cows that sold in each grade between the fall and spring seasons.

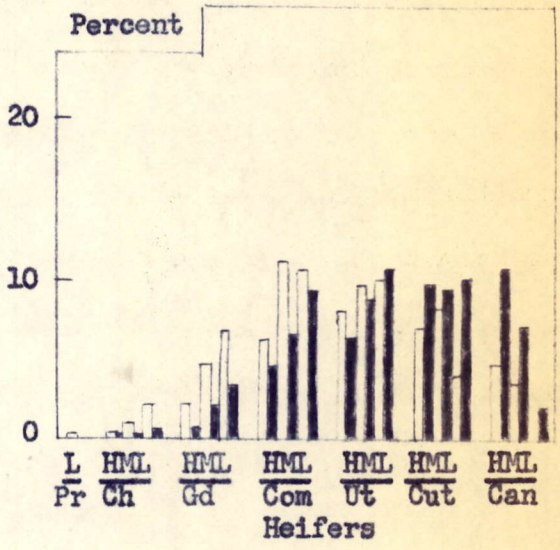
Fall and Spring Sales. Figure 9 shows the grade distribution by seasons of cattle and calves sold on six selected Tennessee auction markets. The data from which the figure was constructed are presented in Appendix Tables XI through XV.

As shown in Figure 9, the mode of the grade distribution for all cattle and calves sold during the spring sales was for vealers, low choice; calves, cull; steers, middle and low utility; heifers, low utility; and for cows the mode was middle canner. In the fall period, the mode for vealers was middle good; calves, middle utility; steers, low commercial; heifers, middle commercial; and for cows, middle canner. The majority of the vealers graded higher than calves, steers or heifers.









Pr = Prime, Ch = Choice, Gd = Good,
Com = Commercial, Ut = Utility,
Cut = Cutter, Can = Canner

H = Upper one-third of grade
M = Middle one-third of grade
L = Lower one-third of grade

▯ Fall ▮ Spring

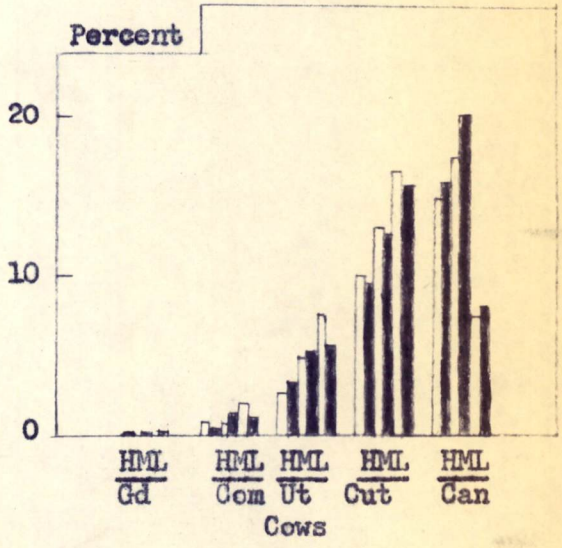


Figure 9. Grade distribution of cattle and calves by one-third grade sold on six Tennessee markets, fall of 1953 and 1954, and spring of 1954 and 1955.

Approximately four-fifths of all the cows graded cutter or canner.

Only 11 percent of vealers selling for slaughter during the fall period graded as high as choice, while 24 percent graded as high as choice in the spring sales. Thirty-six percent of the calves selling for slaughter during the fall graded utility or lower, while 80 percent graded utility or lower in the spring. One-half of the steers graded higher than utility during the fall sales but only one-third of the steers graded this high in the spring sales. Of heifers selling for slaughter during the fall, only 27 percent graded cutter or canner while in the spring season 48 percent graded cutter or canner. About five percent of the cows graded commercial or better in the fall season and three percent in the spring. Thus, vealers that were sold in the spring graded considerably higher than those sold in the fall. When all classes were considered, cattle and calves graded higher in the fall sales than in the spring sales.

CHAPTER III

SUMMARY

Secondary data were used for this study and were obtained from records of sales at six selected auction markets observed twice during observation periods in the fall of 1953 and 1954 and in the spring of 1954 and 1955. The data reveal information on the class, type and grade distribution of the cattle and calves sold. Such information is a prerequisite to any progressive educational program which would assist producers and the industry in making needed adjustments for a sounder livestock marketing program.

All market classes of slaughter cattle and calves were represented on the days on which the auctions were observed. The relative importance of cattle and calves sold through the auction markets by class was as follows: 28 percent vealers, 23 percent steers, 18 percent calves, 16 percent cows and 15 percent heifers. Sales during the fall seasons of 1953 and 1954, accounting for 62 percent of the number of animals sold, were more important than were the spring sales of 1954 and 1955. Vealers were relatively more important in terms of the number of animals sold in the spring sales while calves and steers were relatively more important in fall sales.

With respect to type of breeding, 61 percent of the calves, 64 percent of the steers and 49 percent of the heifers were classified as belonging to the beef-type. A large proportion, or 72 percent, of the vealers were classified as mixed-type. Nearly one-half of the cows were classified as dairy-type. Some differences in type occurred

between the two seasons compared.

Sales directly for slaughter accounted for the majority of the sales, or nearly two-thirds of all animals sold. Average weights of the animals sold for slaughter were as follows: veal calves, 175 pounds; slaughter calves, 305 pounds; steers, 575 pounds; heifers, 540 pounds; and cows, 775 pounds.

As expected, packer buyers bought the largest proportion of all market classes, 35 percent of all cattle and calves sold in the fall sales and 48 percent of them sold in the spring sales. Packer buyers were the primary purchasers of vealers. Speculators were the next most important type of buyer. They bought 18 percent of the cattle and calves sold during the spring sales and 25 percent during the fall sales. They were more interested in purchasing steers, heifers, and cows than in purchasing vealers and calves. Other buyers, who were primarily farmers, purchased approximately 20 percent of the all classes in terms of total sales. Most of these animals went back to the farm for further finishing or for breeding purposes. Auction management purchases accounted for seven percent of the purchases during the spring season and 10 percent during the fall. Order buyers were not a very important type of buyer purchasing less than eight percent of all animals sold.

Cattle and calves graded extremely low in terms of slaughter grades. The modal grade distribution of all animals sold according to class and type were as follows:

Vealers

beef-type - middle utility
dairy-type - cull
mixed-type - low choice

all types - low choice

Calves

beef-type - middle utility
dairy-type - cull
mixed-type - cull
all-types - middle utility

Steers

beef-type - middle commercial
dairy-type - low utility
mixed-type - middle utility
all types - low commercial

Heifers

beef-type - middle commercial
dairy-type - high canner
mixed-type - low utility
all types - low utility

Cows

beef-type - low cutter
dairy-type - middle canner
mixed-type - low cutter
all types - middle canner

The majority of beef-type animals graded higher than the mixed-type. Dairy-type animals graded lower than the beef or mixed-type. When all types were considered, vealers graded higher than calves, steers, or heifers. Most cows graded cutter or lower. Cows purchased for slaughter were cows too old or of such quality as to be undesirable for other purposes.

The average grade of animals purchased by packer buyers, local slaughterers, and speculators was considerably higher than the average grade purchased by order buyers, auction management, and other buyers. Farmers, order buyers, and management generally specialized in the purchase of "thin" animals, whose quality could be quickly improved by

feeding on pasture or concentrates. Thus, it is logical that the quality of the animals purchased by farmers, order buyers, and auction management would be of lower grades than the cattle and calves purchased by the buyers representing the slaughtering firms.

Most of the veal calves purchased by slaughter house operators in the fall graded utility and lower while in the spring they graded from low choice to high commercial. The most common grade of slaughter calves purchased by seasons was from middle good to middle utility in the fall season and in the utility and cull grades during the spring season.

Forty percent of all steers sold for slaughter graded commercial and 33 percent utility that were sold in the fall with the bulk of them grading low commercial. For the spring sales, the bulk of the steers, or 27 percent, graded middle and low utility.

Middle and low commercial grades made up the bulk, or 22 percent of the heifers purchased by slaughterers in the fall sales. In the spring sales, average grades purchased were lower with 29 percent of the heifers grading as cutter and a fourth of them grading utility. Eighty percent of all cows purchased graded cutter and canner and 15 percent graded utility.

BIBLIOGRAPHY

BIBLIOGRAPHY

Badenhop, M. B. Marketing Cattle and Calves Through Auction Markets in Tennessee. Bulletin 247. Tennessee: University of Tennessee Agricultural Experiment Station, Knoxville, June 1956.

_____. Selling and Buying Livestock by Tennessee Farmers. Bulletin 233. Tennessee: University of Tennessee Agricultural Experiment Station, Knoxville, June 1953.

Dowell, Austin Allyn; and Bjorka, Knute. Livestock Marketing. New York: McGraw-Hill Book Company, Inc., 1941.

Johnson, Jack D. Livestock Marketing in the Southern Region. Southern Cooperative Series Bulletin 26. Agricultural Experiment Stations of Alabama, Arkansas, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Bureau of Agricultural Economics and Production and Marketing Administration, United States Department of Agriculture Cooperating. July, 1952.

Peters, Walter H.; Grummer, Robert H. Livestock Production. New York: McGraw-Hill Book Company, Inc., 1954.

Purcell, J. C. Class, Type and Grade of Cattle and Calves Sold on Georgia Livestock Auction Markets. Bulletin N.S. 28 Georgia: University of Georgia Agricultural Experiment Stations, Athens, June 1956.

_____. Prospective Demand for Meat and Livestock in the South. Marketing Research Report No. 99, Southern Co-operative Service Bulletin No. 43. Washington: United States Department of Agriculture, October 1955.

Stout, Roy G. Marketing Cattle and Calves at Southern Auctions. Southern Cooperative Series Bulletin No. 48. Agricultural Experiment Stations of Alabama, Arkansas, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Agricultural Marketing Service, United States Department of Agriculture Cooperating, 1953.

Tennessee Department of Agriculture Cooperating with United States Department of Agriculture, Bureau of Agricultural Economics. Agricultural Trends in Tennessee. Tennessee: Department of Agriculture, Nashville, 1952.

_____. Office of the State Agricultural Statistician, Federal-State Cooperative Crop Reporting Service. 1950-1956 Reports. Tennessee: Nashville, 1950-1956.

Thompson, Sam H. Economic Trends in Livestock Marketing. St. Louis: Planographed by John S. Swift Company, Inc. 1940.

United States Department of Agriculture, Agricultural Marketing Service. Farm Income Situation. Washington: September 1956.

APPENDIX

APPENDIX TABLE I

VEAL CALVES: GRADE BY TYPE SOLD AT SIX TENNESSEE AUCTION MARKETS, FALL 1953, SPRING AND FALL 1954, AND SPRING 1955

Grade	Beef-Type		Dairy-Type		Mixed-Type		All-Type	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Prime								
High	0	0	0	0	0	0	0	0
Middle	0	0	0	0	0	0	0	0
Low	2	0.31	2	0.27	0	0	4	0.08
Choice								
High	5	0.78	1	0.13	11	0.30	17	0.34
Middle	24	3.76	3	0.40	163	4.51	190	3.80
Low	37	5.79	10	1.34	613	16.97	660	13.21
Good								
High	27	4.23	6	0.80	207	5.73	240	4.80
Middle	55	8.61	14	1.87	469	12.98	538	10.76
Low	54	8.45	12	1.61	475	13.15	541	10.82
Commercial								
High	42	6.57	27	3.61	491	13.59	560	11.21
Middle	84	13.15	43	5.76	247	6.84	374	7.48
Low	72	11.27	58	7.77	336	9.30	466	9.32
Utility								
High	34	5.32	58	7.77	171	4.73	263	5.26
Middle	87	13.61	135	18.07	211	5.84	433	8.66
Low	49	7.67	130	17.40	103	2.85	282	5.64
Cull	67	10.48	248	33.20	116	3.21	431	8.62
Total	639	100.00	747	100.00	3,613	100.00	4,999	100.00

APPENDIX TABLE II

CALVES: GRADE BY TYPE SOLD AT SIX TENNESSEE AUCTION MARKETS, FALL 1953, SPRING AND FALL 1954, AND SPRING 1955

Grade	Beef-Type		Dairy-Type		Mixed-Type		All-Type	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Prime								
High	0	0	0	0	0	0	0	0
Middle	0	0	1	0.46	0	0	1	0.03
Low	1	0.05	0	0	1	0.10	2	0.06
Choice								
High	10	0.51	0	0	0	0	10	0.31
Middle	39	2.00	1	0.46	8	0.78	48	1.50
Low	88	4.52	3	1.38	20	1.94	111	3.48
Good								
High	99	5.09	0	0	31	3.01	130	4.07
Middle	186	9.56	1	0.46	62	6.03	249	7.80
Low	206	10.59	4	1.84	79	7.68	289	9.05
Commercial								
High	192	9.87	4	1.84	109	10.59	305	9.56
Middle	188	9.66	13	5.99	121	11.76	322	10.09
Low	224	11.51	21	9.68	106	10.30	351	11.00
Utility								
High	216	11.10	21	9.68	81	7.87	318	9.96
Middle	251	12.90	35	16.13	136	13.22	422	13.22
Low	143	7.35	42	19.36	99	9.62	284	8.90
Cull	103	5.29	71	32.72	176	17.10	350	10.97
Total	1,946	100.00	217	100.00	1,029	100.00	3,192	100.00

APPENDIX TABLE III

STEERS: GRADE BY TYPE SOLD AT SIX TENNESSEE AUCTION MARKETS, FALL 1953, SPRING AND FALL 1954, AND SPRING 1955

Grade	Beef-Type		Dairy-Type		Mixed-Type		All-Type	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Choice								
High	0	0	0	0	0	0	0	0
Middle	19	0.75	0	0	1	0.08	20	0.50
Low	57	2.24	0	0	2	0.16	59	1.49
Good								
High	103	4.04	0	0	7	0.55	110	2.77
Middle	143	5.61	0	0	27	2.14	170	4.29
Low	223	8.75	2	1.28	34	2.69	259	6.53
Commercial								
High	311	12.21	0	0	51	4.04	362	9.13
Middle	370	14.53	6	3.85	81	6.41	457	11.52
Low	369	14.49	6	3.85	154	12.19	529	13.34
Utility								
High	249	9.78	8	5.13	171	13.54	428	10.79
Middle	277	10.88	21	13.46	215	17.02	513	12.94
Low	211	8.28	24	15.38	172	13.62	407	10.26
Cutter								
High	64	2.51	11	7.05	97	7.68	172	4.34
Middle	94	3.69	14	8.97	112	8.87	220	5.55
Low	27	1.06	19	12.18	67	5.31	113	2.85
Canner								
High	17	0.67	21	13.46	28	2.22	66	1.66
Middle	13	0.51	18	11.54	37	2.93	68	1.71
Low	0	0	6	3.85	7	0.55	13	0.33
Total	2,547	100.00	156	100.00	1,263	100.00	3,966	100.00

APPENDIX TABLE IV

HEIFERS: GRADE BY TYPE SOLD AT SIX TENNESSEE AUCTION MARKETS, FALL 1953, SPRING AND FALL 1954, AND SPRING 1955

Grade	Beef-Type		Dairy-Type		Mixed-Type		All-Type	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Prime								
High	0	0	0	0	0	0	0	0
Middle	0	0	0	0	0	0	0	0
Low	1	0.08	0	0	0	0	1	0.04
Choice								
High	5	0.38	0	0	1	0.10	6	0.23
Middle	16	1.22	0	0	0	0	16	0.60
Low	38	2.91	0	0	4	0.41	42	1.58
Good								
High	38	2.91	0	0	4	0.41	42	1.58
Middle	75	5.74	2	0.54	22	2.24	99	3.73
Low	117	9.85	21	0.54	25	2.55	144	5.42
Commercial								
High	112	8.57	4	1.09	34	3.47	150	5.65
Middle	179	13.70	6	1.63	60	6.12	245	9.22
Low	178	13.62	15	4.08	71	7.24	264	9.94
Utility								
High	102	7.80	13	3.53	78	7.95	193	7.27
Middle	102	7.80	41	11.14	104	10.60	247	9.30
Low	107	8.19	41	11.14	125	12.74	273	10.28
Cutter								
High	82	6.27	38	10.33	92	9.38	212	7.98
Middle	75	5.74	40	10.87	110	11.21	225	8.47
Low	35	2.68	42	11.41	89	9.07	166	6.25
Canner								
High	30	2.29	63	17.12	94	9.58	187	7.04
Middle	15	1.15	49	13.32	62	6.32	126	4.74
Low	0	0	12	3.26	6	0.61	18	0.68
Total	1,307	100.00	368	100.00	981	100.00	2,656	100.00

APPENDIX TABLE V

COWS: GRADE BY TYPE SOLD AT TENNESSEE AUCTION MARKETS, FALL 1953, SPRING AND FALL 1954, AND SPRING 1955

Grade	Beef-Type		Dairy-Type		Mixed-Type		All-Type	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Good								
High	2	0.27	0	0	1	0.13	3	0.11
Middle	3	0.40	0	0	2	0.27	5	0.17
Low	6	0.80	0	0	1	0.13	7	0.24
Commercial								
High	15	2.00	2	0.15	7	0.94	24	0.84
Middle	23	3.06	3	0.22	5	0.67	31	1.08
Low	43	5.73	5	0.36	7	0.94	55	1.92
Utility								
High	49	6.52	22	1.61	15	2.02	86	3.00
Middle	80	10.65	41	2.99	26	3.50	147	5.13
Low	76	10.12	72	5.26	57	7.66	205	7.16
Cutter								
High	100	13.31	105	7.66	80	10.75	285	9.95
Middle	95	12.65	159	11.61	119	16.00	373	13.02
Low	109	14.51	219	15.99	137	18.42	465	16.23
Canner								
High	69	9.19	245	17.88	125	16.80	439	15.32
Middle	56	7.46	335	24.45	132	17.74	523	18.26
Low	25	3.33	162	11.82	30	4.03	217	7.57
Total	751	100.00	1,370	100.00	744	100.00	2,865	100.00

APPENDIX TABLE VI

VEAL CALVES: GRADE BY TYPE AND SEASON, SOLD TO PACKERS AND LOCAL SLAUGHTERERS AND SPECULATORS, SIX TENNESSEE AUCTION MARKETS, FALL 1953 AND 1954, AND SPRING 1954 AND 1955

Grade	Fall								Spring								Total	
	Beef-Type		Dairy-Type		Mixed-Type		Total		Beef-Type		Dairy-Type		Mixed-Type		Total		Spring & Fall	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Prime																		
High	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Middle	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Low	0	0	1	0.27	0	0	1	0.06	0	0	1	0.47	0	0	1	0.05	2	0.05
Choice																		
High	1	0.48	0	0	1	0.09	2	0.12	3	1.28	1	0.47	4	0.23	8	0.37	10	0.26
Middle	4	1.93	0	0	90	8.17	94	5.58	9	3.85	1	0.47	59	3.39	69	3.15	163	4.21
Low	3	1.45	0	0	150	13.61	153	9.08	14	5.98	5	2.35	458	26.32	477	21.81	630	16.27
Good																		
High	3	1.45	1	0.27	6	0.54	10	0.59	17	7.26	3	1.41	198	11.37	218	9.97	228	5.89
Middle	22	10.63	1	0.27	90	8.17	113	6.70	23	9.83	7	3.29	111	6.38	141	6.45	254	6.56
Low	15	7.25	2	0.53	203	18.42	220	13.06	26	11.11	3	1.41	137	7.87	166	7.59	386	9.97
Commercial																		
High	15	7.25	11	2.93	65	5.90	91	5.40	21	8.97	13	6.10	377	21.67	411	18.79	502	12.98
Middle	26	12.56	15	3.99	128	11.62	169	10.03	37	15.81	17	7.98	94	5.40	148	6.77	317	8.19
Low	24	11.59	29	7.71	179	16.24	232	13.77	28	11.97	19	8.92	48	2.76	95	4.34	327	8.45
Utility																		
High	9	4.35	24	6.38	47	4.26	80	4.75	16	6.84	21	9.86	88	5.06	125	5.72	205	5.29
Middle	46	22.22	68	18.08	65	5.90	179	10.62	23	9.83	33	15.49	95	5.46	151	6.90	330	8.52
Low	19	9.18	49	13.03	40	3.63	108	6.41	8	3.42	51	23.94	31	1.78	90	4.11	198	5.11
Cull	20	9.66	175	46.54	38	3.45	233	13.83	9	3.85	38	17.84	40	2.30	87	3.98	320	8.26
Total	207	100.00	376	100.00	1102	100.00	1685	100.00	234	100.00	213	100.00	1740	100.00	2187	100.00	3872	100.00

APPENDIX TABLE VII

SLAUGHTER CALVES: GRADE BY TYPE AND SEASON, SOLD TO PACKERS, LOCAL SLAUGHTERERS AND SPECULATORS, SIX TENNESSEE AUCTION MARKETS, FALL 1953 AND 1954, AND SPRING 1954 AND 1955

Grade	Fall								Spring								Total	
	Beef-Type		Dairy-Type		Mixed-Type		Total		Beef-Type		Dairy-Type		Mixed-Type		Total		Spring & Fall	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Prime																		
High	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Middle	0	0	0	0	0	0	0	0	0	0	1	1.59	0	0	1	0.22	1	0.05
Low	1	0.11	0	0	1	0.20	2	0.14	0	0	0	0	0	0	0	0	2	0.10
Choice																		
High	8	0.90	0	0	0	0	8	0.54	1	0.50	0	0	0	0	1	0.22	9	0.47
Middle	28	3.14	0	0	7	1.40	35	2.38	2	1.00	1	1.59	0	0	3	0.65	38	1.97
Low	65	7.30	1	1.23	17	3.41	83	5.64	7	3.50	2	3.17	2	1.00	11	2.38	94	4.86
Good																		
High	60	6.73	0		24	4.81	84	5.71	4	2.00	0	0	2	1.00	6	1.30	90	4.66
Middle	112	12.57	1	1.23	41	8.22	154	10.47	8	4.00	0	0	6	3.02	14	3.03	168	8.69
Low	141	15.83	1	1.23	49	9.82	191	12.98	9	4.50	1	1.59	7	3.52	17	3.68	208	10.76
Commercial																		
High	89	9.99	1	1.23	70	14.03	160	10.88	21	10.50	3	4.76	12	6.03	36	7.79	196	10.14
Middle	103	11.56	5	6.18	76	15.23	184	12.51	22	11.00	4	6.35	8	4.02	34	7.36	218	11.28
Low	101	11.34	9	11.11	55	11.02	165	11.22	30	15.00	8	12.70	14	7.04	52	11.25	217	11.23
Utility																		
High	82	9.20	8	9.88	41	8.22	131	8.91	17	8.50	8	12.70	20	10.05	45	9.74	176	9.10
Middle	71	7.97	15	18.52	62	12.42	148	10.06	36	18.00	8	12.70	24	12.06	68	14.72	216	11.17
Low	19	2.13	17	20.99	33	6.61	69	4.69	19	9.50	9	14.28	32	16.08	60	12.99	129	6.67
Cull	11	1.23	23	28.40	23	4.61	57	3.87	24	12.00	18	28.57	72	36.18	114	24.67	171	8.85
Total	891	100.00	81	100.00	499	100.00	1471	100.00	200	100.00	63	100.00	199	100.00	462	100.00	1933	100.00

APPENDIX TABLE VIII

STEERS: GRADE BY TYPE AND SEASON, SOLD TO PACKERS, LOCAL SLAUGHTERERS AND SPECULATORS, SIX TENNESSEE AUCTION MARKETS, FALL 1953 AND 1954, AND SPRING 1954 AND 1955

Grade	Fall								Spring								Total	
	Beef-Type		Dairy-Type		Mixed-Type		Total		Beef-Type		Dairy-Type		Mixed-Type		Total		Spring & Fall	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Choice																		
High	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Middle	11	1.38	0	0	1	0.20	12	0.89	7	1.52	0	0	0	0	7	1.04	19	0.94
Low	33	4.13	0	0	1	0.20	34	2.51	8	1.74	0	0	0	0	8	1.19	42	2.08
Good																		
High	59	7.38	0	0	5	1.00	64	4.73	11	2.39	0	0	1	0.56	12	1.79	76	3.76
Middle	84	10.51	0	0	26	5.21	110	8.14	27	5.87	0	0	0	0	27	4.02	137	6.77
Low	69	8.64	1	1.85	20	4.01	90	6.66	75	16.30	0	0	4	2.25	79	11.77	169	8.35
Commercial																		
High	128	16.02	0	0	31	6.21	159	11.76	30	6.52	0	0	3	169	33	4.92	192	9.49
Middle	128	16.02	1	1.85	46	9.22	175	12.94	59	12.83	1	3.03	7	3.93	67	9.98	242	11.96
Low	120	15.02	3	5.56	89	17.84	212	15.68	40	8.70	2	6.06	12	6.74	54	8.05	266	13.15
Utility																		
High	66	8.26	3	5.56	71	14.23	140	10.36	38	8.26	1	3.03	14	7.86	53	7.90	193	9.54
Middle	57	7.13	9	16.67	84	16.84	150	11.09	66	14.35	1	3.03	34	19.10	101	15.05	251	12.41
Low	19	2.38	11	20.37	54	10.82	84	6.21	30	6.52	2	6.06	23	12.92	55	8.20	139	6.87
Cutter																		
High	6	0.75	6	11.11	25	5.01	37	2.74	24	5.22	1	3.03	16	8.99	41	6.11	78	3.86
Middle	15	1.88	3	5.56	26	5.21	44	3.25	28	6.09	2	6.06	25	14.05	55	8.20	99	4.89
Low	2	0.25	9	16.67	9	1.80	20	1.48	7	1.52	3	9.09	25	14.05	35	5.22	55	2.72
Canner																		
High	2	0.25	5	9.25	5	1.00	12	0.89	4	0.87	10	30.31	7	3.93	21	3.13	33	1.63
Middle	0	0	2	3.70	3	0.60	5	0.37	6	1.30	8	24.24	5	2.81	19	2.83	24	1.19
Low	0	0	1	1.85	3	0.60	4	0.30	0	0	2	6.06	2	1.12	4	0.60	8	0.39
Total	799	100.00	54	100.00	499	100.00	1352	100.00	460	100.00	33	100.00	178	100.00	671	100.00	2023	100.00

APPENDIX TABLE IX

HEIFERS: GRADE BY TYPE AND SEASON, SOLD TO PACKERS, LOCAL SLAUGHTERERS AND SPECULATORS, SIX TENNESSEE AUCTION MARKETS, FALL 1953 AND 1954, AND APRING 1954 AND 1955

Grade	Fall								Spring								Total	
	Beef-Type		Dairy-Type		Mixed-Type		Total		Beef-Type		Dairy-Type		Mixed-Type		Total		Spring & Fall	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Prime																		
High	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Middle	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Low	1	0.19	0	0	0	0	1	0.10	0	0	0	0	0	0	0	0	1	0.06
Choice																		
High	4	0.75	0	0	1	0.27	5	0.49	0	0	0	0	0	0	0	0	5	0.31
Middle	11	2.05	0	0	0	0	11	1.09	2	0.66	0	0	0	0	2	0.32	13	0.79
Low	27	5.04	0	0	4	1.07	31	3.06	3	0.99	0	0	0	0	3	0.48	34	2.07
Good																		
High	22	4.10	0	0	3	0.80	25	2.47	6	1.99	0	0	0	0	6	0.96	31	1.89
Middle	42	7.84	2	1.94	13	3.49	57	5.63	11	3.64	0	0	6	2.74	17	2.71	74	4.51
Low	55	10.26	2	1.94	17	4.56	74	7.31	27	8.94	0	0	3	1.37	30	4.78	104	6.35
Commercial																		
High	52	9.70	2	1.94	18	4.83	72	7.12	28	9.27	2	1.89	8	3.65	38	6.06	110	6.71
Middle	94	17.54	5	4.85	29	7.77	128	12.65	28	9.27	0		13	5.94	41	6.54	169	10.31
Low	64	11.94	2	1.94	36	9.65	102	10.08	30	9.93	3	2.83	13	5.94	46	7.34	148	9.03
Utility																		
High	40	7.46	8	7.77	28	7.51	76	7.51	16	5.30	2	1.89	14	6.39	32	5.10	108	6.59
Middle	29	5.41	14	13.59	50	13.40	93	9.19	31	10.27	10	9.43	13	5.94	54	8.61	147	8.97
Low	44	8.21	16	15.54	41	10.99	101	9.98	25	8.28	13	12.26	24	10.96	62	9.89	163	9.95
Cutter																		
High	14	2.61	6	5.83	33	8.85	53	5.24	44	14.57	8	7.55	19	8.67	71	11.32	124	7.57
Middle	25	4.66	11	10.68	40	10.72	76	7.51	29	9.60	11	10.38	27	12.33	67	10.69	143	8.72
Low	3	0.56	5	4.85	22	5.90	30	2.96	5	1.66	16	15.09	31	14.15	52	8.29	82	5.00
Canner																		
High	7	1.31	18	17.48	23	6.17	48	4.74	10	3.31	26	24.53	33	15.07	69	11.01	117	7.14
Middle	2	0.37	11	10.68	14	3.75	27	2.67	7	2.32	11	10.38	14	6.39	32	5.10	59	3.60
Low	0	0	1	0.97	1	0.27	2	0.20	0	0	4	3.77	1	0.46	5	0.80	7	0.43
Total	536	100.00	103	100.00	373	100.00	1012	100.00	302	100.00	106	100.00	219	100.00	627	100.00	1639	100.00

APPENDIX TABLE X

COWS: GRADE BY TYPE AND SEASON, SOLD TO PACKERS, LOCAL SLAUGHTERERS AND SPECULATORS, SIX TENNESSEE AUCTION MARKETS, FALL 1953 AND 1954 AND SPRING 1954 AND 1955

Grade	Fall								Spring								Total	
	Beef-Type		Dairy-Type		Mixed-Type		Total		Beef-Type		Dairy-Type		Mixed-Type		Total		Spring & Fall	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Good																		
High	1	0.31	0	0	1	0.30	2	0.15	0	0	0	0	0	0	0	0	2	0.10
Middle	3	0.93	0	0	1	0.30	4	0.31	0	0	0	0	0	0	0	0	4	0.21
Low	4	1.25	0	0	1	0.30	5	0.39	1	0.56	0	0	0	0	1	0.16	6	0.31
Commercial																		
High	8	2.49	2	0.31	3	0.91	13	1.01	3	1.67	0	0	0	0	3	0.47	16	0.83
Middle	7	2.18	2	0.31	2	0.60	11	0.85	4	2.23	1	0.30	2	1.60	7	1.11	18	0.94
Low	19	5.92	2	0.31	5	1.51	26	2.01	5	2.79	3	0.91	2	1.60	10	1.58	36	1.87
Utility																		
High	26	8.10	10	1.57	5	1.51	41	3.18	10	5.59	6	1.82	6	4.80	22	3.47	63	3.28
Middle	33	10.28	18	2.82	10	3.01	61	4.72	17	9.50	10	3.04	4	3.20	31	4.90	92	4.78
Low	32	9.97	38	5.96	32	9.64	102	7.90	16	8.94	19	5.78	6	4.80	41	6.48	143	7.43
Cutter																		
High	37	11.53	57	8.94	43	12.95	137	10.61	32	17.88	23	6.99	10	8.00	65	10.27	202	10.50
Middle	46	14.33	80	12.54	53	15.96	179	13.87	22	12.29	37	11.25	19	15.20	78	12.32	257	13.36
Low	62	19.31	100	15.67	66	19.88	228	17.66	22	12.29	57	17.33	19	15.20	98	15.48	326	16.94
Canner																		
High	21	6.54	109	17.09	46	13.86	176	13.63	18	10.06	59	17.93	26	20.80	103	16.27	279	14.50
Middle	18	5.61	147	23.04	53	15.96	218	16.89	18	10.06	82	24.92	23	18.40	123	19.43	341	17.72
Low	4	1.25	73	11.44	11	3.31	88	6.82	11	6.14	32	9.73	8	6.40	51	8.06	139	7.23
Total	321	100.00	638	100.00	332	100.00	1291	100.00	179	100.00	329	100.00	125	100.00	633	100.00	1924	100.00

APPENDIX TABLE XI

VEAL CALVES: GRADE BY TYPE AND SEASON, SIX TENNESSEE AUCTION MARKETS, FALL 1953 AND 1954, AND SPRING 1954 AND 1955

Grade	Fall								Spring								Total	
	Beef-Type		Dairy-Type		Mixed-Type		Total		Beef-Type		Dairy-Type		Mixed-Type		Total		Spring & Fall	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Prime																		
High	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Middle	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Low	1	0.32	1	0.22	0	0	2	0.08	1	0.30	1	0.35	0	0	2	0.08	4	0.08
Choice																		
High	1	0.32	0	0	1	0.06	2	0.08	4	1.21	1	0.35	10	0.52	15	0.59	17	0.34
Middle	5	1.62	1	0.22	93	5.56	99	4.06	19	5.76	2	0.70	70	3.60	91	3.55	190	3.80
Low	4	1.29	2	0.43	151	9.04	157	6.43	33	10.00	8	2.79	462	23.79	503	19.66	660	13.21
Good																		
High	6	1.94	1	0.22	7	0.42	14	0.57	21	6.36	5	1.74	200	10.30	226	8.83	240	4.80
Middle	28	9.06	4	0.87	332	19.87	364	14.92	27	8.18	10	3.48	137	7.05	174	6.80	538	10.76
Low	18	5.83	6	1.30	320	19.15	344	14.10	36	10.91	6	2.09	155	7.98	197	7.70	541	10.82
Commercial																		
High	19	6.15	11	2.39	108	6.46	138	5.66	23	6.97	16	5.58	383	19.72	422	16.49	560	11.21
Middle	38	12.30	20	4.35	148	8.86	206	8.44	46	13.94	23	8.01	99	5.10	168	6.56	374	7.48
Low	30	9.71	35	7.61	219	13.11	284	11.64	42	12.73	23	8.01	117	6.02	182	7.11	466	9.32
Utility																		
High	10	3.24	35	7.61	77	4.61	122	5.00	24	7.27	23	8.01	94	4.84	141	5.51	263	5.26
Middle	60	19.42	87	18.91	92	5.50	239	9.80	27	8.18	48	16.73	119	6.13	194	7.58	433	8.66
Low	37	11.97	64	13.91	58	3.47	159	6.52	12	3.64	66	23.00	45	2.32	123	4.81	282	5.64
Cull	52	16.83	193	41.96	65	3.89	310	12.70	15	4.55	55	19.16	51	2.63	121	4.73	431	8.62
Total	309	100.00	460	100.00	1671	100.00	2440	100.00	330	100.00	287	100.00	1942	100.00	2559	100.00	4999	100.00

APPENDIX TABLE XII

CALVES: GRADE BY TYPE AND SEASON, SIX TENNESSEE AUCTION MARKETS, FALL 1953 AND 1954, AND SPRING 1954 AND 1955

Grade	Fall								Spring								Total	
	Beef-Type		Dairy-Type		Mixed-Type		Total		Beef-Type		Dairy-Type		Mixed-Type		Total		Spring & Fall	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Prime																		
High	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Middle	0	0	0	0	0	0	0	0	0	0	1	1.14	0	0	1	0.13	1	0.03
Low	1	0.06	0	0	1	0.14	2	0.08	0	0	0	0	0	0	0	0	2	0.06
Choice																		
High	9	0.57	0	0	0	0	9	0.37	1	0.27	0	0	0	0	1	0.13	10	0.31
Middle	37	2.35	0	0	7	0.98	44	1.82	2	0.54	1	1.14	1	0.32	4	0.52	48	1.50
Low	80	5.08	1	0.77	17	2.37	98	4.05	8	2.16	2	2.27	3	0.96	13	1.69	111	3.48
Good																		
High	91	5.78	0	0	27	3.77	118	4.88	8	2.16	0	0	4	1.28	12	1.56	130	4.07
Middle	178	11.30	1	0.77	46	6.41	225	9.29	8	2.16	0	0	16	5.13	24	3.11	249	7.80
Low	191	12.13	2	1.55	69	9.62	262	10.82	15	4.04	2	2.27	10	3.20	27	3.50	289	9.05
Commercial																		
High	153	9.72	1	0.77	94	13.11	248	10.24	39	10.51	3	3.41	15	4.81	57	7.39	305	9.56
Middle	155	9.84	7	5.43	109	15.20	271	11.19	33	8.89	6	6.82	12	3.85	51	6.61	322	10.09
Low	184	11.68	13	10.08	80	11.16	277	11.44	40	10.78	8	9.09	26	8.33	74	9.60	351	11.00
Utility																		
High	189	12.00	11	8.53	54	7.53	254	10.49	27	7.28	10	11.36	27	8.65	64	8.30	318	9.96
Middle	193	12.25	24	18.61	101	14.09	318	13.14	58	15.63	11	12.50	35	11.22	104	13.49	422	13.22
Low	67	4.25	28	21.71	49	6.83	144	5.95	76	20.49	14	15.91	50	17.03	140	18.16	284	8.90
Cull	47	2.99	41	31.78	63	8.79	151	6.24	56	15.09	30	34.09	113	36.22	199	25.81	350	10.97
Total	1575	100.00	129	100.00	717	100.00	2421	100.00	371	100.00	88	100.00	312	100.00	771	100.00	3192	100.00

APPENDIX TABLE XIII

STEERS: GRADE BY TYPE AND SEASON, SIX TENNESSEE AUCTION MARKETS, FALL 1953 AND 1954, AND SPRING 1954 AND 1955

Grade	Fall								Spring								Total	
	Beef-Type		Dairy-Type		Mixed-Type		Total		Beef-Type		Dairy-Type		Mixed-Type		Total		Spring & Fall	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Choice																		
High	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Middle	11	0.73	0	0	1	0.11	12	0.48	8	0.77	0	0	0	0	8	0.54	20	0.50
Low	47	3.11	0	0	2	0.23	49	1.97	10	0.96	0	0	0	0	10	0.68	59	1.49
Good																		
High	80	5.30	0	0	6	0.68	86	3.46	23	2.22	0	0	1	0.26	24	1.62	110	2.77
Middle	103	6.82	0	0	27	3.06	130	5.23	40	3.86	0	0	0	0	40	2.70	170	4.29
Low	114	7.55	2	2.11	30	3.40	146	5.87	109	10.51	0	0	4	1.05	113	7.64	259	6.53
Commercial																		
High	223	14.77	0	0	46	5.21	269	10.82	88	8.49	0	0	5	1.31	93	6.29	362	9.13
Middle	226	14.97	5	5.26	67	7.60	298	11.98	144	13.89	1	1.64	14	3.68	159	10.75	457	11.52
Low	276	18.28	4	4.21	137	15.53	417	16.77	93	8.97	2	3.28	17	4.46	112	7.57	529	13.34
Utility																		
High	166	10.99	5	5.26	130	14.74	301	12.10	83	8.00	3	4.92	41	10.76	127	8.59	428	10.79
Middle	130	8.61	18	18.95	162	18.37	310	12.46	147	14.17	3	4.92	53	13.91	203	13.73	513	12.94
Low	77	5.10	20	21.05	107	12.13	204	8.20	134	12.92	4	6.56	65	17.06	203	13.73	407	10.26
Cutter																		
High	18	1.19	9	9.47	61	6.92	88	3.54	46	4.44	2	3.28	36	9.45	84	5.68	172	4.34
Middle	26	1.72	11	11.58	64	7.26	101	4.06	68	6.56	3	4.92	48	12.60	119	8.04	220	5.55
Low	6	0.40	11	11.58	18	2.04	35	1.41	21	2.02	8	13.11	49	12.86	78	5.27	113	2.85
Canner																		
High	6	0.40	6	6.32	13	1.47	25	1.01	11	1.06	15	24.59	15	3.94	41	2.77	66	1.66
Middle	1	0.06	3	3.16	8	0.91	12	0.48	12	1.16	15	24.59	29	7.61	56	3.79	68	1.71
Low	0	0	1	1.05	3	0.34	4	0.16	0	0	5	8.19	4	1.05	9	0.61	13	0.33
Total	1510	100.00	95	100.00	882	100.00	2487	100.00	1037	100.00	61	100.00	381	100.00	1479	100.00	3966	100.00

APPENDIX TABLE XIV

HEIFERS: GRADE BY TYPE AND SEASON, SIX TENNESSEE AUCTION MARKETS, FALL 1953 AND 1954, AND SPRING 1954 AND 1955

Grade	Fall								Spring								Total
	Beef-Type		Dairy-Type		Mixed-Type		Total		Beef-Type		Dairy-Type		Mixed-Type		Total		Spring & Fall
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No. Percent
Prime																	
High	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0
Middle	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0
Low	1	0.12	0	0	0	0	1	0.06	0	0	0	0	0	0	0	0	1 0.04
Choice																	
High	5	0.62	0	0	1	0.16	6	0.37	0	0	0	0	0	0	0	0	6 0.23
Middle	14	1.75	0	0	0	0	14	0.87	2	0.39	0	0	0	0	2	0.19	16 0.60
Low	32	4.00	0	0	4	0.64	36	2.23	6	1.18	0	0	0	0	6	0.58	42 1.58
Good																	
High	31	3.88	0	0	4	0.64	35	2.17	7	1.38	0	0	0	0	7	0.67	42 1.58
Middle	61	7.62	2	1.08	15	2.39	78	4.84	14	2.76	0	0	7	1.98	21	2.01	99 3.73
Low	85	10.63	2	1.08	21	3.34	108	6.70	32	6.31	0	0	4	1.13	36	3.45	144 5.42
Commercial																	
High	77	9.63	2	1.08	25	3.98	104	6.45	35	6.90	2	1.09	9	2.55	46	4.41	150 5.65
Middle	128	16.00	6	3.24	45	7.17	179	11.10	51	10.06	0		15	4.25	66	6.33	245 9.22
Low	104	13.00	9	4.87	55	8.76	168	10.41	74	14.60	6	3.28	16	4.53	96	9.21	264 9.94
Utility																	
High	61	7.62	9	4.87	59	9.39	129	8.00	41	8.09	4	2.19	19	5.38	64	6.14	193 7.27
Middle	54	6.75	23	12.43	79	12.58	156	9.67	48	9.47	18	9.84	25	7.08	91	8.73	247 9.30
Low	61	7.62	23	12.43	78	12.42	162	10.04	46	9.07	18	9.84	47	13.32	111	10.64	273 10.28
Cutter																	
High	29	3.63	18	9.73	66	10.51	113	7.01	53	10.45	20	10.93	26	7.37	99	9.49	212 7.98
Middle	31	3.88	24	12.97	75	11.94	130	8.06	44	8.68	16	8.64	35	9.92	95	9.11	225 8.47
Low	12	1.50	13	7.03	37	5.89	62	3.84	23	4.54	29	15.85	52	14.73	104	9.97	166 6.25
Canner																	
High	10	1.25	28	15.14	38	6.05	76	4.71	20	3.95	35	19.12	56	15.86	111	10.64	187 7.04
Middle	4	0.50	25	13.51	25	3.98	54	3.35	11	2.17	24	13.11	37	10.48	72	6.90	126 4.74
Low	0	0	1	0.54	1	0.16	2	0.12	0	0	11	6.01	5	1.42	16	1.53	18 0.68
Total	800	100.00	185	100.00	628	100.00	1613	100.00	507	100.00	183	100.00	353	100.00	1043	100.00	2656 100.00

APPENDIX TABLE XV

COWS: GRADE BY TYPE AND SEASON, SIX TENNESSEE AUCTION MARKETS, FALL 1953 AND 1954, AND SPRING 1954 AND 1955

Grade	Fall								Spring								Total
	Beef-Type		Dairy-Type		Mixed-Type		Total		Beef-Type		Dairy-Type		Mixed-Type		Total		Spring & Fall
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No. Percent
Good																	
High	2	0.39	0	0	1	0.18	3	0.15	0	0	0	0	0	0	0	0	3 0.11
Middle	3	0.59	0	0	2	0.35	5	0.25	0	0	0	0	0	0	0	0	5 0.17
Low	5	0.98	0	0	1	0.18	6	0.30	1	0.41	0	0	0	0	1	0.12	7 0.24
Commercial																	
High	11	2.16	2	0.21	6	1.06	19	0.94	4	1.65	0	0	1	0.55	5	0.59	24 0.84
Middle	15	2.95	2	0.21	2	0.35	19	0.94	8	3.31	1	0.23	3	1.66	12	1.41	31 1.08
Low	37	7.27	2	0.21	5	0.89	44	2.19	6	2.48	3	0.70	2	1.11	11	1.29	55 1.92
Utility																	
High	36	7.07	13	1.38	8	1.42	57	2.83	13	5.37	9	2.10	7	3.87	29	3.40	86 3.00
Middle	52	10.22	27	2.87	22	3.91	101	5.02	28	11.57	14	3.26	4	2.21	46	5.40	147 5.13
Low	58	11.39	50	5.32	47	8.35	155	7.70	18	7.44	22	5.13	10	5.52	50	5.87	205 7.16
Cutter																	
High	63	12.38	72	7.65	68	12.08	203	10.09	37	15.29	33	7.69	12	6.63	82	9.62	285 9.95
Middle	66	12.97	109	11.59	90	15.99	265	13.16	29	11.98	50	11.66	29	16.02	108	12.68	373 13.02
Low	79	15.52	144	15.30	109	19.36	332	16.49	30	12.40	75	17.48	28	15.47	133	15.61	465 16.23
Canner																	
High	43	8.45	171	18.17	89	15.81	303	15.05	26	10.74	74	17.25	36	19.89	136	15.96	439 15.32
Middle	29	5.70	228	24.23	95	16.87	352	17.49	27	11.16	107	24.94	37	20.44	171	20.07	523 18.26
Low	10	1.96	121	12.86	18	3.20	149	7.40	15	6.20	41	9.56	12	6.63	68	7.98	217 7.57
Total	509	100.00	941	100.00	563	100.00	2013	100.00	242	100.00	429	100.00	181	100.00	852	100.00	2865 100.00