

AN ANALYSIS OF MICHIGAN'S LIVESTOCK
AUCTION INDUSTRY

Thesis for the Degree of M. S.
MICHIGAN STATE COLLEGE

Stanton P. Parry

1953



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AN ANALYSIS OF MICHIGAN'S LIVESTOCK

AUCTION INDUSTRY

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of the requirements for

Master of Science degree in **Agricultural Economics**

Robert C. Kramer

Major professor

Date August 7, 1953

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AN ANALYSIS OF MICHIGAN'S LIVESTOCK

AUCTION INDUSTRY

A Thesis

**Submitted to the School of Graduate Studies of Michigan
State College of Agriculture and Applied Science
in partial fulfillment of the requirements
for the degree of**

MASTER OF SCIENCE

**Department of Agricultural
Economics**

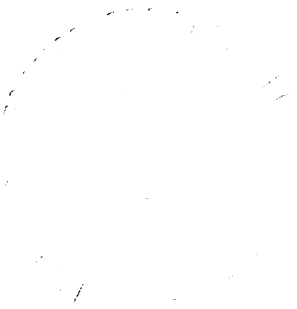
by

Stanton P. Parry

1953



THESIS



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The author assumes full responsibility for any errors in this thesis.

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CHAPTER I

AN INTRODUCTION TO THE LIVESTOCK AUCTION INDUSTRY

One of the leading agricultural industries in the State of Michigan is the livestock industry. On January 1, 1952 there were 1,890,000 cattle and calves; 433,000 sheep and lambs; 956,000 hogs and pigs; and, 79,000 horses and colts on the farms in Michigan. This placed the State of Michigan sixteenth in the United States in numbers of cattle and calves on farms, twenty-second in numbers of all sheep and lambs on farms, and seventeenth in numbers of hogs and pigs on farms.¹ Furthermore, in Michigan the estimated total cash receipts from the marketing of livestock and livestock products came to 470 million dollars in 1952. In this same year the returns from all crops marketed totaled only 275 million dollars.²

In the last few years, the livestock auction has appeared on the marketing scene and has grown to be one of the more important outlets for livestock. However, at Michigan State College no studies had ever been made dealing explicitly with the livestock auction industry, and no information was available to answer questions about this industry submitted by farmers, auction operators, law-makers, students and others interested in livestock marketing.

¹ Michigan Agricultural Statistics 1951, (Michigan Department of Agriculture cooperating with the B.A.E. of the United States Department of Agriculture, 1952).

² Information from office Michigan Co-operative Crop Reporting Service - Lansing, Michigan, data in process of publication for 1952 "Michigan Agricultural Statistics".

The purposes of this study were: First, to ascertain the development of livestock auction markets for the sale of all types of livestock in Michigan; second, to determine the character, and seasonality of the livestock handled by them; third, to inquire into their facilities, organization and method of operation; fourth, to attempt to determine the services rendered by them and charges made for such services; fifth, to inquire into the auction's operating, disease and credit problems; and, sixth, to determine the auction's effectiveness as a marketing outlet for the Michigan farmer's livestock.

The farmers of Michigan are not restricted to the use of this newest of the livestock marketing outlets, for other possible alternative markets were the following:

1. They could elect to ship their livestock direct to the terminal markets at Chicago or Detroit.

2. They could ship their livestock to a dealer or packer owned concentration yard, or to one of the three cooperatively run concentration yards in the state (at Homer, Schoolcraft and Portland).

3. As a further alternative, the farmers of Michigan could decide to ship direct to the packers. There were a number of these local packers and slaughterers available. For example, while only 103 were in operation throughout the state in 1939;³ there were 523 such packers and slaughterers in operation in 1951.⁴

³ F. Voss, Marketing Michigan Livestock, (Unpublished Master's Thesis for Department of Economics, Michigan State College, 1940), pp. 70.

⁴ R. Kramer, Unpublished summary from Office of Price Stabilization records for the year 1950, (Department of Agricultural Economics, Michigan State College) (map).

4. Farmers could elect to sell to dealers and truckers at the farm. There were over 900 such dealers and truckers licensed in the state in June, 1952.⁵

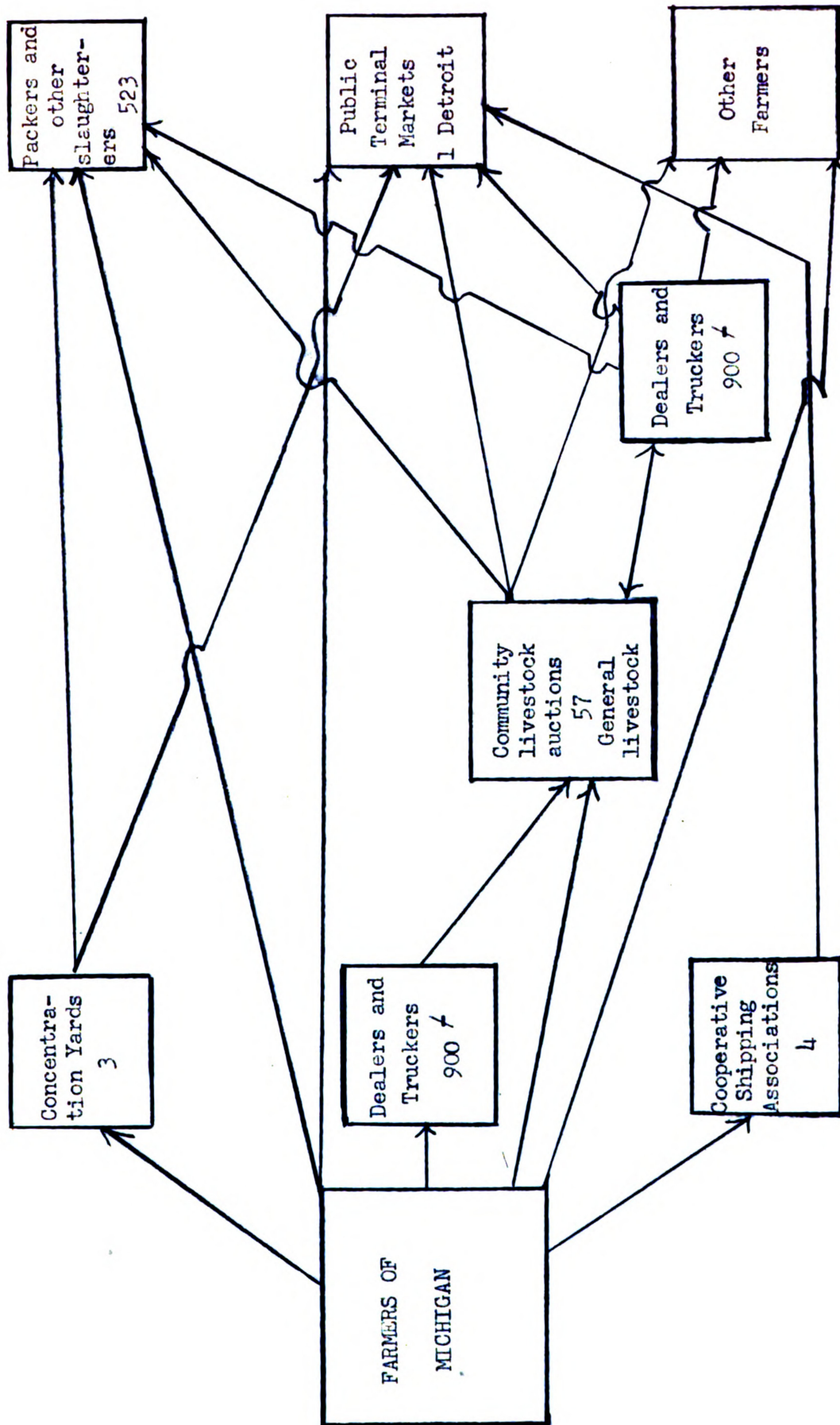
5. Furthermore, farmers could ship to one of the few remaining cooperatively run shipping associations. In 1952, reliable information shows that only four remained in the state. These were the Lake Odessa Cooperative Association, the North Adams Cooperative Association, Reed City Shipping Association, and Williamston Cooperative Association. There has been an extremely rapid decline in the number of these shipping associations in the last few years. In 1922, there were 200 such associations in Michigan. In 1930, 143 remained. Subsequent years found 33 associations in 1939, 23 in 1943, 14 in 1945, and four in 1952.⁶

6. As a final alternative, farmers may ship and sell to other farmers directly. Contacts and contracts are harder to make and transact here, but much of our dairy breeding stock is sold in this manner.

Figure 1 shows diagrammatically the alternative marketing channels open to a Michigan farmer. However, this thesis has concerned itself with only the livestock auction industry.

⁵ List of Licensed Dealers and Truckers, September 1952, Bureau of Animal Industry, Michigan Department of Agriculture, responsible for dealer licensing.

⁶ D. Stark, Livestock Marketing Survey Extension Report, (Department of Agricultural Economics, Michigan State College, 1948.) (Mimeographed). pp. 10-13. The 1952 information was obtained from a personal interview with Mr. Stark.



NOTE: The numbers appearing in the blocks indicate the number operating in 1952.

Figure 1. Some Alternative Channels Through Which Michigan Farmers May Sell Their Livestock

Perhaps it would be easier to understand the livestock auction industry if we delve briefly into its history: The earliest reference believed to have been made to this method of selling was in 193 A.D.⁷ At this time it is believed that Roman soldiers, after the death of Pertinax, offered to sell the Roman World at auction.

The holding of auctions in America is supposed to have started as early as 1676 in New York City.⁸ The first livestock auctions were started in England around 1836, while at almost this same time similar experiments were supposed to have been carried on in America. In Scotland reference is made to the holding of livestock auctions in 1849.⁹

The first livestock auction sale recorded in the United States took place in Ohio in 1836. This was a sale of imported English Cattle (largely Shorthorns) conducted by The Ohio Company for Imported English Cattle, which had been established in 1834.¹⁰ One of the oldest regular livestock auction sales was established in 1853 at London, Ohio. This was called The Madison Importing Company, and started with a total capital

⁷ Charles S. Plumb, Marketing of Farm Animals, (Boston: Ginn and Company, 1927), pp. 259.

⁸ Ibid, pp. 260.

⁹ G. G. Randall, and L. B. Mann, Livestock Auction Sales in The United States, Farm Credit Administration, Bulletin 35, (May 1939), pp. III.

¹⁰ R. A. Clemen, The American Livestock and Meat Industry, (New York: Roland Press, 1923), pp. 60.

of 10,000 dollars. They purchased livestock in England and on September 27, 1853 held their first sale of fifteen bulls, nine cows, twelve hogs, and twenty sheep (all imported from England). This first sale grossed 26,257 dollars. On March 5, 1856 this company started monthly sales. On March 2, 1869 this company held a sale in which one thousand head of cattle were sold.¹¹

Also in the 1850's, the picturesque Kentucky "Court Day Sales" were established. A monthly court on the first Monday of the month brought the planters and stockmen together at the county seat. Some of these sales were believed to have transacted as much as 250,000 dollars worth of business in a single day.¹²

Other early sales include the one for horses which was started in 1900 at Miles City, Montana.¹³ Another early livestock auction started in 1904 at Union City, Iowa.¹⁴ While a monthly auction was started in 1911 in Berlin, Ohio.¹⁵ This auction at Berlin was followed by other Ohio auctions, largely patterned, according to reliable resources,¹⁶

¹¹ Plumb, op. cit., pp. 260.

¹² Clemen, op. cit., pp. 75-77.

¹³ H. Holland and A. R. Clark, Livestock Auction Markets in Montana, (Montana State College, Experimental Station Bulletin 451, 1946) pp. 4.

¹⁴ K. Bjorka and S. Thompson, Community Livestock Auctions in Iowa, (Iowa Experiment Station Bulletin 376, 1938), pp. 280.

¹⁵ P. Eckert and G. F. Henning, The Livestock Auction in Ohio, (Ohio Experiment Station Bulletin 557, 1935), pp. 4.

¹⁶ Ibid, pp. 4.

after those of Kentucky. In the State of Kentucky as early as 1925 there were thirteen livestock auction sales in operation. The first regular sale started in Lexington in May of 1922. From October, 1924 to October, 1925, eight of these sales averaged 21,079 dollars per sale.¹⁷

Farther West, it was found that there was an active livestock auction sale in Nebraska in 1912.¹⁸ The State of Illinois started its first livestock auction sale in 1927.¹⁹

Michigan started in the livestock auction business after most of the other Mid-Western States, and the growth of its auctions was much slower. The first record of a livestock auction in Michigan was that of the sale at Adrian in Lenawee County. This sale was established in May, 1933. It was known as "The Adrian Livestock Sales Company" and it was incorporated as such on May 4, 1933. It was dissolved as a corporation on June 30, 1943, and has since been operated as an individually owned enterprise.²⁰

An auction was established at St. Johns, Gratiot County, late in

¹⁷ E. C. Johnson, Kentucky Livestock Sales Organizations, (Kentucky Agricultural Experiment Station Bulletin 270, 1926), pp. 213, 217.

¹⁸ H. C. Filley, Livestock Auctions in Nebraska, (Nebraska Agricultural Experiment Station Bulletin, 369, 1944), pp. 3.

¹⁹ Selling Illinois Livestock Through Auctions. (The Department of Agricultural Economics, University of Illinois, Mimeograph 890, June, 1938), pp. 2.

²⁰ Files of Corporations, Michigan Corporations and Securities Commission, Lansing, Michigan.

1933, and another started operations at Owosso, Shiawassee County, in 1933. The latter auction was incorporated in March, 1934.²¹ Other early Michigan livestock auction sales were established as follows: One at Charlotte in 1934; one at Marlette, Breckenridge and Traverse City in 1935, and one at Hillsdale about this same time. In 1936, sales were established at Lapeer, Kalamazoo, and Ionia. In 1937, sales were started at Big Rapids and Sandusky.²²

When the Farm Credit Administration made a study of livestock auctions in the United States in 1937,²³ they found that there were thirteen livestock auctions in Michigan. At the same time they found that there were 1,317 livestock auctions in the United States and that Iowa had 195, Illinois 139, Kansas 139, Missouri 113, Nebraska 98, Ohio 76, Indiana 44, Minnesota 38, and Wisconsin three.

Michigan and Wisconsin apparently were the slow starters in the development of decentralized livestock auction marketing in the Mid-West.

Since 1937, Michigan has shown a very rapid development in the livestock auction field. On June 1, 1952, there were sixty-four licensed auctions in the State of Michigan. This represents a 392 percent increase in numbers of auctions since 1937. Michigan's phenomenal late increase has not been conformable with the North Central Region as a whole. Most

²¹ Stark, op. cit., pp. 6.

²² Ibid pp. 6.

²³ Randall and Mamm, op. cit., pp. 2 (Table I).

of the states in this region had their rapid development during the early 1930's, the depression years. Table I shows the growth of these auctions from 1937 to 1952, in selected North Central States and for the United States as a whole.

From Table I it can also be observed that those states which had the largest number of auction sales in the late 1930's have since tended to level off or decrease in numbers. Those states which had little livestock auction development up to the late 1930's have shown tremendous increases in numbers since 1937.

On June 1, 1952 there were 64 licensed livestock auctions in Michigan. Of those 64 licensed auctions, only 57 were true general livestock auctions as defined in Chapter II. The location of those 57 general livestock auctions as of June 1, 1952 is shown in Figure 2.

Although historical records were destroyed in the State Office Building fire in Lansing (1951), available data²⁴ indicates that there were 13 auctions in 1937, 20 in 1939, and 48 in 1944. More recent data shows 65 auctions in 1949, 70 in 1950, 67 in 1951 and 64 in 1952. These figures would indicate that Michigan had reached its peak in auction numbers in 1950.

²⁴ Stark, op. cit., (data for the years prior to 1937 and the year 1944) Randall and Mann, op. cit., pp. 2. (data for the year 1937).

Voss, op. cit., pp. 75. (data for the year 1939).

List of Livestock Auctions Licensed in Michigan, Bureau of Animal Industry, Michigan Department of Agriculture, (data for the years 1949, 1950, 1951 and 1952).

Map
Code
No. Auction
 Location

- 1 Adrian
- 2 Alpena
- 3 Armada
- 4 Bad Axe
- 5 Battle Creek
- 6 Big Rapids
- 7 Breckenridge
- 8 Cadillac
- 9 Caledonia
- 10 Caro
- 11 Cassopolis
- 12 Charlotte
- 13 Clare
- 14 Coldwater
- 15 Coopersville
- 16 Copemish
- 17 Croswell
- 18 Dundee
- 19 Escanaba
- 20 Fremont
- 21 Gaylord
- 22 Gladwin
- 23 Hart
- 24 Hastings
- 25 Hemlock
- 26 Hillsdale
- 27 Hopkins
- 28 Howell
- 29 Jackson
- 30 Kalamazoo
- 31 Kawkawlin
- 32 Lake Oaissa
- 33 Lapeer
- 34 Lincoln
- 35 Marion
- 36 Marlette
- 37 Montague
- 38 Onaway

- 39 Owosso
- 44 St. Johns
- 49 Standish
- 54 Wayland
- 40 Paw Paw
- 45 St. Louis
- 50 Sturgis
- 55 West Branch
- 41 Ravenna
- 46 Sandusky
- 51 Three Rivers
- 56 Wolverine
- 42 Rockford
- 47 Scottville
- 52 Traverse City
- 57 Zeeland
- 43 Rudyard
- 48 Shepherd
- 53 Trufant

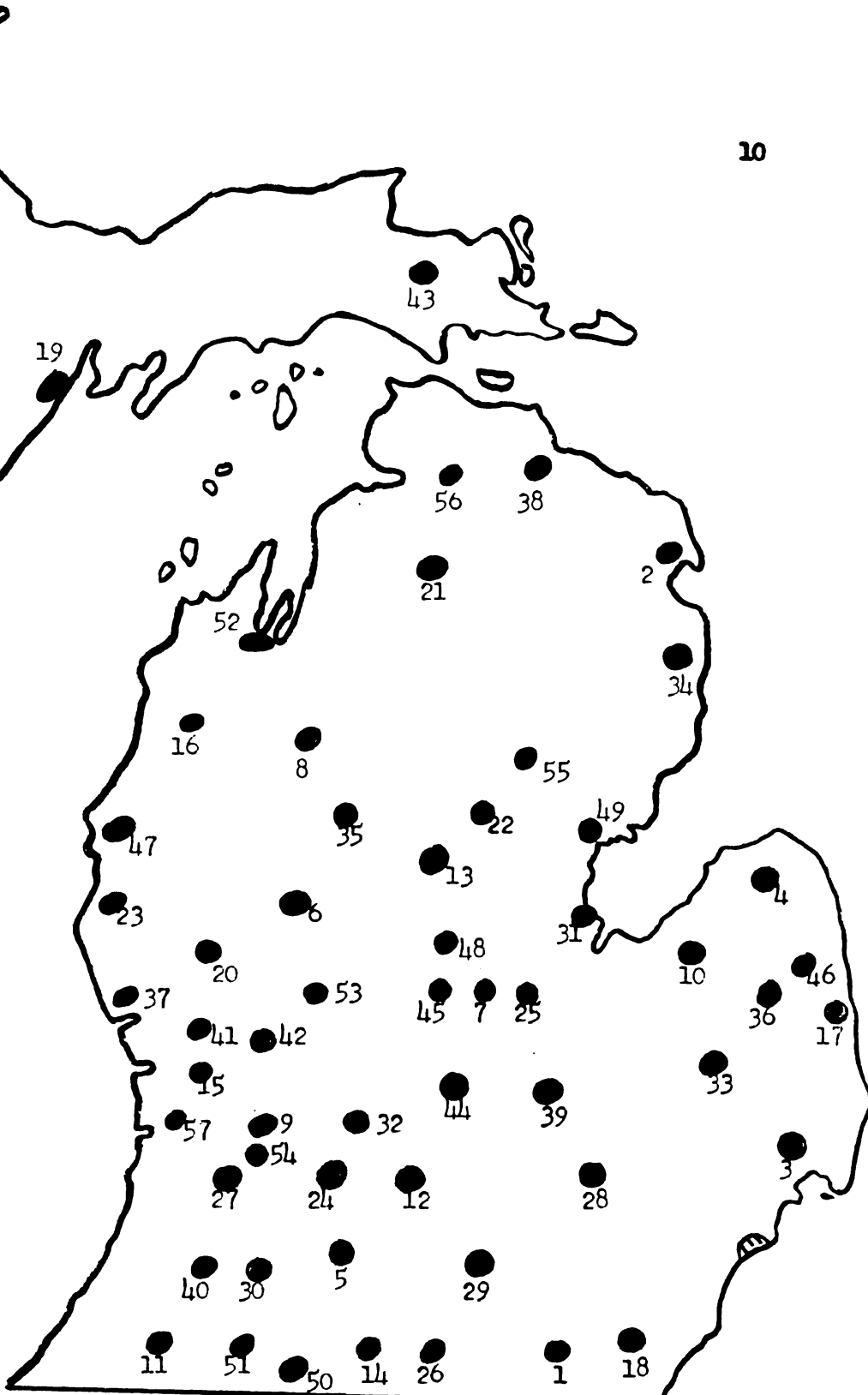


Figure 2. The Geographic Location of Michigan's Fifty-Seven General Livestock Auctions, June 1, 1952

TABLE I

CHANGES IN NUMBERS OF AUCTIONS AND PERCENTAGE CHANGE
BETWEEN 1937 AND 1952 FOR SELECTED NORTH CENTRAL STATES

State	1937*	1952**	Percentage in- crease or decrease between years
Iowa	195	174	-11
Illinois	139	95	-32
Kansas	139	150	8
Missouri	113	122	8
Nebraska	98	106	8
Ohio	76	76	0
Indiana	44	76	73
Minnesota	38	51	34
South Dakota	27	53	96
Michigan	13	64	392
Wisconsin	3	15 ⁴	500
Total this region	885	882	0.0
Total United States	1,317	2,178	65.0

SOURCE: * G. G. Randall, and L. B. Mann, Livestock Auction Sales in The United States, Farm Credit Administration, Bulletin 35, (May 1939), pp. 2. .

** List of Livestock Auctions in The United States by States, (Typed): Compiled by the Rates and Registrations Section, Packers and Stockyards Division, United States Department of Agriculture. (These 1952 numbers thus obtained checked closely with similar figures obtained from the Land-Grant Colleges of the above states except as noted).

⁴ Professor Schaars of the Department of Agriculture Economics, The University of Wisconsin, indicates that in the beginning of 1953 there were 15 authorized sales in Wisconsin. The older List of the Rates and Regulations Section of the Packers and Stockyards Administration indicated only three in this case.

During the summer of 1952, 22 of the 57 general livestock auctions were visited as part of this livestock auction study. The selection of the sample has been explained in Chapter III. At this time, it might be well to look at Figure 3 and note the growth of the livestock auction industry as recorded for these 22 sampled auctions. This chart shows that four of the 22 auctions were established in 1950, which has been shown to be the year for greatest growth in the state. Other trends that should be noted are as follows: (1) The years 1941-1942 marked the first real growth of the livestock auction business in Michigan. (2) The number of auctions in Michigan remained quite stable during the middle war years of 1943-1944, probably due to O.P.A. price ceilings on livestock, lack of building materials, and shortage of labor. (3) With the end of World War II in 1945, a new growth of auctions occurred. (4) This growth apparently reached its peak in 1950, and then began to decline slightly.

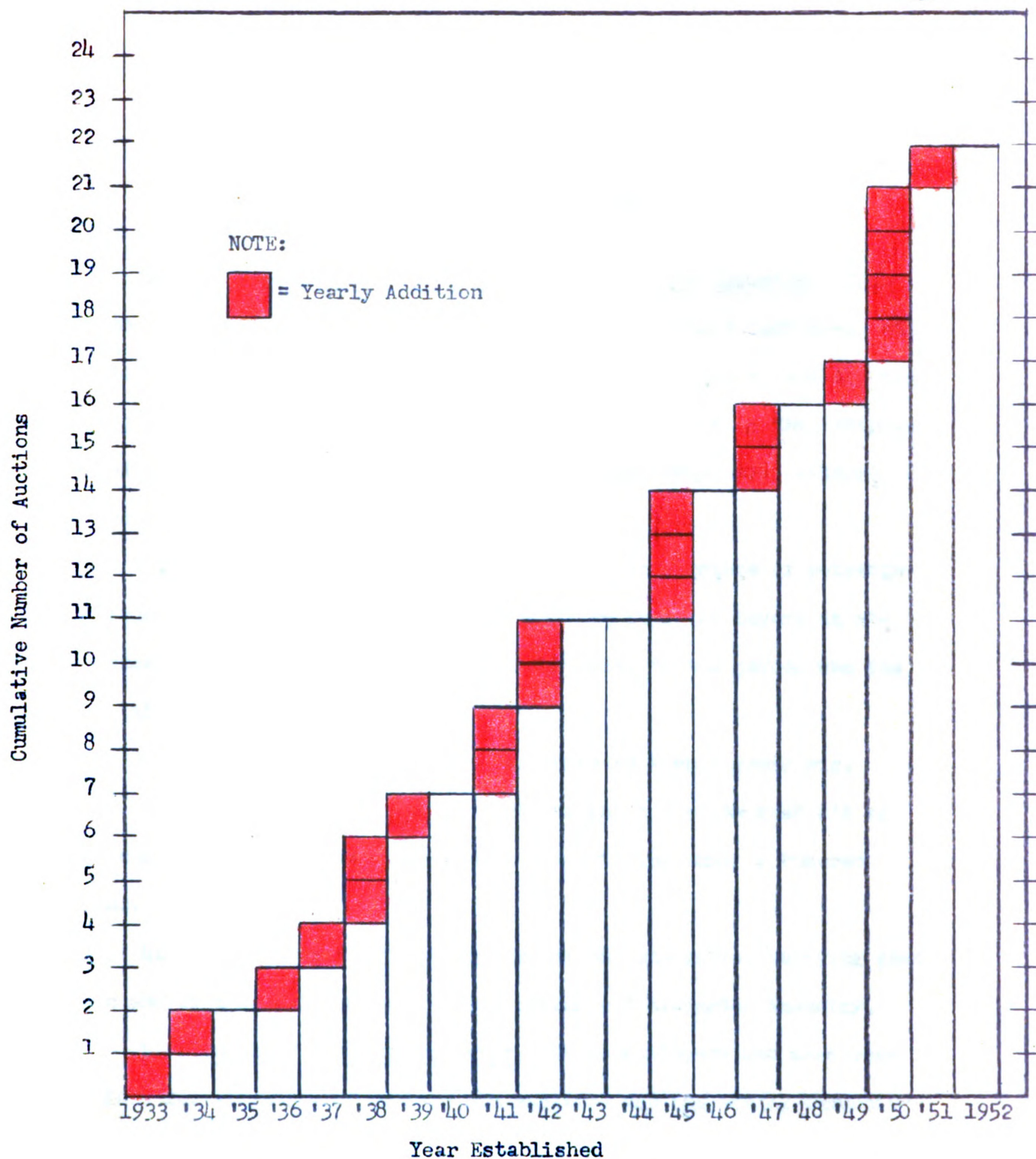


Figure 3. The Date of Establishment and Cumulative Number of Auctions As Recorded for the Twenty-two Sampled Auctions Visited in the Summer of 1952

CHAPTER II

GLOSSARY OF TERMS AND MICHIGAN LAWS AFFECTING THE LIVESTOCK INDUSTRY

Definitions Pertinent to the Livestock Auction Industry. This chapter contains a list of terms common to the livestock industry. These are terms which will be referred to throughout this thesis, and are listed alphabetically and qualified below. The latter part of this chapter contains a brief description of some of the laws frequently referred to in the livestock auction industry.

1. Auction: An auction may be defined as a method of determining price in which the auctioneer invites bids from the buyers in attendance and sells the object, offered for sale, to the person who has made the highest bid.

2. Barrow: A male hog which was unsexed when a young pig.

3. Bob Calf or Deacon Calf: Calves which are one week old or less and those calves over a week old, but weighing under a hundred pounds.

4. Butcher Hogs: Hogs (largely barrows and gilts) carrying good flesh and of a weight desired by the packing and slaughter industry.

5. Community Auction Inspector: State employees who were responsible for licensing of dealers and auctions and inspecting community livestock auctions to check on their compliance with health and other laws and regulations administered by the Michigan Department of Agriculture's Bureau of Animal Industry. On June 1, 1952 the state employed two such inspectors.

6. Country Dealers: Country buyers who, as independent operators, buy livestock directly from the farmer and sell them for a profit at public stockyards, packers or livestock auctions. This term was used whenever the operator actually took possession of the farmer's livestock at the farm.

7. Country Trucker: Farmers and others who do hired trucking of livestock to public stockyards, auctions, concentration yards and other markets. They charged a transportation and handling fee, but did not take possession of the shipper's livestock.

8. Concentration Yards or Assembly Points: Local markets which were privately operated and where only privileged groups were allowed to buy and sell. These were largely owned and operated by packers, private dealers, and some cooperative associations. They were largely hog markets and were much more common in other states than in Michigan.

9. Decentralized Marketing: The selling of livestock locally through a livestock auction, concentration yard or to a local packer.

10. Direct Marketing: The sale and transfer of livestock from producers direct to packers or other slaughterers without using an intermediate selling agency.

11. Feeder Pigs: Young pigs with insufficient growth or flesh to be sold for slaughter purposes: they were returned to the farm for feeding and finishing.

12. Feeder Heifers and Steers: Sometimes referred to as Feeder Cattle: Cattle with sufficient growth and flesh to make suitable for feedlot feeding.

13. Gilt: A young female hog which has not farrowed.

14. Livestock Auction: "Any livestock market where livestock is accepted on consignment and the auction method is used in the marketing of such livestock."¹ There are many types of livestock auctions, but the following types were considered the most important and are the most referred to.²

- (a) The General Livestock Sale: Sales which handled all species of livestock, and some, at the same time, did a minor business in miscellaneous goods. They have permanent physical facilities and were often referred to as auction sales, sales barns, sales pavilions, or community livestock auctions. There were 57 of these licensed in Michigan on June 1, 1952. This was the group which was given the major emphasis in this study.
- (b) The Market Day or Combination Sales: Some livestock was handled, but the largest income was from the sale of miscellaneous goods. There were five sales of this type in Michigan on June 1, 1952. They each carried a 1,500

¹ Laws Relating to and Administered by the Department of Agriculture, Michigan Department of Agriculture, 1951, (Act 284, 1937, 287, 121) pp. 84, 85.

² Note: Livestock auctions licensed by the Michigan Department of Agriculture under authority of Public Act 284 of 1937 are listed here as Type a through d. There were 64 livestock auctions licensed in Michigan on June 1, 1952. However, this study was based on category a, the general livestock sale.

dollar surety bond for the previous year meaning that their high weekly sale for that period was less than 1,500 dollars; therefore, this group was quite insignificant as a livestock market outlet.

- (c) Purebred Livestock Sale: This sale was usually restricted to that livestock (largely cattle) which was eligible for registration with a purebred association. There was only one of these highly specialized sales licensed in Michigan on June 1, 1952.
- (d) Other Specialized Livestock Sales: Sales limited usually to one type or species of livestock; for example, a sale where only saddle horses were sold. There was one sale of this type licensed in Michigan on June 1, 1952.
- (e) Farm Auction Sales: Sales which were held at the farm usually co-instantaneously with a sale of real estate and other farm property being liquidated due to a change of ownership. These sales were specifically exempted from licensing by the state legislature's definition of a livestock auction.³
- (f) Feeder Sales: Sales which were highly seasonal, and embodied selling at a central location (often at a general livestock auction sale barn) feeder cattle or sheep to livestock feeders.

³ Laws Relating to and Administered by the Department of Agriculture, Op. cit., pp. 85.

(g) Sale of Prize Animals at Fairs and Shows: Sales category which included the selling of purebred livestock by breed associations, fat stock at fairs and livestock shows, 4-H livestock, and others of similar nature.

15. Livestock Shipping Associations: A cooperative organization of livestock producers that assembled, loaded, and shipped their livestock to some central market.

16. Order Buyers: Private individuals who buy on order for distant or local packers. They charged a commission for their services. In some cases the auction operators or their representatives acted as order buyers for some packers.

17. Packer Buyers: Those buyers at the public terminal markets or livestock auctions who represented packing plants as direct employees.

18. Public Stockyards: As defined under the Packers and Stockyards Act⁴: "Stockyard, means any place, establishment or facility commonly known as stockyards, conducted or operated for compensation or profit as a public market, consisting of pens, or other inclosures, and their appurtenances, in which live cattle, sheep, swine, horses, or goats are received, held or kept for sale or shipment in commerce. This title shall not apply to a stockyard of which the area normally available for handling livestock, exclusive of runs, alleys, or passage ways is less than twenty thousand square feet."

⁴ Regulations under the Packers and Stockyards Act, 1921 as amended, War Food Administration, United States Department of Agriculture, No. 164, February, 1945, pp. 20.

19. Posted Markets: Stockyards meeting the definition under eighteen above are posted under regulation of the Packers and Stockyards Administration of the United States Department of Agriculture, and must comply with federal regulations on health, licensing, bonding, charges, record keeping, and trade practices. Only one of the 57 general livestock auctions in Michigan was listed as a posted market. This was the livestock sale at St. Johns. All other auction markets were under state regulations only. In the United States, there were 327 posted stockyards of all types on October 15, 1952.⁵

20. Ringman: An employee of the auction who keeps stock moving through the auction ring, past the auctioneer and buyers and thence to the outlet to return to the yarding.

21. Roughs: Old sows, boars, and stags are usually classed as roughs.

22. Slaughter Cattle: Those heifers, steers, bulls, and cows brought to the auction for immediate slaughter (and therefore do not have to be accompanied with certificates as defined under the Bovine Law).

23. Stag: Boars unsexed after maturity and sold as roughs.

24. Weighmaster: A person employed by the auction to weigh in all livestock. In Michigan he must be licensed and registered with the Bureau of Weights and Measures.

⁵ List of Stockyards Posted Under the Packers and Stockyards Act, 1921, Production and Marketing Administration, United States Department of Agriculture, October 15, 1952.

25. Yardmen: Persons employed in loading, unloading, penning and driving livestock as part of handling operations at the auction.

Laws Frequently Referred to in the Livestock Auction Industry

1. Auction Law or the Livestock Auction Law: Public Act 284 of the 1937 session of the Michigan Legislature with later amendments.⁶ This was an act to prevent the spread of infectious diseases of livestock. It required those engaged in buying, selling, and transporting livestock to be licensed and bonded by the Department of Agriculture. It also provided for weighmasters, and inspection and disinfection of sales yards and vehicles. Its major provisions that needed defining in this paper were as follows:

- (a) Dealer Licensing: Those individuals engaged in buying and selling, or transporting, but not operating or conducting a livestock yard where livestock is kept and sold at public sale were to be licensed as dealers for five dollars per year. Those operating such a livestock yard were charged ten dollars per year. This latter provision included livestock auction operators.
- (b) Licensing of Weighmaster: Where any livestock is purchased or sold by weight; such licensees were required to employ a registered weighmaster (see previous definitions) to do all their weighing.

⁶ Laws relating to and Administered by the Department of Agriculture, Michigan Department of Agriculture, 1951, (Act 284, 1937, 287.121), pp. 84.

(c) Bonding of Auctions: Besides being licensed, each dealer or broker operating a livestock yard or livestock auction must for the period of his license (October 1 through the following September 30) obtain a surety bond, to indemnify persons from whom livestock was purchased or for whom livestock was sold. These bonds ran from a 1,500 dollar minimum to a 15,000 dollar maximum. This amount was based on the amount of the highest weekly sale recorded during the previous yearly period, and the bond usually amounted to an amount one thousand dollars over this high weekly sale for those auctions bonded less than the maximum amount.

2. The Bovine Law: Act 157 as amended by the 1949 legislature:⁷ Cattle over twelve months of age could not be sold or otherwise disposed of unless they were accompanied by an official certificate of record, issued by the Director of Agriculture, showing that they had passed an official test for Brucellosis (Bang's disease) within thirty days prior to the sale. This law made the seller responsible for furnishing this record, but the law did not apply to steers or other cattle disposed of for slaughter. However, even those sold by auctions for slaughter must be accompanied by a sales slip and must be killed within ten days in most cases.

⁷ Ibid, (287.21a, Section 21a) pp. 76, 77.

3. The Deacon Law: Act 340 of the 1913 legislature, as amended in 1952.⁸ This 'Deacon Law' made it unlawful to transport a calf under one week of age in inter or intra-state commerce, or to sell for transportation any calf under one week old, except from one farmer to another.

4. Feeder Pig Unloading Law:⁹ Swine could not be sold or removed from a public livestock yard unless immediately slaughtered. They must be killed or delivered at inspected yardings within seventy-two hours following removal from the public yarding. There was no objection to a sale outside the auction building provided the swine was loaded from one vehicle to another one in which they were removed from the premises. Feeder pigs and breeding stock, going back to the farm, were therefore transferred between vehicles at many of the auction yards in Michigan.

5. Immature Veal Law: Act 340 of the 1913 legislature makes it unlawful to sell for human consumption the carcass or meat of a calf less than four weeks old.¹⁰

⁸ Ibid, (289.251, Section 1, supplement) pp. 172.

⁹ Administrative Code of 1944, (Section 6 of Regulation 119), Michigan Department of Agriculture, (Mimeographed).

¹⁰ Laws relating to the Administered by the Department of Agriculture, Michigan Department of Agriculture, 1951, (Act 340 of 1913, 289.251) pp. 172.

CHAPTER III

PROCEDURE IN SELECTING A REPRESENTATIVE SAMPLE

There were 64 licensed livestock auctions in Michigan on June 1, 1952. It was impossible to visit every one of the licensed livestock auctions in Michigan. If this had been possible, it was not necessary to visit all 64 licensed auctions to get a true representation of the typical operations of Michigan's livestock auction industry.

It was possible to classify the general livestock auctions and to select from them a stratified purposive sample of representative general livestock auctions with the aid of information obtained from the Michigan Department of Agriculture, Michigan Department of Securities and Corporations, interviews with the Community Livestock Auction Inspector, and from answers to a preliminary mail questionnaire sent to each of the 64 licensed livestock auctions in Michigan.

On the basis of information so obtained, a universe of 57 general livestock auctions was selected as a base for the study of Michigan's livestock auction industry. Furthermore on the basis of this same information five of the 64 licensed auctions were placed in the miscellaneous auction classification; one auction was classified as a purebred sale, and one auction was classified as a saddle horse sale.

The 57 general livestock auctions which were included in the universe of study were stratified on the basis of geographic location, size

of business, and type of ownership. This stratification was made possible from information obtained as follows:

1. The geographic location of each of the auctions, was obtained from a list of bonded and licensed auctions, maintained by the Bureau of Animal Industry of the Michigan Department of Agriculture.

2. The size of business as indicated by the high weekly sale and the amount of bond carried by each of the 57 general livestock auctions, was obtained from the Bureau of Animal Industry of the Michigan Department of Agriculture. For those not reporting a high sale, the Community Auction Inspector estimated their high weekly sale for 1951.

3. The type of ownership for each of the 57 general livestock auctions was obtained from the list maintained by the Bureau of Animal Industry of the Michigan Department of Agriculture. The corporations were verified by the Michigan Corporation and Securities Commission.

There were 25 responses to the mail questionnaire from 57 auctions in the general livestock auction category. This information was used to make a comparison with a priori knowledge on type of ownership, and size of business. The 25 mail responses on type of ownership agreed in every case with the listing made from advance information. Therefore, it was concluded that the 57 general livestock auctions could be correctly stratified in this respect. The reply to the question on the average size sale for June, 1952 seemed to correspond quite closely with information which had been previously obtained on these auctions' high weekly sale for the year 1951. Thus, it was concluded that it was correct to use

this high weekly sale as a base for stratifying the universe in respect to size of business.¹ The prior information on location was already quite conclusive.

The desired stratification, available information, and desired accuracy were discussed with the statistician at the Michigan State College Agricultural Experiment Station. It was confirmed here that a sample of 22 of the general livestock auctions was more than ample to give a true representative picture of Michigan's livestock auction industry.

The 22 general livestock auctions were selected purposively from the stratified universe of 57 general livestock auctions as follows:

1. Location: The first basis of stratification of the 57 general livestock auctions was location. Each of the general livestock auctions was placed in a cell by type-of-farming area in the state. The type-of-farming area on a county line basis was used as set up by the

¹ A linear regression line was plotted on a scatter diagram relating high weekly sale in 1951 to average June sale 1952 for the 22 auctions selected for the purposive sample (this included 19 of the 25 original mail responses). The resulting correlation coefficient calculated from this data was .944, which showed a very close correlation between high sale for 1951, and June, 1952 average sale. It was concluded that it was correct to use high sale as an indication of an auction's relative size of business in this stratification.

farm management section of the Department of Agricultural Economics.²

By using this concept and selecting auctions within these type-of-farming areas, it was assured that a good geographic distribution was being obtained.

Furthermore, it meant that any variations between auctions occurring because of differences in geographic location (as it effects type of livestock, seasonality of receipts, availability of labor, concentration of livestock and competition with other markets) would be accounted for through this type of distribution. The type-of-farming areas and the number of auctions in each area are as shown in Table II. the actual delineation and location of the general livestock auctions within each type-of-farming area may be seen by referring to Figure 4.

The sample of general livestock auctions was selected as follows:

- (a) One auction was selected from each type-of-farming area in the Lower Peninsula (this required a sample of 13 auctions, for all type-of-farming areas in the Lower Peninsula except area thirteen contained at least one auction).
- (b) One auction was selected from the Upper Peninsula (type-of-farming areas 15, 16 and 17). Only two

² E. B. Hill, Types-of-Farming Areas in Michigan, Michigan Agricultural Experiment Station Bulletin 206 (revised June, 1939) pp. 68: This Bulletin was over thirteen years old, but it was believed to be sufficiently accurate for the desired geographic distribution of this project.

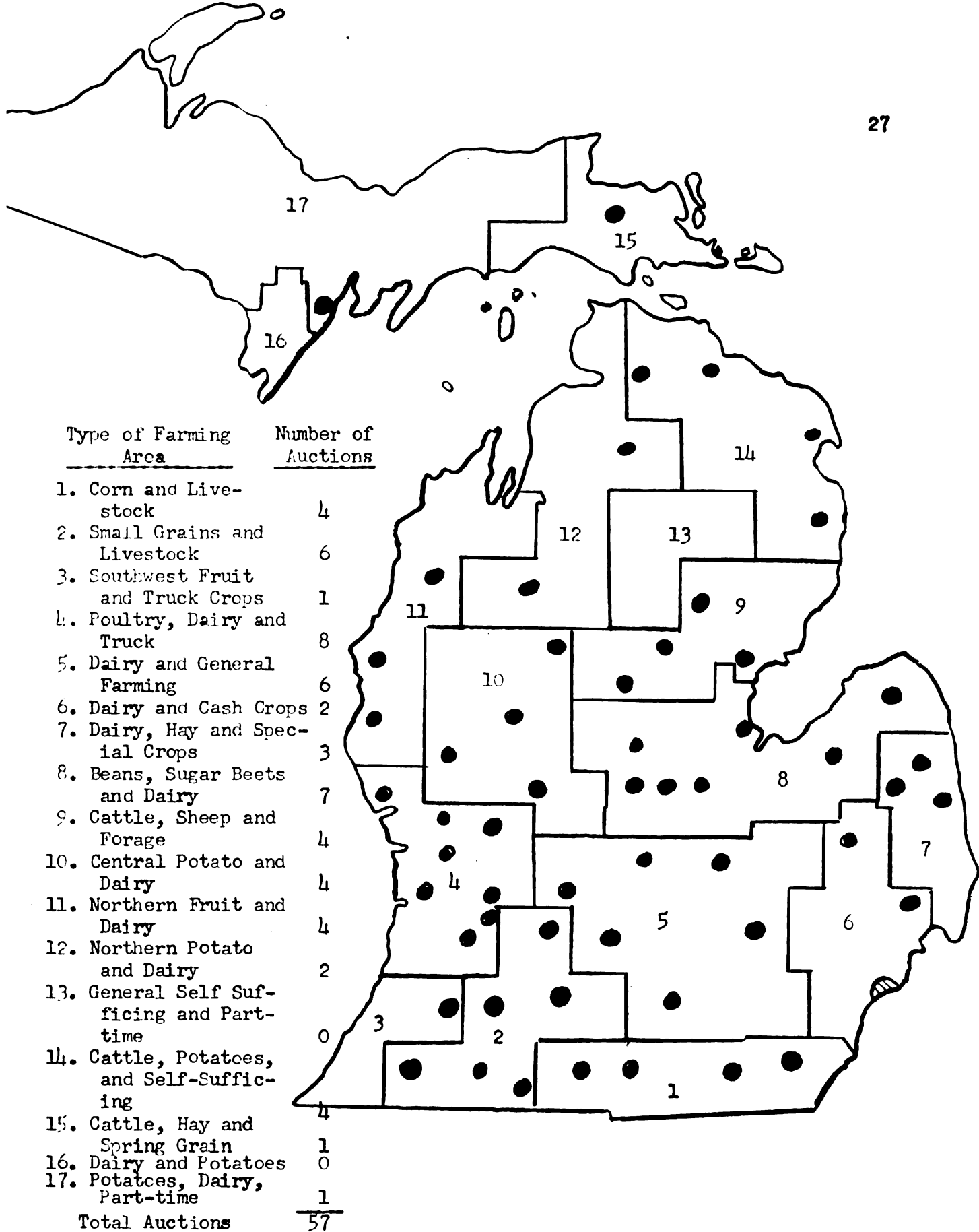


Figure 4. Distribution of the Fifty-Seven General Livestock Auctions in Michigan, Classified by Type-of-Farming Area, 1952

auctions were located in the Upper Peninsula, and both were under the same ownership. This added another auction to the sample size.

- (c) Type-of-farming areas 2, 4, 5 and 8 had more than four auctions per area; therefore, at least two were selected from each of these areas to properly weight the sample in proportion to the total population. This required four more auctions in the sample size.
- (d) In order to get the proper proportion of small individually owned businesses in the sample, two auctions were added as follows: one each from area eleven and area fourteen. Another auction was selected from area two to complete the small partnership representation, and another from area eight to complete the large individually owned auction category. This added four more auctions to the sample size.

The sample thus selected contained 22 of the 57 general livestock auctions in Michigan, or 38.6 percent of the state's general livestock auctions.

The sample of auctions selected to be visited represented type-of-farming areas in the proportions listed in Table II. Figure 5, shows the geographic distribution of the 22 sampled auctions on an outline map of Michigan with the type-of-farming areas delineated (the red dots on the map signify sampled auctions).

TFA	Number Auctions	Number in Sample
1	4	1
2	6	3
3	1	1
4	8	2
5	6	2
6	2	1
7	3	1
8	7	3
9	4	1
10	4	1
11	4	2
12	2	1
13	0	0
14	4	2
15)		
16) U.P.	2	1
17)		
	57	22

● = Auctions visited.

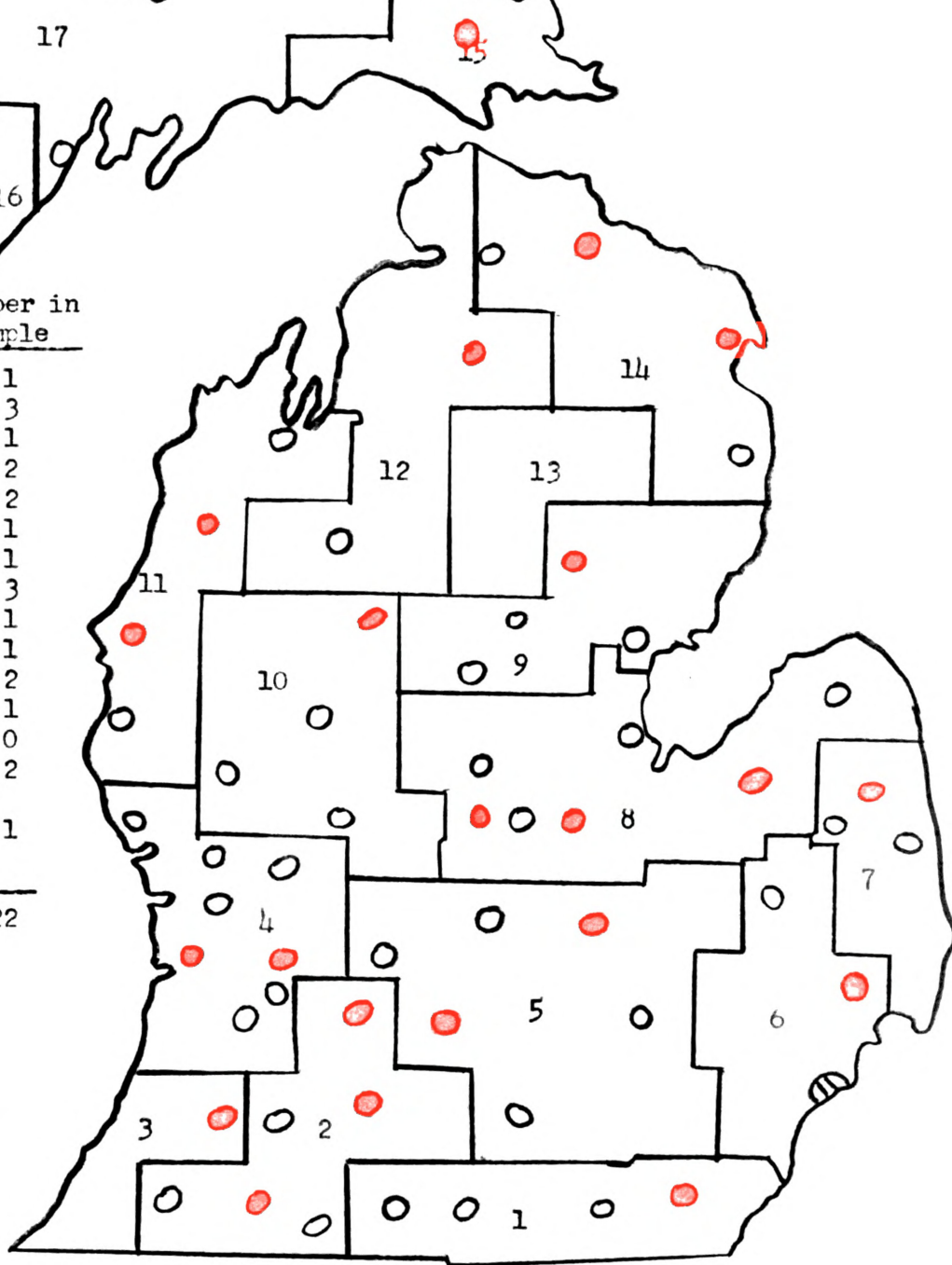


Figure 5. The Fifty-Seven General Livestock Auctions in Michigan Classified by Type-of-Farming Area, Along with the Twenty-Two Such Auctions Sampled, 1952

TABLE II

THE LOCATION OF 57 GENERAL LIVESTOCK AUCTIONS IN MICHIGAN CLASSIFIED ACCORDING TO TYPE OF FARMING AREA, JUNE, 1952

Type of Farming Area*		Livestock Auctions**				Sample as
Area Number	Name	Number per area	Number sampled	Percent of State's total auctions	total auctions	percent of areas
1.	Corn and livestock	4	1	7.0	25	
2.	Small Grains and livestock	6	3	10.5	50	
3.	Southwest fruit and truck crops	1	1	1.8	100	
4.	Poultry, dairy, and truck crops	8	2	14.0	25	
5.	Dairy and general farming	6	2	10.5	33	
6.	Dairy and cash crops	2	1	3.5	50	
7.	Dairy, hay and special crops	3	1	5.3	33	
8.	Beans, sugar beets and dairy	7	3	12.3	42	
9.	Cattle, sheep and forage	4	1	7.0	25	
10.	Central potato and dairy	4	1	7.0	25	
11.	Northern Fruit and dairy	4	2	7.0	50	
12.	Northern potato and dairy	2	1	3.5	50	
13.	General, self-sufficing and part-time	0	0	0.0	0	
14.	Cattle, potatoes and self-sufficing	4	2	7.0	50	
(15.	Cattle, hay and spring grains	1	1	1.8)	
(16.	Dairy and potatoes	0	0	0.0)50	
(17.	Potatoes, dairy, and part-time	1	0	1.8)	
Total or average		57	22	100.0	38.6	

SOURCE: * E. B. Hill, Types of Farming Areas in Michigan, Michigan Agricultural Experiment Station Bulletin 206 (Revised June, 1939) pp. 68.

** List of Livestock Auctions, June, 1952, Michigan Department of Agriculture.

Upper Peninsula

2. Type of Ownership: The purposive sample, besides meeting the requirement of at least one auction from each type-of-farming area in the Lower Peninsula, met qualifications on type of ownership as follows:

- (a) In the total universe of 57 general livestock auctions, there were 18 auctions individually owned, 21 owned by partnerships and 18 owned by corporations.
- (b) In selecting the sample, each type of ownership in the sample was given as nearly as possible the same weight as in the total population. Thus, the final sample contained six auctions owned by individuals, eight owned by partnerships, and eight owned by corporations (Table III).

3. Size of Business: The third type of classification used to stratify the total population and thenceforth as a basis for the selection of a representative sample was the size of business.

The 57 general livestock auctions were classified by size of business using data on the high weekly sale for the auction year 1951 (September 30, 1950 through October 1, 1951). Four categories were used for stratification.

The first category was classified small business and included all those auctions with a less than 25,000 dollar high weekly sale for 1951. The second category was classified medium business and included all those auctions with a high weekly sale in 1951 between 25,000 dollars and 49,999 dollars. The third category was classified large business and included all those auctions with a high weekly sale in 1951 between 50,000 dollars

TABLE III

THE 57 GENERAL LIVESTOCK AUCTIONS, AND
THE 22 SAMPLED AUCTIONS FROM THIS
POPULATION CLASSIFIED BY TYPE OF
OWNERSHIP, AND IMPORTANT QUANTI-
TATIVE RELATIONSHIPS TO EACH OTHER

Type of Ownership	Total population		Sample	
	Number	Percent	Number	Percent
Individuals	18	31.6	6	27.2
Partnerships	21	36.8	8	36.4
Corporations	18	31.6	8	36.4
Totals	57	100.0	22	100.0

and 74,999 dollars. The fourth category was classified very large business and included all those auctions having a 75,000 dollars or more high weekly sale in 1951.

In Michigan it was found that of the total population of 57 general livestock auctions 18 were small businesses; 17 were medium businesses; six were large businesses, and 16 were very large businesses. Because there were so few in the cell labeled large business this is shown combined with the very large category in many of the later classifications in this thesis. When this is done it is labeled 'large' business.

In selecting the sample, each size of business in the sample was weighted as nearly as possible to its weight in the total population. This resulted in a sample of seven small businesses, seven medium businesses,

three large businesses and five very large businesses. Table IV shows this quantitative relationship between the sampled auctions and the total population.

TABLE IV

THE RELATIONSHIP BETWEEN THE SAMPLE
SIZE OF BUSINESS AND THE SIZE OF
BUSINESS IN THE TOTAL POPULATION

Size of Business	Total Population		Sample Population	
	Number	Percent	Number	Percent
Small	18	31.6	7	31.8
Medium	17	29.8	7	31.8
Large	6	10.5	3	13.6
Very large	16	28.1	5	22.8
	22	38.6	8	36.4
Total	57	100.0	22	100.0

To further verify the validity of the selection of the sample on the basis of the size of business the arithmetic mean of the population and the arithmetic mean of the sample were compared with respect to the actual high weekly sale reported by these auctions in 1951.

The 57 general livestock auctions' high weekly sales averaged 52,094 dollars. The 22 sampled general livestock auctions' high weekly sale averaged 51,620 dollars. This was a difference of only four hundred and seventy-four dollars between the two means. Within each size of business category, a similar relationship was evident (Table V).

TABLE V

THE 57 GENERAL LIVESTOCK AUCTIONS IN MICHIGAN AND THE 22 SAMPLED AUCTIONS COMPARED ON AVERAGE HIGH WEEKLY SALE IN 1951 BY SIZE CATEGORY

Average of High Weekly Sale, 1951			
Size of business	Total population	Sample population	Difference in Means (population mean-sample mean)
Small	\$ 13,947	\$ 15,668	\$ -1,721
Medium	33,602	30,406	3,196
Large	62,091	65,000	-2,909
'Large' (Very Large)	111,222) 97,823	123,625) 101,640	-12,403) -3,827
Average of total	\$ 52,094	\$ 51,620	\$ 474

The three major characteristics which could cause variations between livestock auctions were location, type of ownership, and size of business. Inasmuch as these were the same characteristics which were used to stratify the population, and since it was shown that the sample selected represented the total population quite closely in all three categories; it was concluded that the 22 livestock auctions (38.6 percent of the state's total) selected as a purposive sample gave a true representative picture of the livestock auction industry in Michigan.

The 22 sampled auctions were visited during the latter part of July and during the month of August, 1952. Everyone of the 22 operators so selected and visited cooperated fully with the author. The results obtained from the answers to the schedule used in the interviews, and results obtained from observations made while in attendance at each of the 22 sales are presented in the following chapters to give a picture of typical operations in the Michigan livestock auction industry.

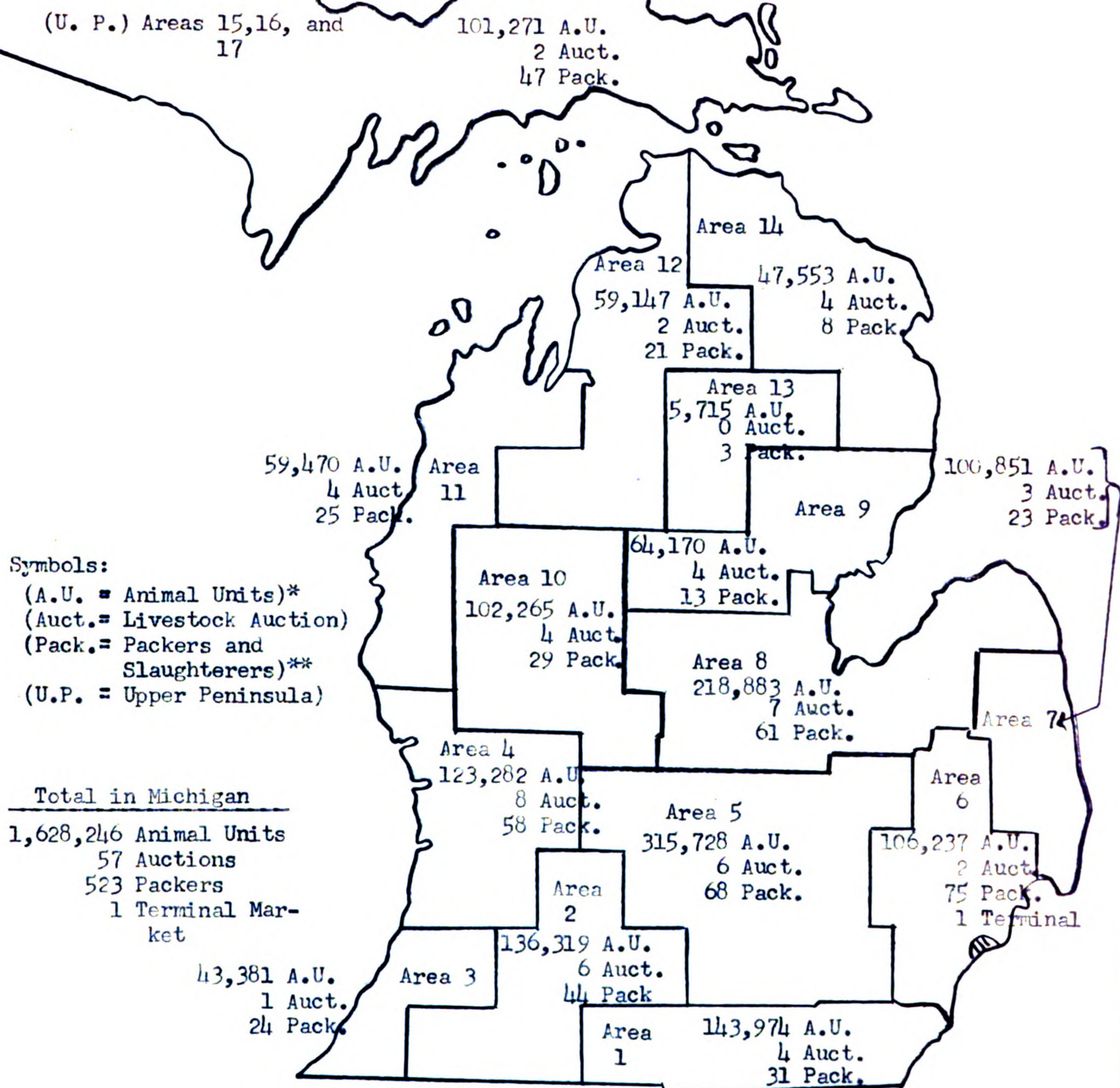
CHAPTER IV

GEOGRAPHIC LOCATION AND SALE DAY COMPETITION OF MICHIGAN AUCTIONS

Location of the Auctions: From some of the maps presented in the early chapters of this thesis, it was noticed that the auctions were widely scattered throughout the state. However, it was also noticed that a large number of these auctions seemed to be located in the Southern part of the Lower Peninsula. This would be expected by one with knowledge of the state's livestock concentration. This concentration and relationship between areas of the state may be affirmed by converting the livestock numbers of the various species into a single number for each type-of-farming area. This was done by using the concept of animal units.¹

A map of Michigan (Figure 6) shows these animal units as computed for each type-of-farming area, and lists the number of auctions, slaughterers, and terminal markets located in each type-of-farming area. There

¹ R. D. Jennings, Animal Units of Livestock Fed Annually, The United States Department of Agriculture, Bureau of Agricultural Economics, F.M. 64 (1949) pp. 15. The weights used were the animal-unit factors for grain and roughage consuming livestock fed in a year. The base (1.0) for the factors was the quantity of all feeds including pasture expressed in feed units used by the average milk cow in the United States in a year. As Michigan milk cows were fed higher than average the base was raised to (1.1). Other factors used included: Heifers and calves (.5), Beef cows, 2 years and older (.8), Cattle on feed (.7), Sheep (.15), and Hogs fed during the year (.17).



Source: * Computed from number of livestock by counties, U.S. Census of Agriculture, 1950.

** R. Kramer, Unpublished summary from Office of Price Stabilization for the year 1950 (Michigan State College) (map).

Figure 6. Animal Units and Decentralized Market Outlets for Each Type-of-Farming Area So Delineated in Michigan.

seemed to be a definite positive relationship between the location of the number of animal units and the outlets for them. This indicated that these localized market outlets increased as the number of livestock in an area increased. These outlets listed did not account for all the potential outlets for the livestock, nor did they show the differences in the size of various outlets as the amount of livestock in an area increased. However, these were the major decentralized outlets.

When the animal units in each type-of-farming area were plotted on a scatter diagram with the number of outlets (auctions, packers, terminals); and, a straight line regression equation was fitted to this diagram a fairly close fit was noted. When a correlation coefficient was calculated to verify the closeness of this relationship between animal units and available market outlets for each area, the result obtained was a r of .77. This showed a fairly high positive relationship, indicating that when the numbers of animal units in an area increased the market outlets increased also.

A less detailed, and therefore clearer picture of the state's livestock concentration and its significance on auction outlet location was obtained by dividing the state into Upper and Lower Peninsula, and then dividing the Lower Peninsula into Northern and Southern halves. These three large areas provided a basis for generalization on inter-area differences in numbers of livestock and livestock auction outlets. The division of the Southern half of the Lower Peninsula from the Northern half of the Lower Peninsula follows county type-of-farming area boundary

lines, and the line of delineation roughly approximates a line between Bay City and Muskegon. The Upper Peninsula area was separated by the natural water barrier (Figure 7).

The broader classification combined somewhat similar type-of-farming areas in respect to numbers and kinds of livestock. It was realized that within each of these three areas so delineated there was still much heterogeneity, but far outweighing this disadvantage was the ability now to generalize. The problem of having small localized type-of-farming areas where many outlets were used over the localized boundary lines and where so many detailed type-of-farming differentiations had to be considered separately was that the human mind could not comprehend these differences, nor should it have to for it is the proper role of classification and categorization to make generalization possible. It was believed that much the same marketing conditions prevailed within each of these areas so delimited. While the differences between areas was considered significant enough for the delineation.

1. The Southern half of the Lower Peninsula, so delineated, and henceforth referred to as the Southern Michigan Livestock Area contains type of farming areas one through eight. This Southern Michigan Livestock Area was the heavy livestock populated area of the state. The area also had the heaviest populated cities in Michigan. It had, besides the livestock auctions, numerous in-state market outlets including the terminal market at Detroit. It also had access to the big markets at Chicago, and other out-state markets in Indiana, and Ohio.

2. The Northern half of the Lower Peninsula, so delineated, and henceforth referred to as the Northern Michigan Livestock Area presented a different marketing picture. It had smaller human and livestock population, and was located farther from the main in-state and out-of-state population centers. The type-of-farming areas within this region included areas nine through fourteen. This Northern Livestock Area with its limited market outlets of other types was most dependent on its livestock auction industry.

3. The third area of the state delineated was the Upper Peninsula, here called the Upper Peninsula Livestock Area. This area was comprised of type-of-farming areas fifteen, sixteen and seventeen. It was an area of very sparse human and livestock population. The major job of a market outlet in this area was the assembly of the widely scattered, sparse livestock population. The lack of concentrated livestock production had deterred the establishment of many market outlets and the auctions located in this area were very important to those limited number of producers having access to them.

The division of the state into these three livestock regions, and the amount of livestock (in terms of animal units) along with the number of decentralized market outlets are shown in Figure 7. The Southern Michigan Livestock Area had 73 percent of the animal units of the state, and 65 percent of the livestock auctions. It also had over 72 percent of the slaughterers. The relatively fewer auctions (in relation to livestock population) in this area was explained by the nearness of the area to the numerous other types of in-state and out-state markets.

UPPER PENIN-
SULA LIVESTOCK AREA

Animal Units
101,271
6.2%

Auctions
2
3.5%

Packers & Slaughterers
478.9%

NORTHERN MICHIGAN
LIVESTOCK AREA

Animal Units
338,320
20.8%

Auctions
18
31.5%

Packers and Slaughterers
99
18.7%

SOUTHERN MICHIGAN LIVESTOCK
AREA

Animal Units
1,188,655
73%

Auctions
37
65%

Packers and Slaughterers
384
72.4%

NOTE:

All percentages appearing in this figure represents the percent of state's total in each area so defined.

Source: Cartographic Generalization as proposed by G. L. Johnson, Relative Importance of Alternative Market Outlets used by Michigan Farmers in Selling Livestock, Unpublished Master's Thesis, Michigan State College, 1942, pp. 11.

Figure 7: The Three Main Livestock Areas of Michigan with Numbers and Percentage of State's Auctions, Animal Units, and Slaughterers in Each

The Northern Michigan Livestock Area had only 20.8 percent of the livestock in the state (in terms of animal units). Furthermore, it had only 18.7 percent of the state's slaughter plants. However, 31.5 percent of the state's livestock auctions were located in this region. Therefore, livestock auctions (quantitatively) seemed to be relatively more important to the farmers in this Northern Livestock Area than to those farmers in the Southern Livestock Area. For this Northern Livestock Area did not have as many alternative markets or the concentrated livestock population needed for individual farmers to ship volume loads long distances. It was believed that as the farms in the Northern Livestock Area were smaller, often of a subsistence or part-time level, that many of the arrivals at these Northern auction markets were of the odd-lot type. This meant that the auctions were acting as concentration or assembly points for more distant shipments. It was this feature of the auctions which seemed to make them especially adaptable to the needs of the producers in this area.

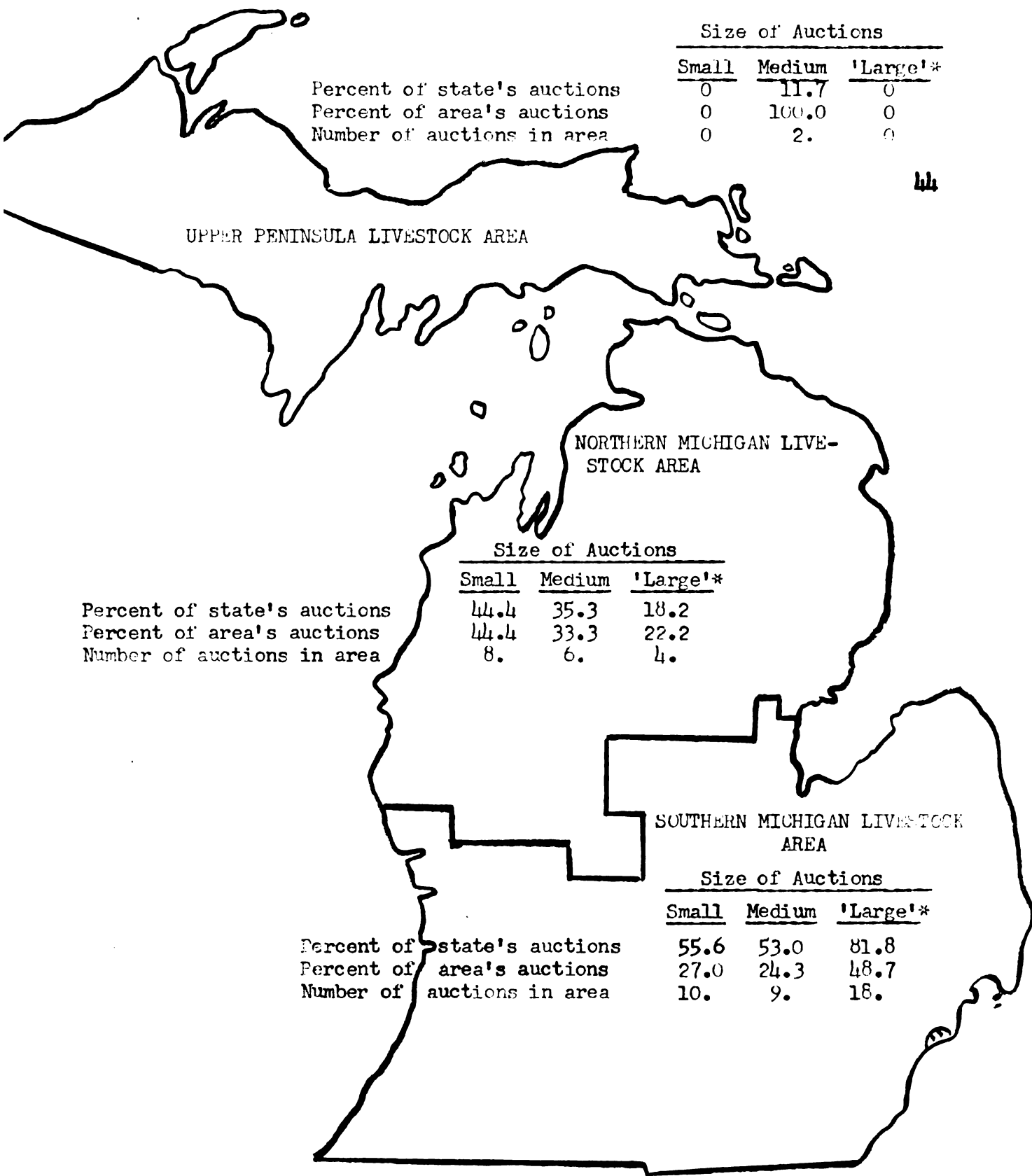
The Upper Peninsula Livestock Area had only 6.2 percent of the state's livestock (in terms of animal units). This livestock was widely scattered over a vast area; making it difficult to justify an auction in many parts of the Upper Peninsula. There were two auctions (or 3.5 percent of the state's total) in this area. Also 8.9 percent of the state's slaughter plants were located in this area. In the Upper Peninsula, one would hypothesize a larger number of auctions due to the increased distance to central markets, but apparently the scattered

livestock and great distances needed to accumulate any reasonable concentration of livestock for marketing, over-rode the local people's need for this decentralized method of marketing.

It was shown that the large livestock numbers in the Southern Livestock Area warranted the building of decentralized livestock auction markets, but it was further seen that in proportion to the amount of livestock concentrated in this area they were limited in numbers. This was largely because of the nearness of other outlets for the farmer's livestock as one approached the huge population centers of Chicago and Detroit.

The Northern Livestock Area was the best suited to the location of the auction type of market outlet and hence auctions were proportionally more successful here. Previous farm outlets for livestock had included some sales direct to local slaughter plants, concentration yards and shipping associations, but a large number were handled by dealers, an unsuitable method of marketing. For the dealer was an experienced buyer who did business with a less experienced seller (the farmer) and he often found it possible to use his greater knowledge of current prices and price trends, along with his experience at judging weights to give the producer a very unfair price for his livestock. The local auction provided a place where the producers could sell by weight and put him in a better position to keep tract of current price trends.

When the size of the auctions in each area was taken into account, a pattern as presented in Figure 8 was obtained. It was found



*For the purpose of this analysis the large and very large auctions as differentiated under sampling were combined. The title given to this combination was 'large'.

Figure 8: Three Principle Livestock Areas of Michigan with Auctions in Each Area Classified by Size of Business

that in the Southern Livestock Area 48.7 percent of the auctions were 'large'² businesses. Furthermore, 27.0 percent of the auctions were classified small businesses, and 24.3 percent were classified as medium businesses.

Comparing the Southern Livestock Area with the other two livestock areas of the state; it was found that this Southern Livestock Area had 81.8 percent of the state's 'large' auctions; at the same time it contained 55.6 percent of the state's small auctions, and 53.0 percent of the state's medium auctions.

The two auctions located in the Upper Peninsula were medium in size, and constituted 11.7 percent of the state's medium auctions.

In the Northern Livestock Area, 44.4 percent of the auctions were small businesses; 33.3 percent were medium businesses, and 22.2 percent were designated 'large' businesses. It was further found that 44.4 percent of the state's small auctions, 35.3 percent of the state's medium auctions, and 18.2 percent of the state's 'large' auctions were located in this Northern Livestock Area.

² 'Large' as here designated includes the large and very large categories as set forth in Chapter III. This appeared to be a more meaningful classification for use in this Chapter since only six of the 57 general livestock auctions in the state actually fall into the large category. The use of small businesses and medium businesses is the same differentiation as presented in Chapter III.

Sale day competition between auctions: The 57 general livestock auctions were stratified according to sale day in Figure 9. The most common sale day in Michigan was Monday, when 14 sales were held.

From Figure 10, it can be seen that there was very little competition between closely contiguous sales. Much of this lack of sale day competition may be attributed to the fact that many contiguous sales were owned by the same ownership entity. They used the same help at each different location, and did not desire to compete with themselves for buyers and sellers. This multiple auction ownership pattern may be seen by referring to Table VI.

It was found that 10 auction ownership entities had interests in 23 livestock auctions in Michigan. The other 34 general livestock auctions were owned by individual ownership entities. For the whole industry, 44 auction ownership entities controlled 57 general livestock auction outlets.

Sale day competition within the same area, besides being controlled by multiple auction ownership, was further controlled because of the fear or unwillingness of operators in contiguous territory to engage in direct competition for sellers and buyers. Auction operators recognized the fact that the number of buyers and sellers in a given territory were limited; therefore, they tried to adjust their sales so additional buyers may attend, and so that sellers do not have two sales to choose between on the same day.

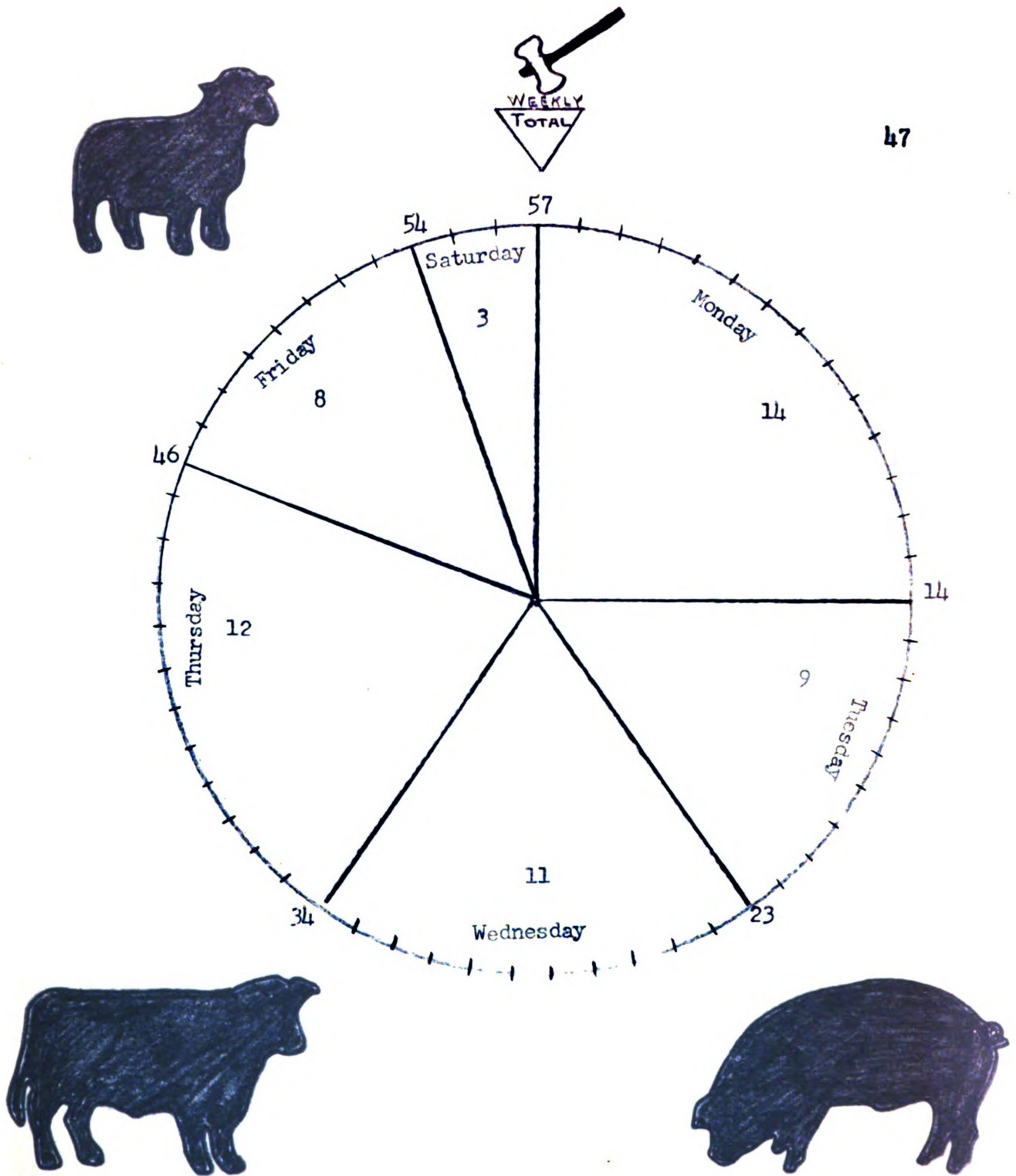


Figure 9. Sales Days for Michigan's Fifty-Seven General Livestock Auctions, June, 1952

SYMBOLS:

Sale Day

Monday = ●

Tuesday = ●

Wednesday = ●

Thursday = ⊕

Friday = ●

Saturday = ⊕

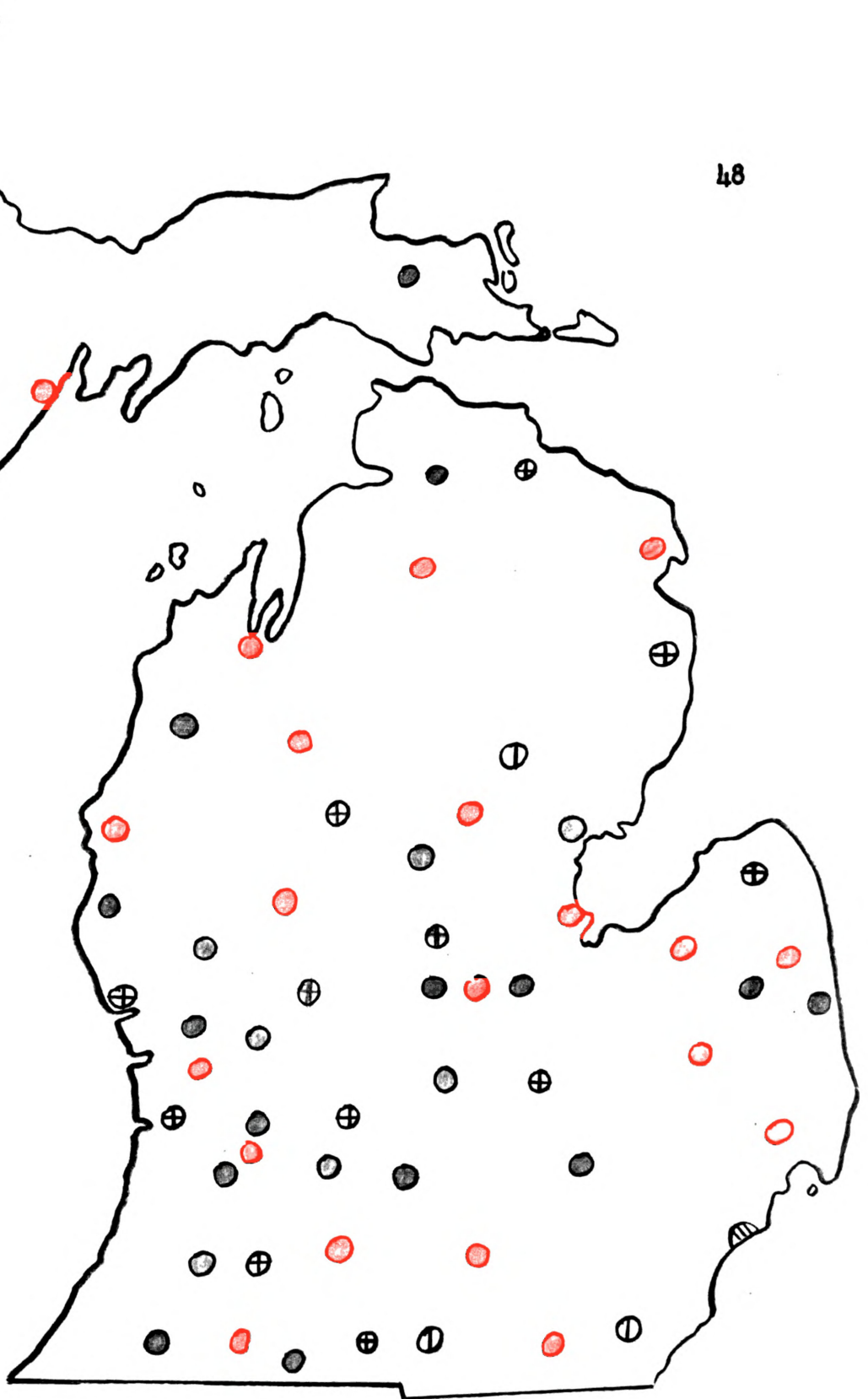


Figure 10: Sale Day Competition Between Contiguous Sales

TABLE VI

AUCTION OWNERSHIP ENTITIES AND NUMBERS OF AUCTIONS
OWNED BY EACH ENTITY CLASSIFICATION

Number of separate ownership entities	Type of ownership	Number of sales per entity	Total number of auctions per classification
4	Individual	2	8
2	Partnership	2	4
1	Partnership	3	3
1	Corporation	2	2
1	Corporation	4	4
1	Cooperative Corporation	2	2
10			23

Something of the magnitude, or more nearly the distance, of sale day competition may be seen if one looks at the answers received from 21 of the 22 sampled auctions to the question: Within what distance to your market did the largest percentage (approximately 80 percent) of each species arrive? Table VII shows the responses received from this question.

The largest percentage of the auctions (at least 60 percent of the auctions reporting for all species except feeder cattle) reported that they got the largest percentage of their livestock within a 39 mile radius of their auction. This varied from 81 percent of the auctions reporting they obtained the largest percentage of their feeder pigs and

TABLE VII

NUMBER OF AUCTIONS AND PERCENTAGE OF THE TOTAL AUCTIONS CLASSIFIED BY THE DISTANCE FROM WHICH SIX MAJOR SPECIES OF LIVESTOCK ARE RECEIVED.
 TWENTY-ONE SAMPLED AUCTIONS REPORTING, 1952

Miles radius from auction center	Number and percentage of auctions reporting each distance									
	Slaughter cattle		Feeder cattle		Butcher hogs		Feeder Pigs		Sheep and lambs	
Miles	No.	Cum.*	No.	Cum.*	No.	Cum.*	No.	Cum.*	No.	Cum.*
0 to 10	1	-	1	4.8	1	4.8	3	14.3	2	9.5
0 to 19	5	4.8	5	28.6	8	42.9	5	38.1	6	38.1
0 to 29	7	61.9	5	52.4	6	71.5	9	80.9	9	80.9
0 to 39	2	71.4	2	61.9	2	81.0	3	95.2	2	90.4
0 to 49	5	95.2	4	80.9	3	95.3	1	100.0	2	100.0
0 to 59	1	100.0	4	100.0	1	100.0	-	-	-	-
0 to 69	-	-	-	-	-	-	-	-	-	-
Total	21	100.0	21	100.0	21	100.0	21	100.0	21	100.0

*Cumulative percent

sheep and lambs within this 39 mile radius to 52 percent of the auctions reporting they received the largest percent of their feeder cattle within this 39 mile radius.

Apparently feeder cattle came the longest distance; many coming from the Western states in car lot shipments, and from Northern Michigan to the auctions in the Southern Livestock Area. Feeder pigs and sheep and lambs came from a close proximity to the auction. Slaughter cattle and butcher hogs came from within a medium radius of the auction market (0 to 49 miles).

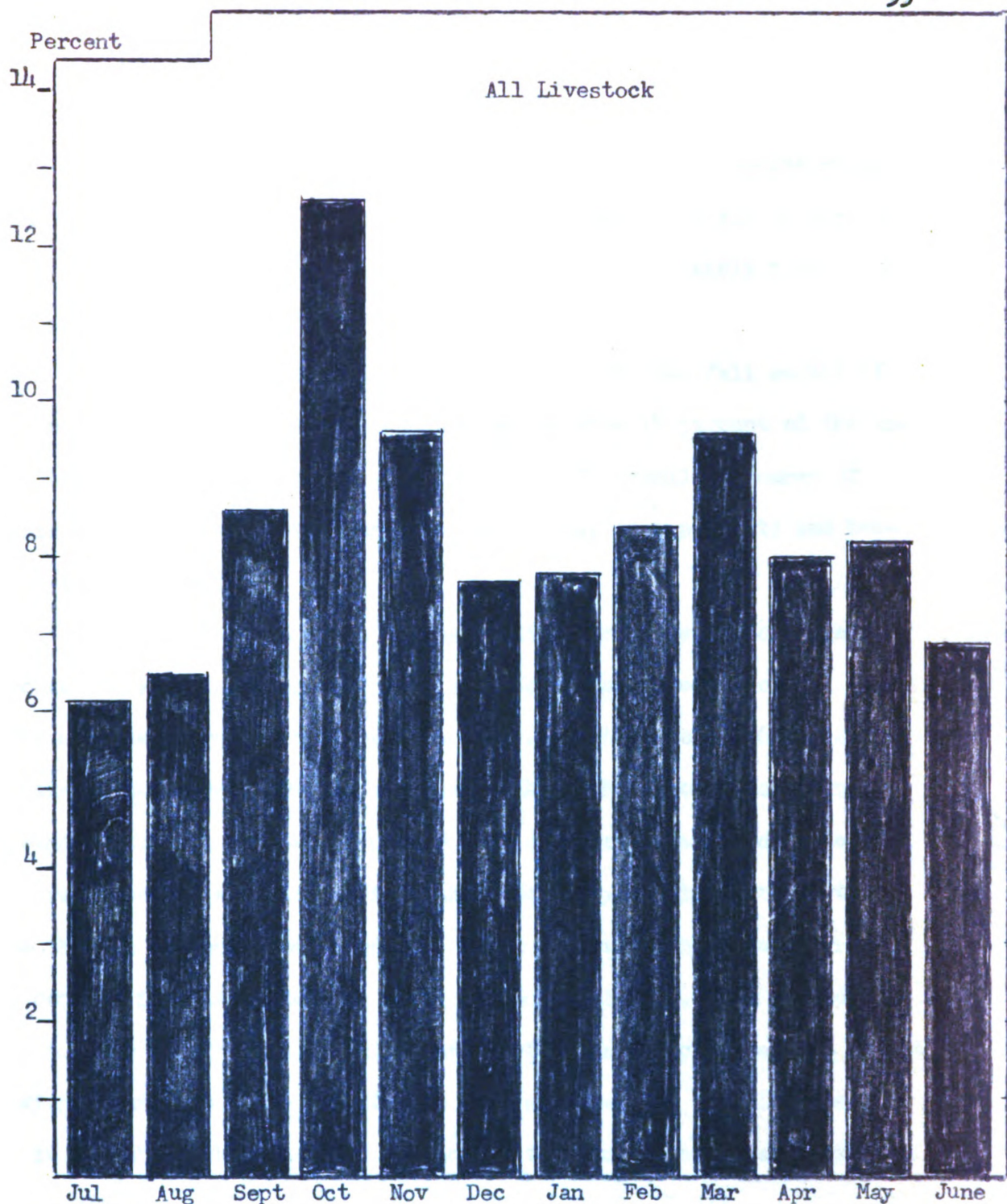
CHAPTER V

SEASONALITY OF LIVESTOCK MOVEMENT THROUGH SELECTED MICHIGAN AUCTION MARKETS

Considerable seasonal variation existed in receipts of livestock at the livestock auction markets of Michigan. The average monthly receipts of calves, cattle, sheep and lambs, and hogs combined at eleven of the 22 sampled auctions from which records were available during the period of July 1, 1951 through June 30, 1952 are shown in Figure 11.

The seasonal pattern for all livestock received at these eleven auctions shows that the peak month was October. At this time approximately 13 percent of the livestock was marketed. This was followed by a decline especially in the months of December and January. Receipts increased somewhat in February and the spring peak was reached in March when 9.6 percent of the livestock was marketed. Thereafter the volume marketed declined until the low point of the year was reached in July when only 6.1 percent of the livestock was marketed.

This pattern shows receipts for only a one-year period, and must be judged on the basis of this limited data. However, there was no indication that this fiscal year was not a fairly representative year in Michigan. Feed supplies were not short nor were there any unusual seasonal prices evident which might have affected the movement of this livestock.



NOTE: Graphed by percent of annual total marketed monthly.

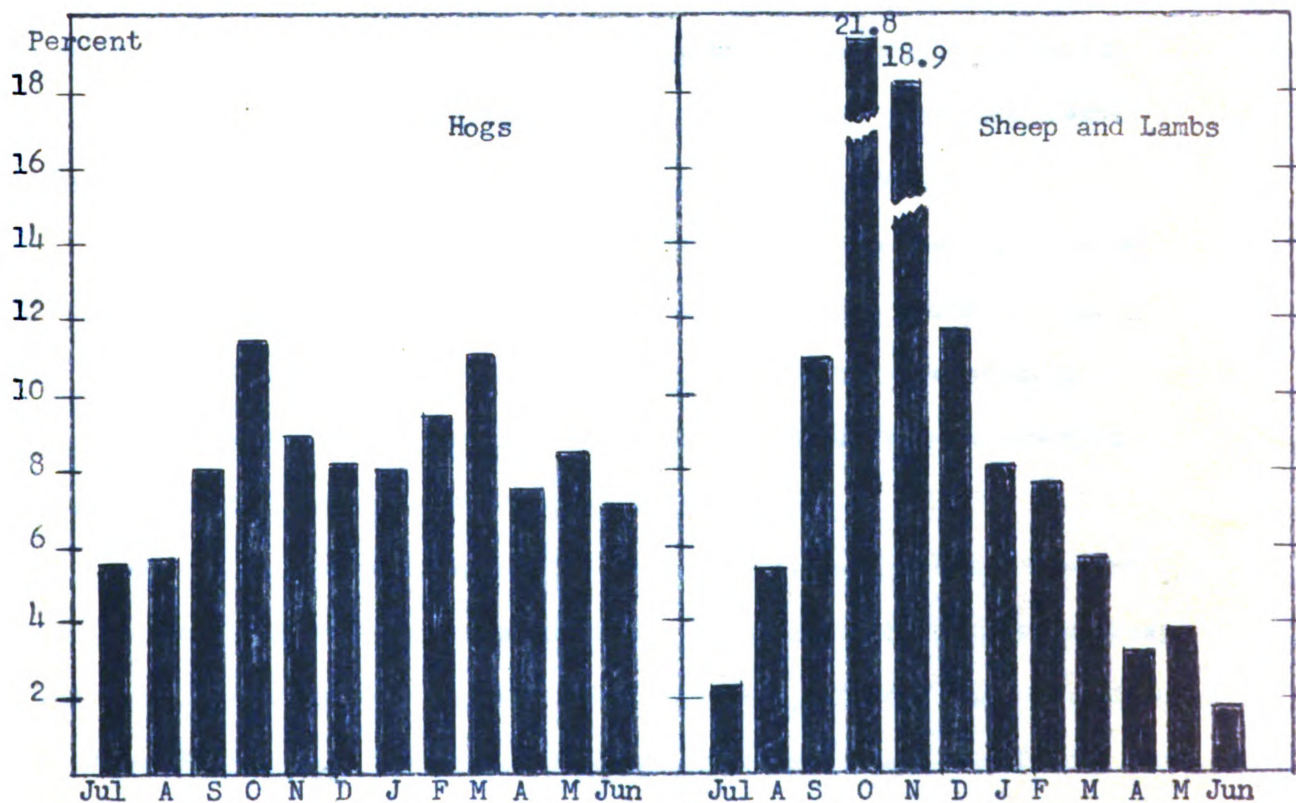
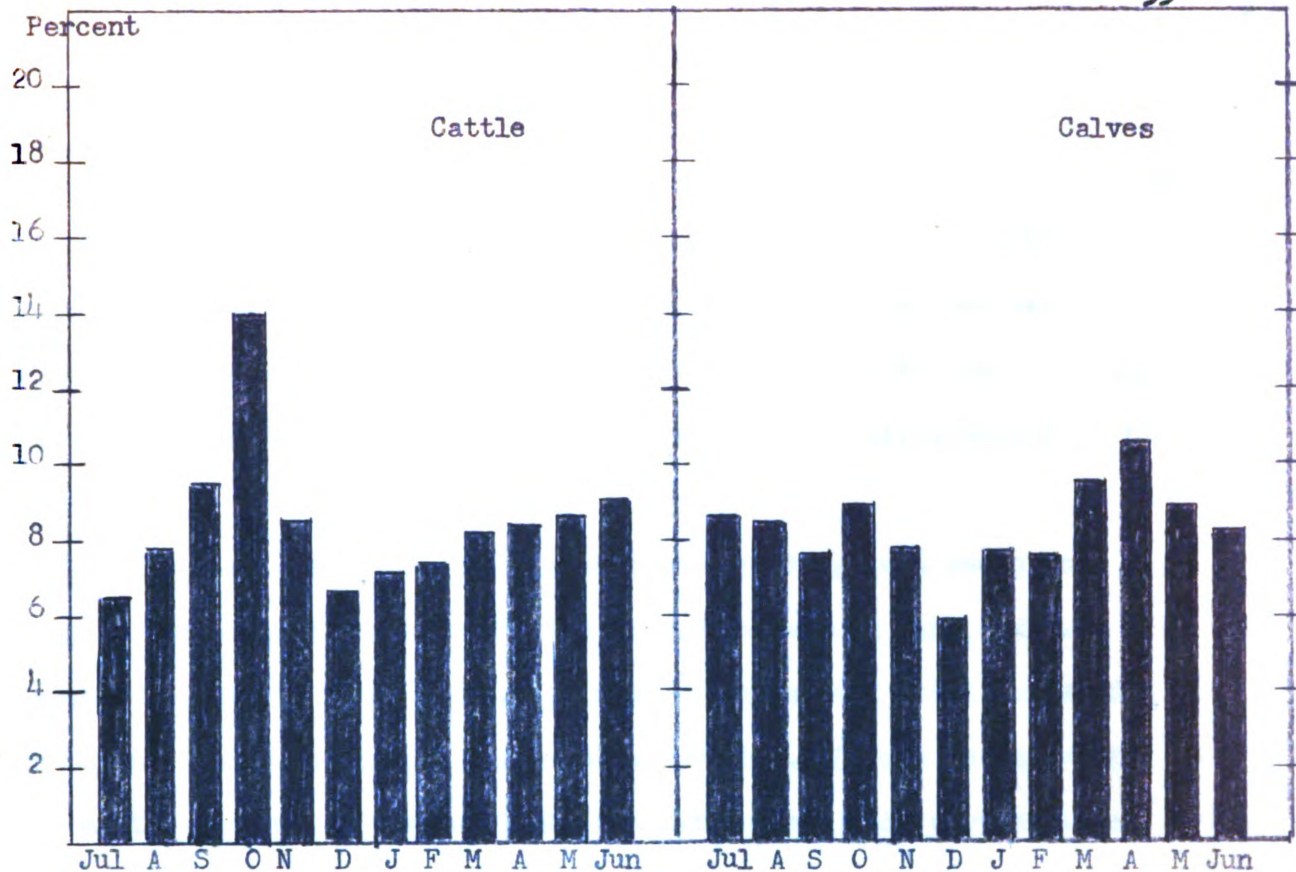
Figure 11. Average Seasonal Distribution of All Livestock Marketed Through (Eleven) Sampled Auctions (Fiscal Year July, 1951 To June, 1952)

When the seasonal distributions of the individual species were examined, it was found that the seasonal distribution of all cattle marketed through these auctions (Figure 12) corresponded fairly closely to that of all species combined (Figure 11).

The largest number of cattle was marketed in the fall months of September and October. The peak cattle month when 14 percent of the annual total was marketed occurred in October. The smallest number of cattle came to these auction markets during July (6.5 percent) and December (6.7 percent).

Calf receipts at these eleven auction markets were more stable through the year than for any other species or the receipts of all livestock marketed through these same auctions. April, when 10.6 percent of the annual total was marketed, was the peak month for calf marketings through auctions. This was a period when a large number of dairy cattle freshened and veal calves from these dairy-type animals began to move through the auctions. From the month of April, there was a gradual decline in calf marketings until the month of July. The period from July through November was fairly stable, with the exception of the slight upswing during the month of October. The seasonal low in calf receipts was in December, when only 5.9 percent of the annual total was marketed.

Hog receipts at these eleven auction markets showed two seasonal peaks. The highest, when 11.5 percent of the annual total was marketed, occurred in October. The secondary peak (when the fall pig crop was marketed) was in March. At this time 11.1 percent of the annual total



NOTE: Graphed in percent of annual total marketed monthly

Figure 12. Seasonality of Marketings of Cattle, Calves, Hogs, Sheep and Lambs Through Eleven Sampled Michigan Auctions (Fiscal Year July, 1951 To June, 1952)

was marketed. There were two low months. In June 5.6 percent and in July 5.7 percent of the annual total hog marketings were received at these eleven auctions. Except for these two peaks and two early summer troughs, hog marketings were quite uniform the other eight months of the year.

The specie which varied the most in marketings was sheep and lambs. There was a range from a low of 1.9 percent in June and 2.4 percent in July to peaks of 21.8 percent of the annual total marketed in October and 18.9 percent marketed in November. During these latter two months most of the feeder lambs and native fat lambs were arriving at the auction markets. There was a moderate rise in sheep and lamb receipts from July to August. There was a sharp advance to September, and an abrupt rise to October and November. Very few sheep and lambs were marketed in the late spring and early summer months.

It was believed that by dividing the state into the three major livestock areas (Southern half of the Lower Peninsula, Northern half of the Lower Peninsula, and the Upper Peninsula), it would be possible to notice differences in seasonal distribution of the livestock receipts at these auction markets due to geographic location.

Of the eleven auctions in the state reporting livestock numbers for the year 1951-1952, six were located in the Southern Livestock Area; four were located in the Northern Livestock Area, and one was located in the Upper Peninsula. The proportion sampled in each area was fairly close

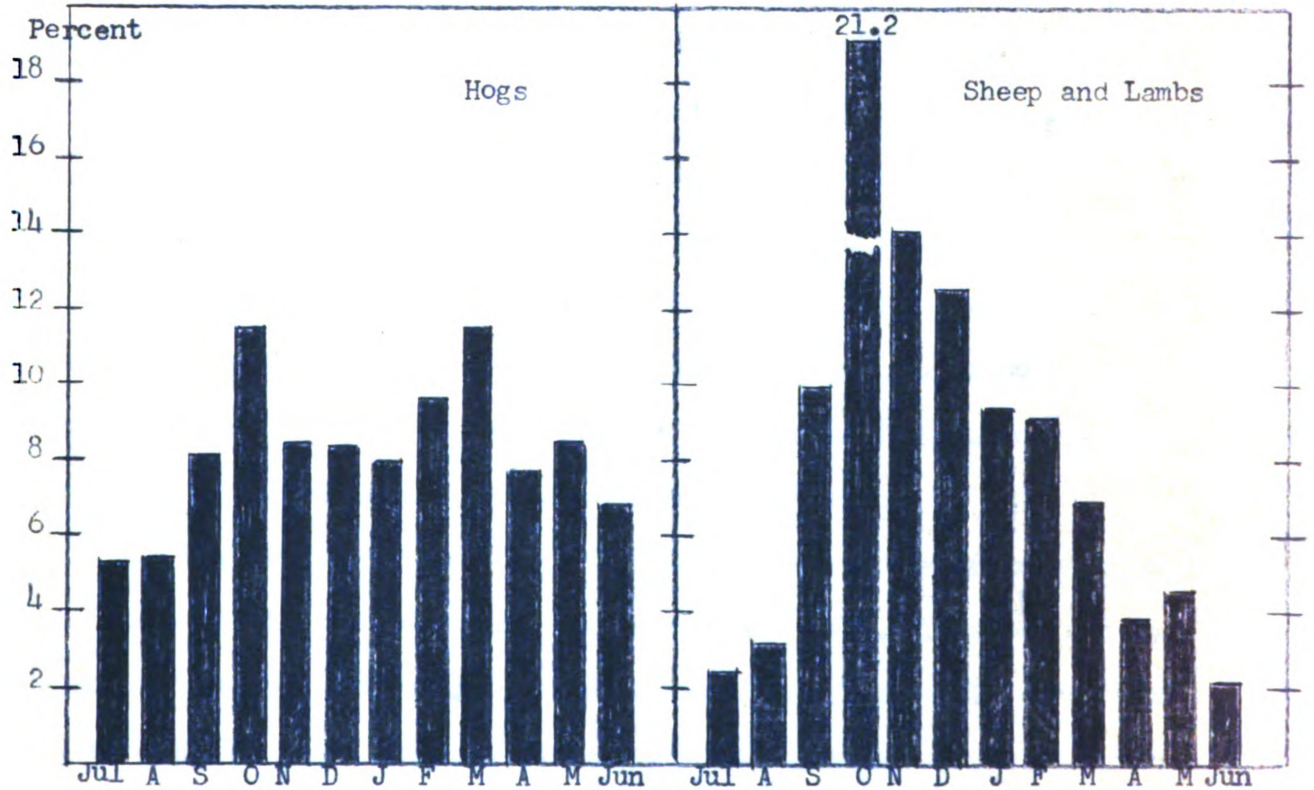
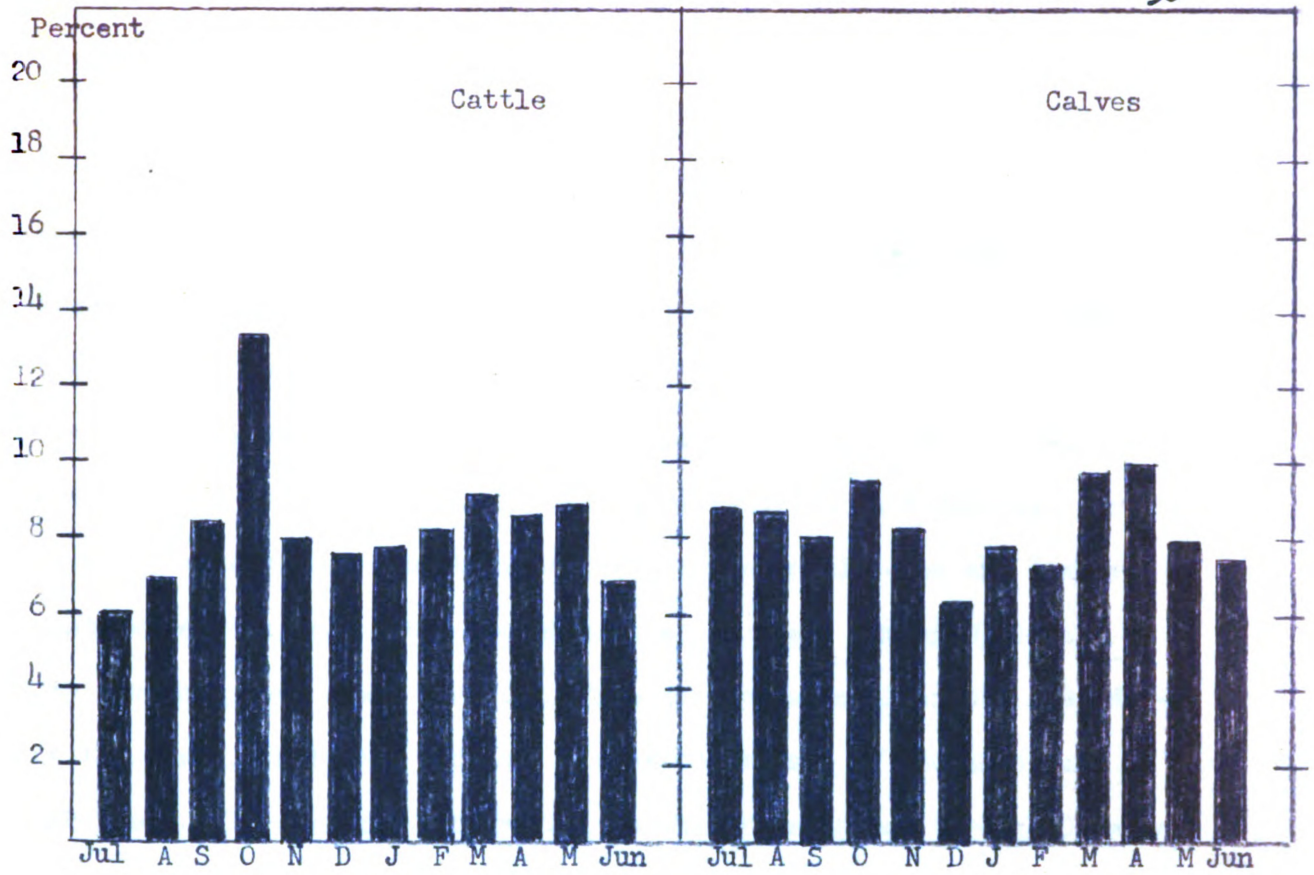
to the total auction population in each of these areas. However, these eleven auctions were not selected from this standpoint, but were merely those auctions of the 22 sampled which maintained complete records on livestock movement through their auctions.

Looking at the graphs for the individual species in the Southern Livestock Area (Figure 13), it can be observed that October was the peak month for cattle. At this time 13.4 percent of the annual cattle receipts were received at these six auction markets. July was the low month for cattle receipts. At this time only six percent of the annual cattle receipts were received.

The low month for calf receipts in this Southern Livestock Area was December when 6.3 percent of the areas total was marketed. This was a little above the low point for the state's auctions as a whole. March and April were the high months for calves receipts in this Southern Livestock Area. Approximately ten percent of the annual total was marketed in each of these two spring months.

When the monthly marketings of hogs in the Southern Livestock Area were compared with the entire state's auctions, it was found that this Southern Livestock Area had an identical seasonal pattern. This would be expected, for the largest part of the state's hogs were sold from this Southern Livestock Area (which includes Michigan's Corn Belt).

The seasonality of marketings of sheep and lambs through auctions in this Southern Livestock Area was similar to the seasonal movement recorded for this specie for the state as a whole. October was the peak



NOTE: Graphed by percent of annual total marketed monthly.

Figure 13. Seasonality of Livestock Movement Through Six Auctions in the Southern Livestock Area of Michigan (Fiscal Year July, 1951 To June, 1952)

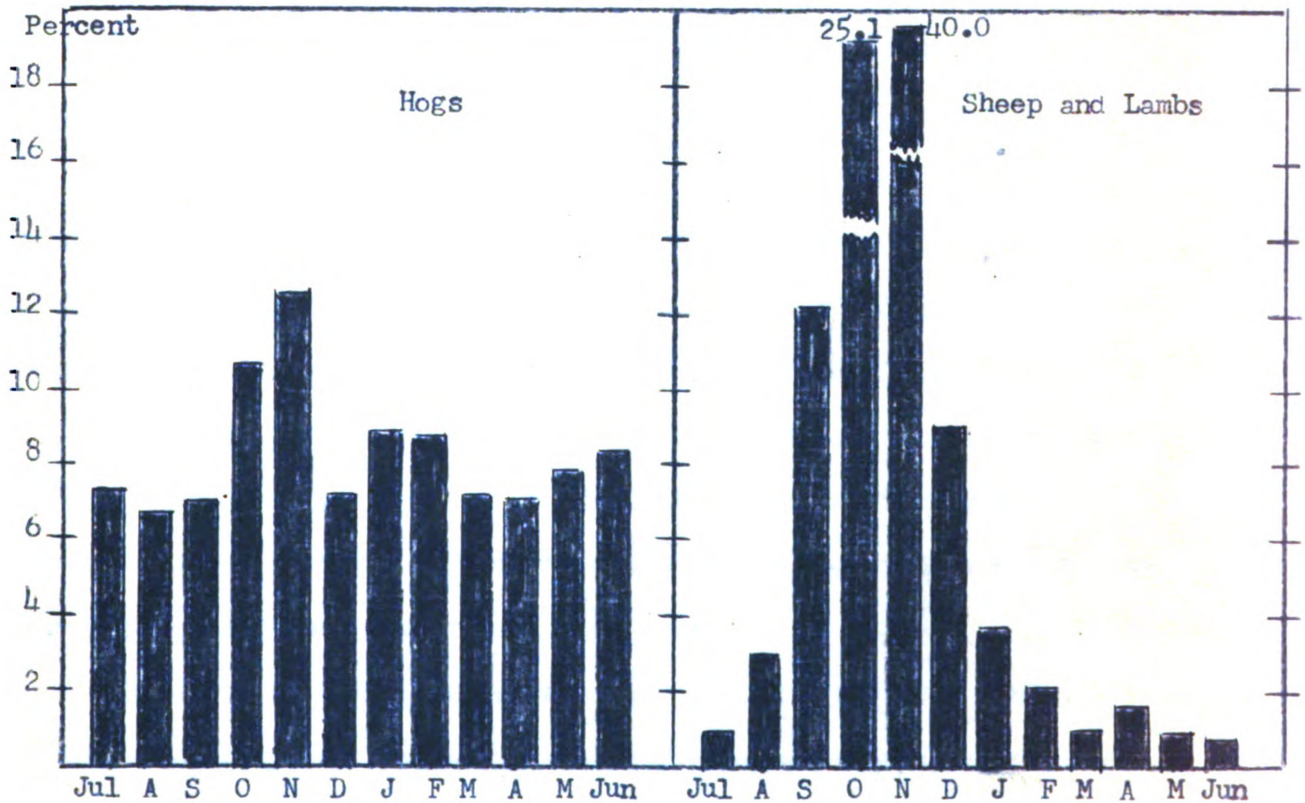
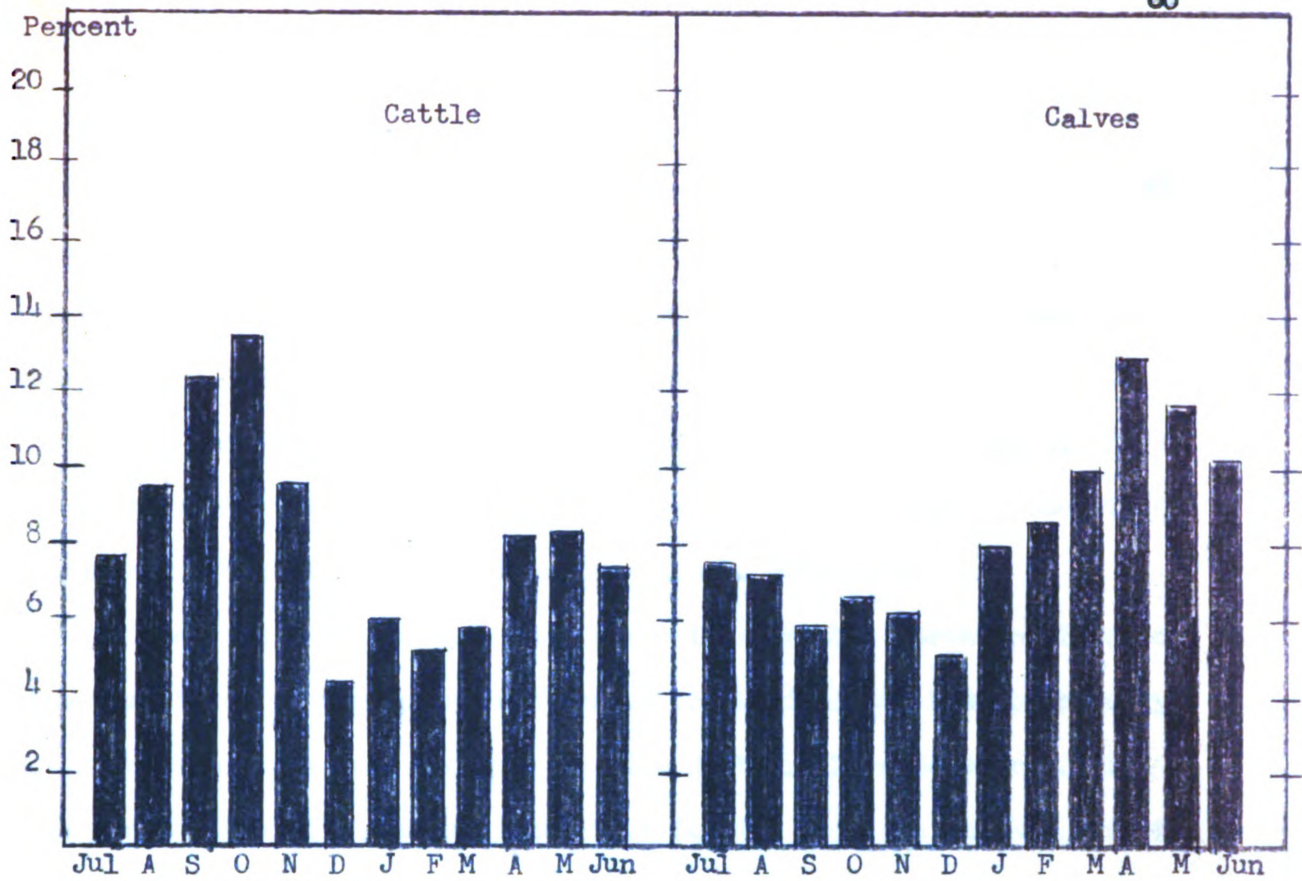
month with approximately 21 percent of the annual total receipts. November, in the Southern Livestock Area, did not have the high secondary peak as was noted for all eleven auctions in the state. In the Southern Livestock Area approximately 14 percent of the total sheep and lambs received at the area's sampled auctions were received in November. For the state as a whole, almost 19 percent of the total sheep and lamb receipts were received at the eleven sampled auctions during November. Very few sheep and lambs were sold from the Southern Livestock Area during the spring or summer months. Almost 60 percent of the sheep and lambs were sold during the four fall months of September through December.

In the Northern Livestock Area there seemed to be more extreme fluctuations for all four species, than had been previously noted for the state's eleven livestock auctions, or for the six sampled auctions in the Southern Livestock Area. Figure 14 shows the movement by species through four sampled auctions in the Northern Livestock Area.

It can be seen in Figure 14 that the peaks in this Northern Livestock Area were higher, and the troughs lower than for the Southern Area or the state as a whole. The rest of the auctions in the state when combined with this area apparently had a leveling effect.

The high month for cattle in this Northern area was in October when 15.5 percent of the annual cattle marketings were made. December was the low month. At that time only 4.4 percent of the annual cattle marketings were received at these Northern Livestock Area auctions.

For calves, the spring months of April, May and June were higher than for all the auctions in the state or for the Southern Livestock Area.



NOTE: Graphed by percent of annual total marketed monthly.

Figure 14. Seasonality of Livestock Movement Through Four Livestock Auctions in the Northern Livestock Area of Michigan (Fiscal Year July, 1951 To June, 1952)

This was largely due to the importance of dairying in the Northern Area and the large number of veal calves being marketed from late winter and early spring freshenings.

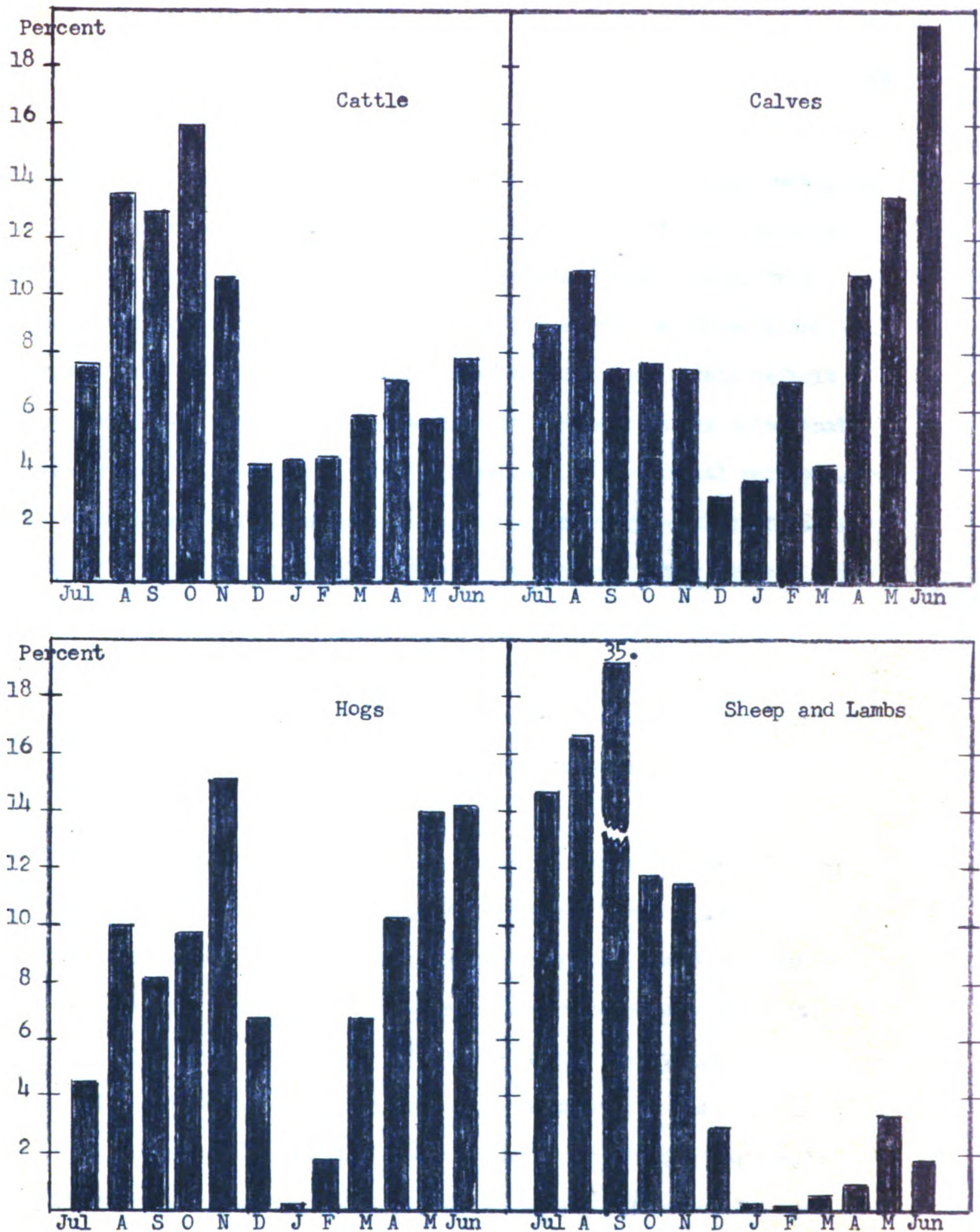
Hog marketings in the Northern Livestock Area had a slightly higher spring marketing total when differentiated from the rest of the state's auctions or from the Southern Livestock Area's auctions.

Sheep and lamb receipts by the auctions in this Northern Livestock Area were lower in the spring and summer months than had been previously noted for the state as a whole or for the Southern Livestock Area. The peak month occurred one month later than for the auctions in the rest of the state. During this peak month of November, 40 percent of the annual marketings of sheep and lambs were sold through these four Northern auctions.

The pattern of seasonal distribution of livestock receipts at the single sampled auction in the Upper Peninsula was much different for each of the species than recorded for the other two of Michigan's livestock areas, or for the state's auctions as a whole (Figure 15).

Although the records are for only one auction, this auction represents one half of the auctions in the entire Upper Peninsula Area, and it was believed that the marketings would give a good indication of seasonality of livestock movement in that area.

Receipts of all livestock were low during the winter months of December, January and February due to unfavorable winters, which made marketing difficult.



NOTE: Graphed by percent of annual total marketed monthly.

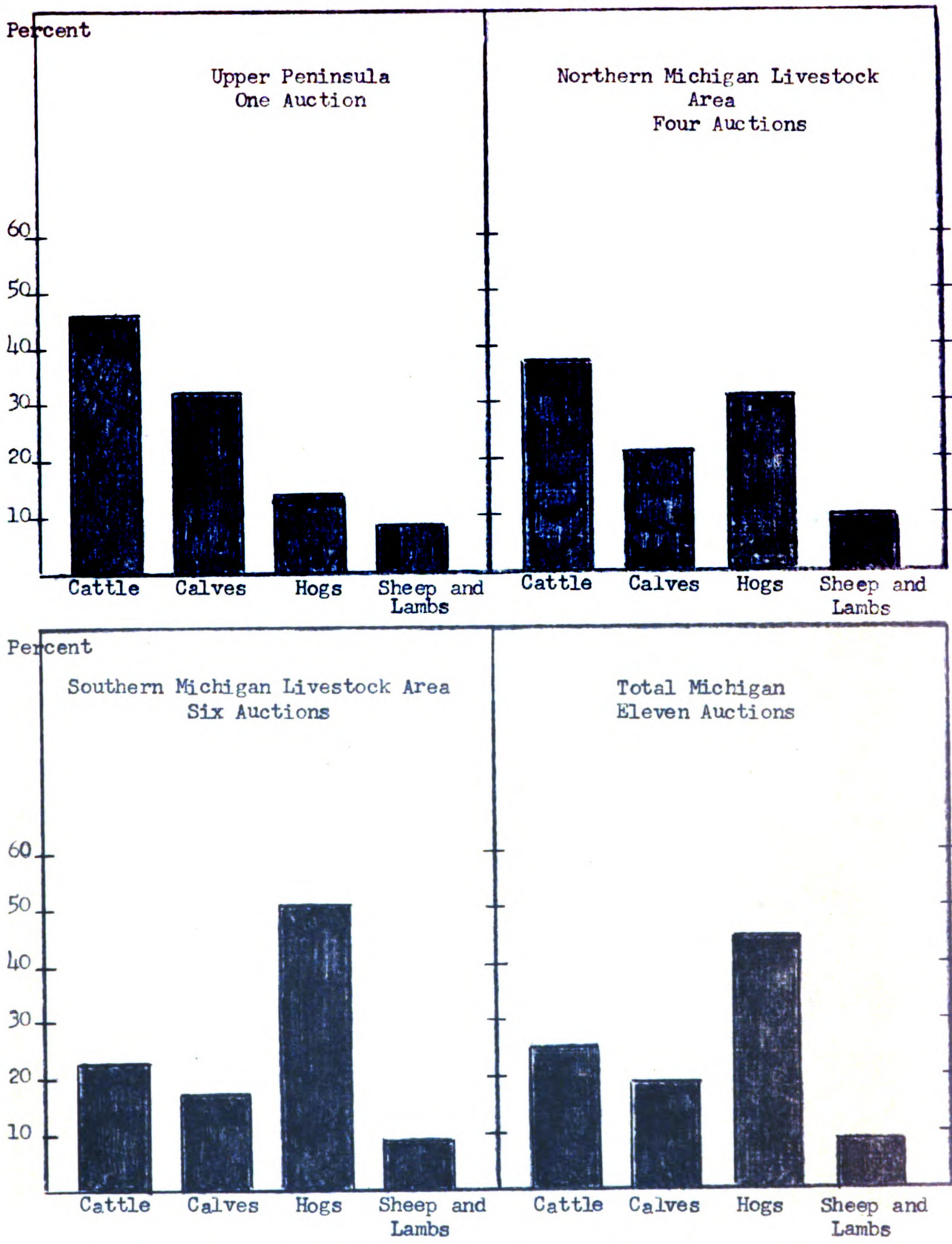
Figure 15. Seasonality of Livestock Movement Through One Auction in the Upper Peninsula of Michigan (Fiscal Year July, 1951 To June, 1952)

Over fifty percent of the auction's annual cattle marketings were made during the fall months of August through November. Calf receipts at the sampled auction ranged from a December low of three percent of the annual total to a June high of 16.5 percent of the annual total. Over 40 percent of the calf receipts arrived at this auction in April, May and June. Very few hogs were raised or marketed in this deficit feed area of Michigan. From these limited arrivals it was noted that November was the peak month with 15.2 percent of the annual receipts. The recorded marketings of sheep and lambs showed 35 percent of the annual total was marketed in September. The months of July, August and September accounted for 56.6 percent of the annual sheep and lamb marketings through this Upper Peninsula auction.

Percentage Distribution of species of livestock sold at auctions in the state as a whole and for each of the three major livestock areas are recorded in Figure 16.

For the state's auctions as a whole it was noted that 25.7 percent of the marketings were cattle; 18.5 percent were calves; 46.8 percent were hogs, and nine percent of marketings were sheep and lambs.

Hogs were quantitatively the most important specie marketed through the state's auctions. This was also the most important specie marketed in the Southern Livestock Area. In this area hogs accounted for 51.1 percent of the total livestock marketed through its sampled auctions; cattle made up 22.7 percent of the marketings; calves made up 17.4 percent, and sheep and lambs made up 8.8 percent.



Source: Data from the records of eleven of the twenty-two auctions in the State of Michigan, data for the fiscal year July, 1951 through June, 1952.

Figure 16. Percentage Distribution by Species of Livestock Sold in the Three Major Livestock Areas, and for the Whole State of Michigan

Hogs were not as important in the Northern Livestock Area. It was found that 37.4 percent of the marketings through this area's auctions were cattle; 30.8 percent were hogs; 21.8 percent were calves, and sheep and lambs accounted for ten percent.

In the Upper Peninsula, it was found that 46 percent of the livestock marketings through auctions were cattle; 32 percent of the marketings were calves; 14 percent were hogs, and sheep and lambs accounted for eight percent of the total livestock marketed through this auction.

CHAPTER VI

ORGANIZATION, AUCTION FACILITIES, AND PERSONNEL

Twenty-one of the state's general livestock auctions were owned by partnerships. Eighteen were owned by individuals, and eighteen were owned by corporations.

The auction facilities were found in most cases to be owned by the auction operators. It was found that 19 operators of the 22 studied auctions owned their auction facilities; while the other three operators rented their auction property.

Physical Plants and Equipment: The facilities used in Michigan for livestock auctions differed greatly in functional design, size, age, ease of operation and layout. A large percentage of the buildings were constructed specifically for livestock auction purposes. Seventeen of the 22 auctions in this study were occupying buildings built specifically for livestock auctions when originally constructed. Five of the 22 sampled auctions were not built for this specific purpose. Considering a building built specifically for auctions in the last ten years as a new auction building, and one built more than ten years ago specifically for auctions as an old auction building; it was found that eight of the 22 auctions were in new auction buildings; nine of the 22 were in old auction buildings; while two of the 22 were in remodeled old buildings; two were in old barns little changed, and one was located at a fairgrounds.

Some of the auctions had the sale ring, office, lunchroom, and yards all under one roof. Others had the office and lunchroom separated from the sale barn or had these located in a lean-to type structure next to the sale barn. One of these latter-type barns is shown in Figure 17.

A Small Michigan Auction: Figure 17 shows the floor plan of a modern, well-arranged small Michigan auction.

This auction used the same truck dock for unloading and loading-out the livestock consignments. This slowed up early loading-out when there were many late arrivals. While this auction could be criticized on lack of smoothness of livestock movement because of this, the auction had many good features.

One of the better features was the lift separation between bull pens which allowed the bulls to be driven in one side and driven out the other to the scales and ring hence not forcing a yardman to back them out of the pen. This often difficult and dangerous job was necessary at most yards.

Another good feature of this auction was the use of some of the alleys as pens by employing swinging gates which acted as space savers. They worked especially well with hogs and sheep in the narrow six foot alleys as in the bottom of Figure 17. The use of these narrower alleys made it much easier to steer livestock to the proper pens, and six to eight foot alleys seemed wide enough for these small auctions.

The scales were located near the sale ring and the livestock was weighed before selling at all except one of the sampled auctions. The

1" = 8'

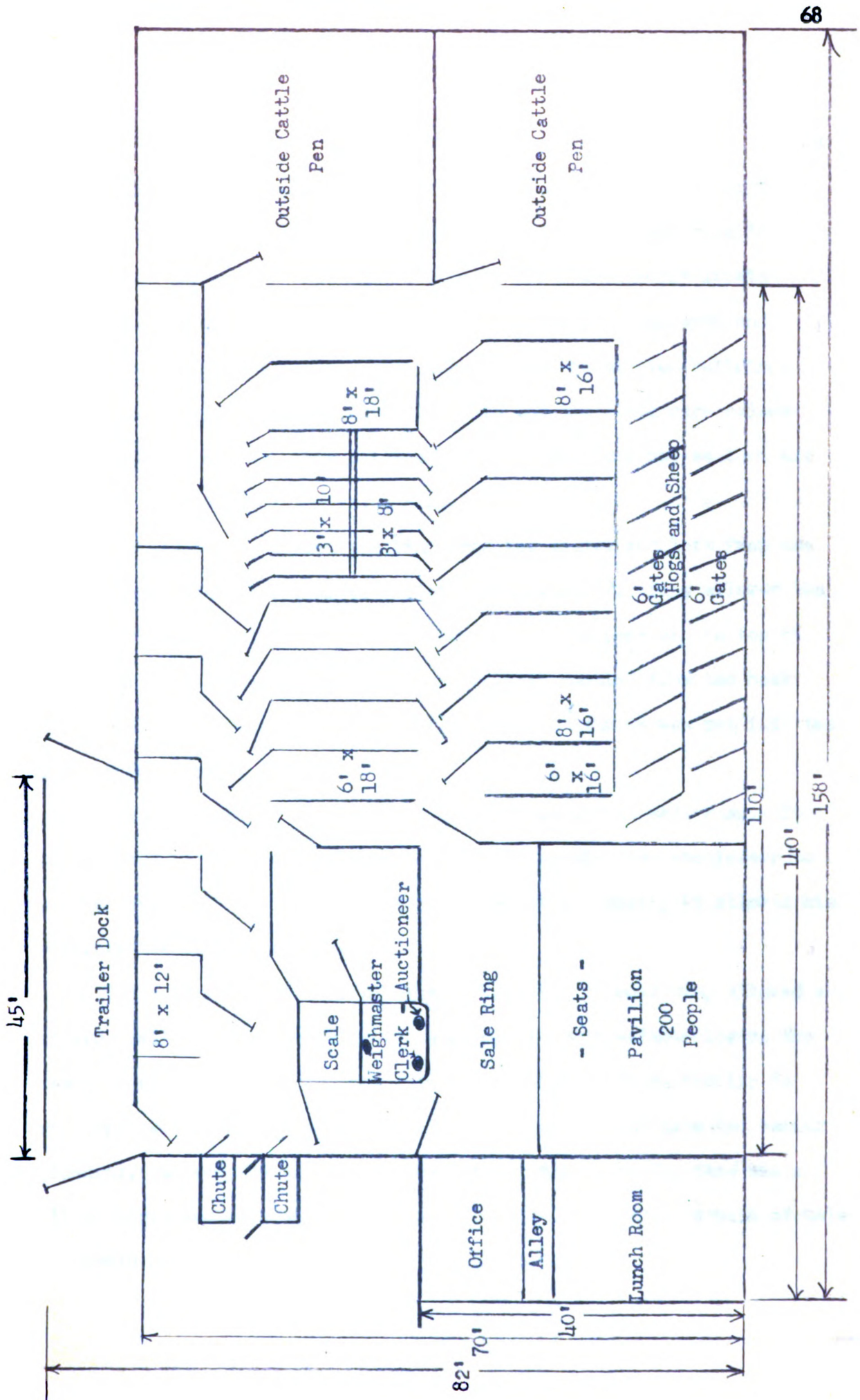


Figure 17. A Well-Arranged Small Michigan Auction Sale Barn

weighmaster was in a position at this auction to hand stamped weight slips directly to the clerk, who recorded selling price and buyer's name on them and relayed the information to the conveniently located main office. The sales pavilion, where livestock was displayed and sold, was sealed up separately from the rest of the auction building. The pavilion seated over two hundred people and the seats were raised in amphitheatre style. This allowed all interested buyers, sellers and visitors a good view of the sales ring.

The livestock entered the ring from the scales and left from the right side of the sales ring as depicted in Figure 17. This allowed the stock to flow smoothly through the sales ring. The pens on the top of this Figure were sellers' pens and were usually emptied from the back of the building forward. When the livestock was sold it was put into the larger buyers' pens.

A raised counter was provided at one side of the sale ring. It was occupied by the auctioneer and clerk. It enabled the auctioneer to see the livestock, and as he faced all prospective buyers, it allowed him to follow the bids more easily.

The drive-through trailer dock, with gates at each end, allowed a car and trailer to be driven in and unloaded quickly without losing the cargo. A slight dip in the road allowed the wheels of the trailer to drop down so that the back of the trailer was low, which made for easier unloading. Except for the lack of separate loading chutes, this was a well arranged and easy to operate small livestock auction. A barn of this type would have cost around 20,000 dollars in 1953.

Cost of Auction Facilities: The auctions in the state ranged from those costing 2,000 dollars up to those reporting an original investment of 100,000 dollars. The average of 18 of the 22 sampled auctions was 24,971 dollars, which was close to the cost of the auction depicted in Figure 17. When these same 22 operators were asked what they valued their auction facilities in 1952, the 21 replying gave answers which ranged from 2,000 to 125,000 dollars. The average 1952 valuation was 34,024 dollars. This increase in the average by almost 10,000 dollars can be attributed largely to the inflationary rise in building costs, since many of the auctions were constructed before World War II.

Table VIII shows the original cost of 18 of the 22 sampled auctions. Table IX shows the estimated replacement valuation in 1952 for 21 of the 22 sampled auctions.

Lunchrooms, Acreage and Pen Space: Twenty of the 22 auctions (91 percent) had lunchroom concessions. Only two did not provide lunchroom concessions for their patrons. These were auctions located in towns where other lunchrooms were in close competition with theirs.

These lunchrooms were not run for supplemental income, but for the convenience of the auction's buyers and sellers; therefore, they were often leased out to various civic groups.

The auctions were located on land ranging from one acre to 114 acres. The average of 19 auctions was 13.5 acres which was available for use if needed for the business. The actual acreage used was 4.7 acres

TABLE VIII

ESTIMATED COST OF LIVESTOCK AUCTION FACILITIES
 AT TWENTY-TWO OF MICHIGAN'S LIVESTOCK AUCTIONS.
 ORIGINAL VALUATION AS DECLARED BY PRESENT
 AUCTION OPERATOR

Value in dollars	Number of auctions	Percent of total auctions
Auctions not replying to question	4	18.18
0- 4,999	2	9.10
5,000- 9,999	1	4.54
10,000-14,999	4	18.18
15,000-19,999	4	18.18
20,000-24,999	3	13.64
25,000-29,999	0	0.00
30,000-34,999	1	4.54
35,000 and over	3	13.64
Total	22	100.00

TABLE IX

ESTIMATED REPLACEMENT COST OF THE LIVESTOCK
 AUCTIONS SAMPLED IN THE STATE

Value in dollars	Number of auctions	Percent of total auctions
Auctions not replying to question	1	4.54
0- 4,999	0	0.00
5,000- 9,999	2	9.10
10,000-14,999	0	0.00
15,000-19,999	3	13.64
20,000-24,999	7	31.82
25,000-29,999	2	9.10
30,000-34,999	1	4.54
35,000 and over	6	27.26
Total	22	100.00

on the average with a range between one acre and ten acres. This included space occupied by the buildings, outside parking lots, and outside yards.

The average auction in Michigan had 9,927 square feet of pen space, exclusive of runs and alleys. This was approximately half that needed to be posted under the administration of The Packers and Stockyards Act. The pen space ranged from one auction have 3,000 square feet of pen space to one having 21,708 square feet of pen space (Table X).

TABLE X
 TWENTY-TWO GENERAL LIVESTOCK AUCTIONS IN MICHIGAN
 CLASSIFIED BY AMOUNT OF PEN SPACE, EXCLUSIVE OF
 RUNS AND ALLEYS

Square feet of pen space	Auctions studied	Percentage of total
3,000- 4,999	3	13.64
5,000- 6,999	5	22.73
7,000- 8,999	3	13.64
9,000-10,999	5	22.73
11,000-12,999	0	0.00
13,000-14,999	1	4.54
15,000-16,999	2	9.10
17,000-18,999	1	4.54
19,000-20,999	1	4.54
21,000-22,999	1	4.54
Total	22	100.00

Seventy-three percent of the 22 studied auctions had less than 11,000 square feet of pen space.

Scales: Weighing facilities were provided at all of the state's auctions. Each of the sampled auctions had only one scale and weighed both single animals and lots over the same scale. Of these 22 scales, 20 were registered beam type with a pointer in the indicator attachment which showed when the scale beam was balanced. Two scales were registered beam type of scales, which enabled the weighmaster to stamp the weight on a scale ticket as with the other 20, but these two were also equipped with a dial which allowed the patrons to see the weight registered. Reports from 17 of the 22 auctions showed that the age of the scales ranged from six months to fifteen years. Fifty-two percent were five years old or less. Thirty-five percent were over five years old, but less than ten years of age. Only two scales of the 17 reporting were over ten years old.

These scales were tested infrequently by the Bureau of Marketing and Enforcement of the Michigan Department of Agriculture, and scale companies. Twelve of the 22 sampled auctions reported the frequency of scale tests. This ranged from an auction reporting the testing of its scales every two months to several which listed tests once a year. Forty-two percent listed tests at least once every six months while the remaining 58 percent listed tests as occurring once every year.

All 22 sampled auctions listed the minimum scale graduation as five pounds and the minimum weight they could record was five pounds. The beam capacity of 50 percent of these sales was five tons. Thirty-two percent listed the maximum beam capacity as ten tons. While four other auctions reported other weight limits.

The Bureau of Marketing and Enforcement tested the scales and licensed and examined weighmasters. These scales were required to meet the national handbook regulations of the United States Bureau of Standards.¹

The Bureau of Marketing and Enforcement calibrated and tested new auction facilities' scales. It also tried to conduct at least annual inspections of already established sales. Whenever it had written request of a patron, it retested the scales. There was no charge for this service and any person using the scales could request it. Livestock scales were required to have a fence on the scales and a stationary fence surrounding the scales to help prevent rubbing against them and prevent obtaining inaccurate weights. The scales were required to be accurate within one and one-half pounds for each one-thousand pounds.

Other Facilities: None of the 22 sampled auctions gave the livestock feed before the sale; however, some did provide water. Most of the livestock arrived on the day of the sale, and except for those auctions also running a daily market there were few facilities for special feeding and watering of livestock at any of the sales.

All of the sampled sales barns were equipped with rows of elevated amphitheatre type seats arranged along three sides of the sales ring or in front of one side of the sales ring. Seating capacity of these 22 sampled auctions varied from those seating approximately 95

¹ Handbook 44, United States Department of Commerce, Bureau of Standards, 1949.

patrons to those seating close to four hundred. Sixty-four percent of these auctions seated less than two hundred and fifty people (Table XI).

TABLE XI

TWENTY-TWO MICHIGAN AUCTIONS, CLASSIFIED ACCORDING
TO SALES RING SEATING CAPACITY

Number of Persons	Number of Auctions	Percent of Total
50- 99	1	4.54
100-149	2	9.09
150-199	3	13.64
200-249	8	36.36
250-299	4	18.18
300-349	2	9.09
350-399	2	9.09
Total	22	100.00

Looking at the loading facilities for these auctions it was found that in general the same truck chutes were used for loading and unloading. However, at six of the sales special loading chutes were provided for those wishing to load-out early while other stock was still arriving. When most of the livestock had arrived, these unloading truck docks were also employed in loading-out livestock. At 21 of the 22 auctions there were special unloading ports for trailers. There was an average of approximately three truck chutes at each of these 22 auctions. The range was from one chute to seven chutes. Fourteen of the auctions had less than four truck chutes. Seven had four or five truck chutes and one had seven chutes. Some of the larger auctions were handicapped by

having too few unloading or loading chutes and from not having separate loading and unloading chutes.

Six of the livestock auctions had access to railroad loading and unloading facilities. However, little use was being made of these facilities.

The sale ring size varied from one auction with 240 square feet of ring space to one having 600 square feet of space. The average sale ring area for the 22 auctions was 359 square feet.

Operation of Facilities: It was found that over 86 percent of the studied auctions allowed buyers to enter the ring if they so desired. Only three auctions specifically objected to buyers entering the ring and had posted signs to this effect. This latter group was protecting other buyers who want to see clearly. It was also a protection for the auction, for in case of injury the auction might be held responsible. Many auctions tried to get around this responsibility by posting signs that buyers entered the ring at their own risk.

The majority of Michigan's livestock auction pens were under cover. Michigan's auctions operate the year around and must have some protection for the livestock during inclement weather. The law was quite explicit about requiring some such protection. A Michigan Department of Agriculture regulation² states that, "Livestock yards shall be provided with

² Administrative Code of 1944, (Section 6 of Regulation 119), Michigan Department of Agriculture, (Mimeographed).

pens and buildings necessary to reasonably protect any livestock handled from injury and inclement weather. The pens and buildings shall be of such construction as will facilitate cleaning and shall be regularly cleaned and kept free of mud and accumulation of manure and filth."

Over 45 percent of Michigan's auctions had over 90 percent of their auction yardage under cover. Over 86 percent of the auctions had over 60 percent of their yardage under cover (Table XII).

TABLE XII

TWENTY-TWO MICHIGAN AUCTIONS CLASSIFIED BY
THE AMOUNT OF YARDAGE UNDER COVER

Percent under cover	Auctions Number	Auctions percent
31- 40	1	4.54
41- 50	1	4.54
51- 60	1	4.54
61- 70	2	9.10
71- 80	2	9.10
81- 90	5	22.73
91-100	10	45.45
Total	22	100.00

The auctioneer's voice was audible and distinct at all the auctions visited. All of the 22 sampled auctions had amplifiers for their auctioneers. This equipment was often furnished by the auctioneers themselves, but in some cases speakers were set up outside so people in the yards and parking areas could hear what was being sold, and in these cases the sound was good advertising. For the most part the

auction facilities were in good condition. The author visited each of the 22 sampled auctions and subjectively ranked them on state of repair of the pens, cleanliness in the pens, lighting in the pens and sale ring, and sound in the pavilion. All these were considered essential items in improving the buyers' knowledge of the livestock offered for sale. Broken, and poorly constructed pens lead to possible injury; unclean pens to possible disease; while poor lighting in the pens and in the ring along with indistinct or inaudible sound made it difficult to make an intelligent bid.

The condition of the pens was good or excellent for about 64 percent of the studied auctions. The degree of cleanliness of the pens, for the most part, was a little less favorable. Only 50 percent of the auctions were in the good and excellent ratings. Only 18 percent of the total auctions were in the excellent rating.

The lighting in the pens was often inadequate. Some buyers would like to inspect their livestock early. This lack of adequate lighting often hampered buyers interested in this early inspection. This was probably one of the reasons for the many buyers crowding into the auction sales ring. Sixty-four percent of the auctions ranked poor or fair in respect to pen lighting. On the whole the auctions had good or excellent lighting in the ring. Here 82 percent of the auctions were in the good or excellent category. The same high ranking was true for sound with 100 percent of the auctions falling into the good or excellent rating. On the whole Michigan's auctions seemed to be providing good facilities for the use of the farmers in the state.

TABLE XIII

THE RATINGS OF TWENTY-TWO SAMPLED AUCTIONS ON
CONDITION OF PLANT FACILITIES

	Condition of Facilities - Subjective Rating								Total
	Poor		Fair		Good		Excellent		
	Number	Percent	Number	Percent	Number	Percent	Number	Percent *	
State of repair of pens	4	18.2	4	18.2	7	31.8	7	31.8	22 100.0
Cleanliness of pens	3	13.6	8	36.4	7	31.8	4	18.2	22 100.0
Lighting in pens	4	18.2	10	45.4	6	27.3	2	9.1	22 100.0
Lighting in ring	0	0.0	4	18.2	9	40.9	9	40.9	22 100.0
Sound in pavilion	0	0.0	0	0.0	10	45.4	12	54.6	22 100.0

*Number and percentage of auctions studied.

Personnel: The employees of an auction may be classified as managers, auctioneers, ringmen, yardmen, weighers, office help, and others (Table XIV).

The manager usually has a dual role during the sale. He often does the clerking for the auctioneer besides regular managerial duties. The auctions were seldom large enough to warrant full-time managers.

The yardmen handled the livestock from the time it was unloaded at the auction until it was loaded for shipment as directed by the buyer. The number of these employed varied from one to 24 depending on the size of the auction. At the 22 sampled auctions it was found that the yardmen made up 48.4 percent of all auction employees.

The ringman assisted the auctioneer in obtaining bids from the crowd at a few auctions, but his main occupation was moving animals around the ring and taking them from the scale. One to two ringmen handled all the livestock in the ring at the 22 sampled auctions, helping the one to two auctioneers with the selling.

The weighmaster weighs the livestock and fills out a scale ticket. This ticket listed the owner's name, the livestock's description, and the weight was stamped on the ticket by the registered beam scale. This ticket is given to the clerk at ringside.

The clerk sat with the auctioneer and recorded the selling price and buyer on the scale ticket he received from the weighmaster. The clerk then turned this completed scale ticket into the main office.

TABLE XIV

TWENTY-TWO MICHIGAN LIVESTOCK AUCTIONS CLASSIFIED BY
 AMOUNT OF PERSONNEL EMPLOYED IN VARIOUS JOB CATEGORIES

Number of persons	Number of Auctions having designated number of employees						
	Manager	Auctioneer	Ringmen	Yardmen	Weighers	Office Help	
0	-	-	2	-	-	-	-
1	17	10	9	1	13	1	1
2	5	12	11	1	9	2	2
3	-	-	-	3	-	7	7
4	-	-	-	1	-	5	5
5	-	-	-	2	-	1	1
6	-	-	-	3	-	1	1
7	-	-	-	1	-	2	2
8	-	-	-	2	-	2	2
9	-	-	-	0	-	1	1
10-14	-	-	-	3	-	-	-
15-19	-	-	-	1	-	-	-
20-24	-	-	-	4	-	-	-
Total	22	22	22	22	22	22	22

The office help kept various accounts up to date for the buyers and sellers during the sale, and handled bookkeeping records after the sale. The amount of office help varied from one to nine persons, depending once again on the size of business.

The total personnel employed at auctions is shown in Table XV. This was categorized by small, medium and 'large' business, as used in previous chapters.

TABLE XV

TWENTY-TWO MICHIGAN AUCTIONS CLASSIFIED BY SIZE OF BUSINESS AND NUMBER OF EMPLOYEES FOR EACH SIZE

Size of business	Number of Employees							Total
	5-9	10-14	15-19	20-24	25-29	30-34	35-39	
	Number of Auctions							
Small	2	3	2	-	-	-	-	7
Medium	-	3	3	-	1	-	-	7
'Large'	-	-	-	3	-	3	2	8
Total	2	6	5	3	1	3	2	22

The number employed at small auctions varied from seven to 17 employees. At the medium sized auctions the variation was from 13 to 27 employees. At 'large' auctions the range was from 20 to 36 employees.

The average number of employees in these 22 auctions was 19. The average for small auctions was eleven employees, for medium seventeen employees, and for 'large' auctions twenty-eight employees.

The employees for these one day a week sales came largely from local farmers. All auctions listed this as their major male labor supply, with minor additions from school boys, local factory workers, and traveling auction help. The office help was largely composed of local housewives.

CHAPTER VII

GENERAL OPERATING PROCEDURE, ACCOUNTING METHODS AND SELLING CHARGES AT MICHIGAN'S AUCTION MARKETS

Frequency of Sale: The auction method of sale was conducted one day a week at each of the auction markets sampled. However, 23 percent of these auctions bought livestock as order buyers especially for hogs, during the other days of the week.

Time of Sale: The starting time for the typical Michigan auction ranged from twelve noon to 8:00 P.M.

The sample included 15 auctions with afternoon sales, and seven with evening sales. The operators of the smaller evening sales stated that, because theirs were small-scale enterprises, better buyer participation was obtained with evening sales. Some buyers from other sales apparently visited these evening sales to finish out their day's buying. Evening sales also provided a better opportunity for sellers to attend. This was especially true of part-time farmers, who were unable to get away from work during the day to attend. Evening sales also provided a better opportunity for the auctions to obtain part-time help for this once-a-week operation.

The average starting time for the fifteen afternoon sales was two P.M. The afternoon starting time ranged from twelve noon to three P.M. The average starting time for the five evening sales was seven P.M. The starting time for evening sales ranged from four P.M. to eight P.M.

At the auctions the length of sale ranged from two to nine hours during the summer; the average being four and one-half hours. The length of sale was considerably longer during the busier fall season. Throughout the year, the sales lasted until all the livestock was sold.

Sellers: The average number of sellers per sale in the sample ranged from 30 to 600. The average number of sellers for the sample was 205.

The auction's livestock was either sent directly to the auction by farmers, or by dealers or auction buyers acting as dealers.

The livestock shipped to the auction by farmers was delivered in their own trucks or brought in for the farmers by hired truckers. Some auction operators also ran their own trucking service; while others acted as a central dispatching service for community truckers.

It was found that 80 percent of the feeder cattle, 93 percent of the slaughter cattle, 98 percent of the vealers, 98 percent of the sheep and lambs, 96 percent of the feeder pigs, and 99 percent of the butcher hogs came from farmers. It was found that 20 percent of the feeder cattle, seven percent of the slaughter cattle, two percent of the vealers, two percent of the sheep and lambs, four percent of the feeder pigs, and one percent of the butcher hogs were supplied by dealers.

Buyers: Considerably fewer buyers than sellers were in attendance at the auctions. At the auctions in the sample the average number of buyers per sale ranged from five to 100 depending on the size of the sale. The average number of buyers in attendance was 34.

The major buyers at auctions were packers and farmers. The largest percent of the slaughter livestock was taken by packers through their own direct representatives or through order buyers. Approximately 100 percent of the slaughter cattle, vealers, slaughter sheep and lambs, and butcher hogs were taken by packers. Seventy-three percent of the feeder cattle were purchased by farmers at these auctions. Twenty-two percent were purchased by dealers, and five percent by packers. Three percent of the feeder pigs were purchased by dealers, while 97 percent were purchased by farmers. Only 52 percent of the sampled auctions handled feeder lambs. These reported selling nine percent of them to packers, six percent of them to dealers, and 85 percent to farmers.

Selling by Weight: In Michigan all the slaughter livestock was sold by weight. The only types of livestock sold by the head were deacon calves, a few dairy replacements and feeder pigs. However, 59 percent of the auctions reported that they sold feeder cattle by the head when requested to do so by consignors.

Order of Sale: The complete order of sale varied between sales. For some species however, the auctions were quite consistent in the order of sale. This was especially true in the case of feeder pigs which were generally sold outside before the sale was started in the ring.

The order of sale in the ring followed somewhat this general order: deacon calves, veal, feeder cattle, sheep and lambs, slaughter cattle, bulls, and hogs. The barrows and gilts were usually sold before the rough hogs.

At three of the sales the hogs were sold first. The management explained that it made more efficient use of pens, for when kept separated by consignors many more pens were required than when combined in buyers' pens. Early sales of these hogs therefore released seller pens for late arriving livestock.

Auctions selling hogs last claimed that, due to the dust created by hogs, many of the buyers liked to wait until the end of the sale for these. Secondly, deacons and feeders were largely purchased by farmers. Selling these first gave the farmers an opportunity to get their purchases home early. Butcher hogs were purchased by a few packer buyers who were under less pressure to leave.

In general, the auctions had developed a sale order which seemed to be best suited to the desires of their buyers.

Sorting and Grading: The livestock consigned at Michigan's auctions was sorted for market class at all the auctions studied and each such market class was sold under individual consignor's ownership. The livestock was sold singly or in lots, but always under individual ownership.

Most slaughter heifers and steers, most rough hogs, all slaughter cattle, all calves, all dairy replacements and all bulls were sold singly.

Feeder pigs were not sorted but sold as per arrival. They were usually sold in lots as grouped by the consignor prior to delivery at the auction. However these lots were sometimes broken up by the auctioneer with the consignor's permission.

No strict grading was attempted at the auctions; however, some lots within individual market class consignments were divided on the basis of weight or some other physical characteristic. For example, feeder cattle were divided up into lots largely based on weight, age and conformation. These lots or individual animals were sold as thus divided. No two consignments were mixed.

Barrows and gilts were separated into weight classes if there was much difference within an individual's consignment. They were usually sorted by the consignor however, before arrival.

Sheep and lambs were usually sold in lots. These lots were grouped somewhat uniformly by age and weight, but no two consignments were mixed.

Price Protection: At all Michigan auctions some form of price protection was allowed the seller. There were several methods of price protection in use. For example, at sixty-three percent of the auctions in the sample the seller was allowed to bid as he desired on his own livestock; at twenty-seven percent of the auctions the seller was limited to one bid; at five percent of the auctions the seller was allowed to list the minimum price he would take; and at five percent the seller could list the minimum price or bid as desired.

When farmers or dealers bid on their own livestock there was no charge made or any restrictions levied at 36 percent of the auctions sampled. At 23 percent of the auctions there was no charge made unless the seller made a habit of using this practice as a means of inventorying

his livestock. Eighteen percent of the auctions charged one-half of the regular commission when the livestock was bid in, while eighteen percent charged regular commission. Five percent of the auctions charged one dollar if the seller bid in his cattle. Any bidding-in which occurred was largely on cattle and calves, for hogs could not be legally taken back to the farm when sold through the ring.¹

Further price protection came from the auction management buying on its own account to "protect the price". It was found that 73 percent of the auctions in the sample did buy regularly to protect the price. Another nine percent bought for this purpose occasionally, while 18 percent did no price-protection bidding.

Source of Market Information: The sampled auctions listed market reports from the Detroit and Chicago stockyards as their major source of market information. This was disseminated to the auctions most effectively by radio (Table XVI).

Advertising Auctions: The 22 auctions spent from zero to 55 dollars a week on paid advertising.

The average amount spent was 15.86 dollars per week. Only four of the 22 auctions spent 30 dollars or more a week for advertising. There were many methods used to solicit business at these studied auctions. Some of the main methods used are presented in Table XVII.

¹ Administrative Code of 1944, (Section 6 of Regulation 119), Michigan Department of Agriculture, (Miscographed).

TABLE XVI

SOURCES OF MARKET INFORMATION FOR AUCTION OPERATORS
OF TWENTY-TWO MICHIGAN AUCTIONS

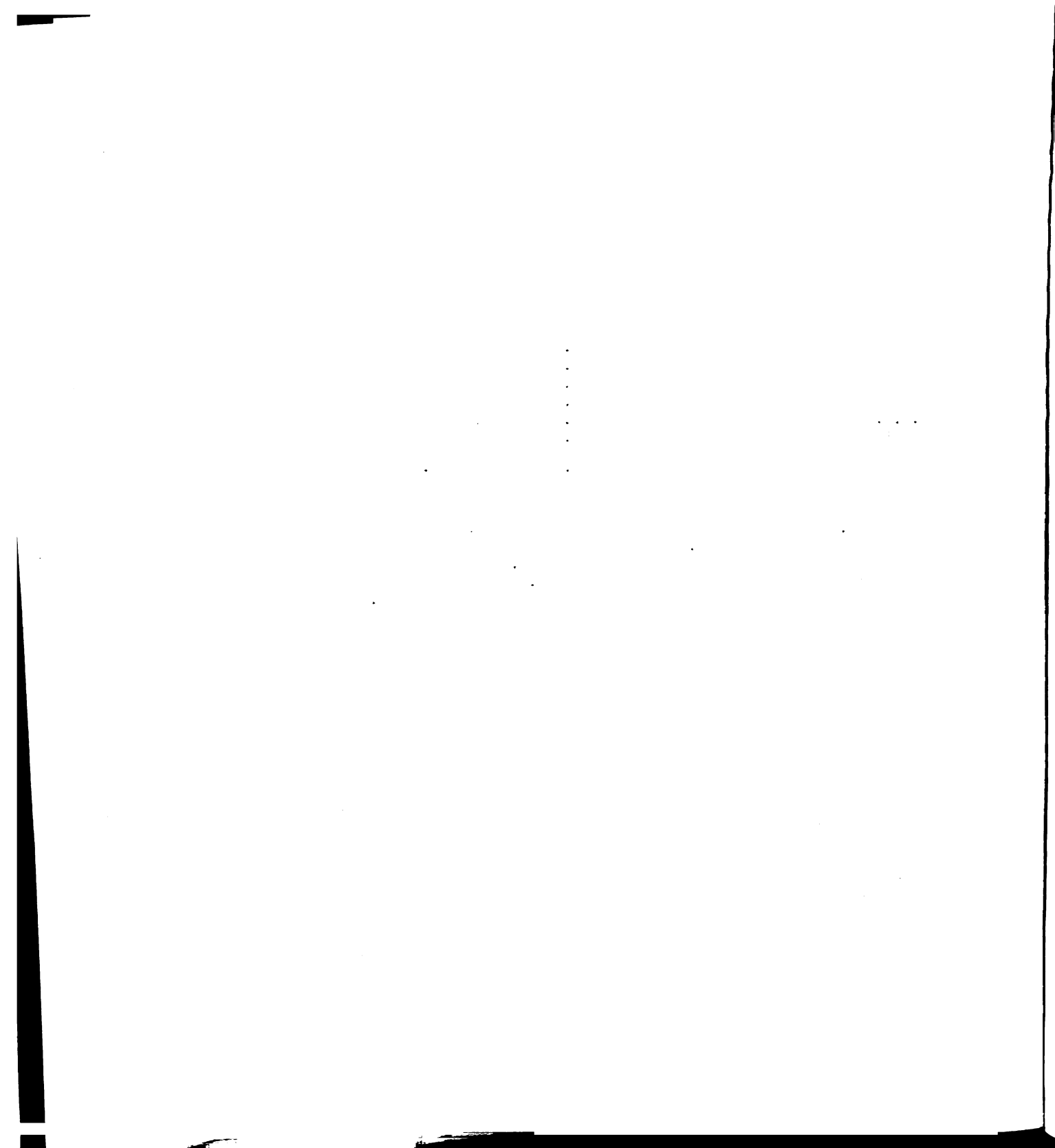
Information Obtained from	Points*	Relative Value percent of total
Radio	35.	53
Other auctions	10.5	16
Telephone to terminal	6.	9
Daily newspaper	5.5	8
U.S.D.A. Daily Market News Report	4.5	7
Drover's Journal	4.5	7
Total	<u>66.</u>	<u>100.</u>

*Each auction was asked to list its most important source of market information. Some had only one source of information, while others had as many as three sources. The value of this information to auction was given a total weight of three points. Hence if only one source was used its value was three points. If two sources were used the value of each was equal to one and one-half points.

TABLE XVII

METHODS OF ADVERTISING USED
AT TWENTY TWO-SAMPLED MICHIGAN AUCTIONS

Method of Advertising	Number of auctions	Percent of total
1. Newspaper and radio	7	32
2. Newspaper only	6	27
3. No paid advertising	5	23
4. Radio and letters or handbills	2	9
5. Newspaper, radio and letters or posters	2	9
Total	<u>22</u>	<u>100</u>



Accounting and Handling Procedure: Office procedure and forms used by the auctions varied greatly. However, an attempt to generalize the procedure is given below.

Upon arrival, the livestock was identified. Cattle and calves were ear-tagged at 20 of the auctions in the sample. A numerical patch was used for identification at the remaining two auctions. Hogs and sheep were painted or chalked for identification at 77 percent of the studied auctions. At the remaining 23 percent these species were placed in individual consignment pens and identified by numbered pens. Livestock in large consignments were not individually marked when they occupied an entire pen. In odd-lot consignments, the livestock was all identified so that several consignments could be collected in the same pen.

Dock Receipts: At the time of identifying, a dock receipt or shipping ticket was made out for the trucker. This was made out in triplicate. It showed the owner's name and address; the trucker's name and address; the kind of livestock; the number of head of each kind; and the identification. One copy of this dock receipt went to the main office for entry in the seller's voucher. One went to the shipper as a receipt for delivery of the livestock. The other followed the livestock to the pen for later use in filling out the scale ticket. The pen number was often recorded on this dock receipt. A dock receipt was made out separately for each market class of livestock so it could accompany livestock to the correct pens.

Scale Ticket: Before selling, the livestock was moved from seller's pens to the scales. The deck receipt was handed to the weighmaster who referred to this to record on the scale ticket the consignor's name and address; the kind of livestock, the livestock's identification number, and the number of head being weighed. The scale ticket was made out in duplicate. This scale ticket was handed to the clerk at the auction ring side. The clerk, who sat with the auctioneer, filled in the scale ticket with the selling price, the buyer, and the buyer's pen number. Then the clerk sent one copy of the scale ticket to the main office. The other part of the scale ticket usually went with the livestock to the buyer's pen as a buyer's receipt.

Buyer's Invoice: At the main office a running account of the buyer's purchases was kept on a buyer's invoice. This invoice listed the buyer's name, address, pen, kind and number of livestock, weight and price. It was made out in triplicate. The original was kept at the office; the second copy went to the buyer as his bill; the third copy was sometimes used for checking out livestock from the yards.

Seller's Voucher: At the same time that the entry was made on the buyer's invoice a similar entry was made for the consignor on a seller's voucher. This showed consignor, livestock's identification, buyer, type of livestock, weight and price. The total value per lot, and the total gross amount was listed. The various selling charges (Commission and insurance or service fee) were listed. These selling expenses included a trucking expense when a hired truck was used. When these expenses were subtracted from gross receipts, a net proceeds figure was obtained.

Part of this seller's voucher was often made out from the shipper's ticket or dock receipt before the scale ticket came in. This same dock receipt informed the office help when an individual consignor's lots had been sold. The office could then have a consignor's check ready for him quickly. After a consignor's livestock was sold, a check was made out to the seller for the amount recorded on the seller's voucher as net proceeds. In some cases a combination check and sale bill was used, while in others separate sale bills and checks were used. One copy of the seller's voucher went to the seller, while one was retained at the office.

Sales Sheet: Some check on sales was allowed if the clerk who recorded at the ring kept a sales sheet. This was filled out at the same time as the weight slip. It listed number of head, kind of livestock, owner, buyer, price and weight. It was very useful in case of a lost weight slip.

Other Forms: Some auctions kept only weight slips, buyer's vouchers, and seller's vouchers as permanent records. Others kept very complete records of information obtained from the above mentioned supposedly primary records. These auctions which kept complete records had book-keeping forms which showed buyers, sellers, their addresses, number of head in transaction, weight, price, gross selling price, amount of commission charged, amount of service fees collected, and deductions for trucking. These were arranged in individual columns which could be summarized for the weekly sale giving total number of head by species, gross sales, payments to farmers, receipts from commissions and service fees,

payments from buyers, gross income to the auction, and itemized operational expenses which were subtracted from gross income to give an auction's net operational profit. Such a complete bookkeeping sheet was kept at very few auctions.

A final form employed at many sales was the release order. This order showed to whom the livestock was released, number of head, pen number, and who checked out the livestock. This released the company from liability after the trucker had hauled the stock from the yard, for the purchaser or trucker signed these releases when the livestock was loaded-out.

The keeping of these or similar records was a necessary part of an auction's operation. This was true not only from the standpoint of good management, which required knowledge of business operations, but also as legally required under Public Act 284; an act which required that "adequate records" be kept of all sales and purchases of livestock for two years from date of sale. These records were to be opened for inspection at the request of the Department of Agriculture.²

Selling Charges: The selling charges at Michigan auctions varied greatly between auctions. Often within the same sale there was a variation in selling charges to individual consignors due to differences in number of head consigned or value of the livestock consigned (Appendix C).

² Laws Relating to and Administered by the Department of Agriculture, Michigan Department of Agriculture, (Act 284 of 1937, 287.123 Section 3) pp. 86.

Seventeen auctions reported their selling charges for cattle. It was found that 41 percent of these auctions charged by the head with no variation for differences in number of cattle supplied by consignor, or for differences in their sale value. Selling charges for this group of auctions ranged from one dollar to one and one-half dollars per head. Twenty-four percent of these auctions varied selling charges according to sale value; eighteen percent varied charges with changes in volume of cattle marketed by individual consignors; and, eighteen percent charged a fixed percent of gross selling value.

At 82 percent of these auctions a service or insurance charge was added as an extra commission. The charge levied ranged from one-half to one and one-half percent of the gross selling price.

In general selling commissions and service or insurance fees were the only charges levied at livestock auctions.

Seventeen auctions reported calf charges. It was found that 70 percent of these auctions charged by the head with no variation. The charges ranged from 50 to 80 cents per head. To this was added a service or insurance charge of one-half to one and one-half percent of gross selling price. Eighteen percent of these auctions varied their selling charges with the value of calves supplied; while 12 percent varied their calf selling charges with the number of head supplied.

Seventeen auctions reported hog selling charges. It was found that 76 percent of these sales charged by the head with no variations for volume or value differences. The charges ranged in this group from 20 to 80 cents

per head. Twenty-four percent of these auctions reported varying selling charges as the number of hogs consigned by one owner changed.

Feeder pig selling charges were obtained from 15 different auctions. All auctions sold feeder pigs by the head with no variations for volume or value differences. The range in price was from 25 to 35 cents per head. The auctions usually eliminated the insurance or service charge on sales of feeder pigs.

Sheep and lamb charges were reported by 12 auctions. Only eight percent of these varied selling charges for consignors on the basis of number of head consigned. Ninety-two percent charged a straight commission charge per head. The selling charge ranged from 25 to 60 cents per head plus a half to one and one-half percent service or insurance charge.

Table XVIII shows the selling charges for four major species of livestock at the most common auction rate and lists comparisons with comparable selling charges at the Detroit Terminal Market.

This comparison shows that in general there was very little difference between the charges at the auctions and the terminal market. Charges for odd-lots were a little higher at the terminal, but as the volume of livestock shipped to the terminal increased, the charges at the two markets became quite close.

Table XVIII does not take into account the differences in transportation costs between the two markets. One of the largest differences between costs of using the two outlets would be the increased distances from most farms to the terminal market. There were 57 livestock auctions

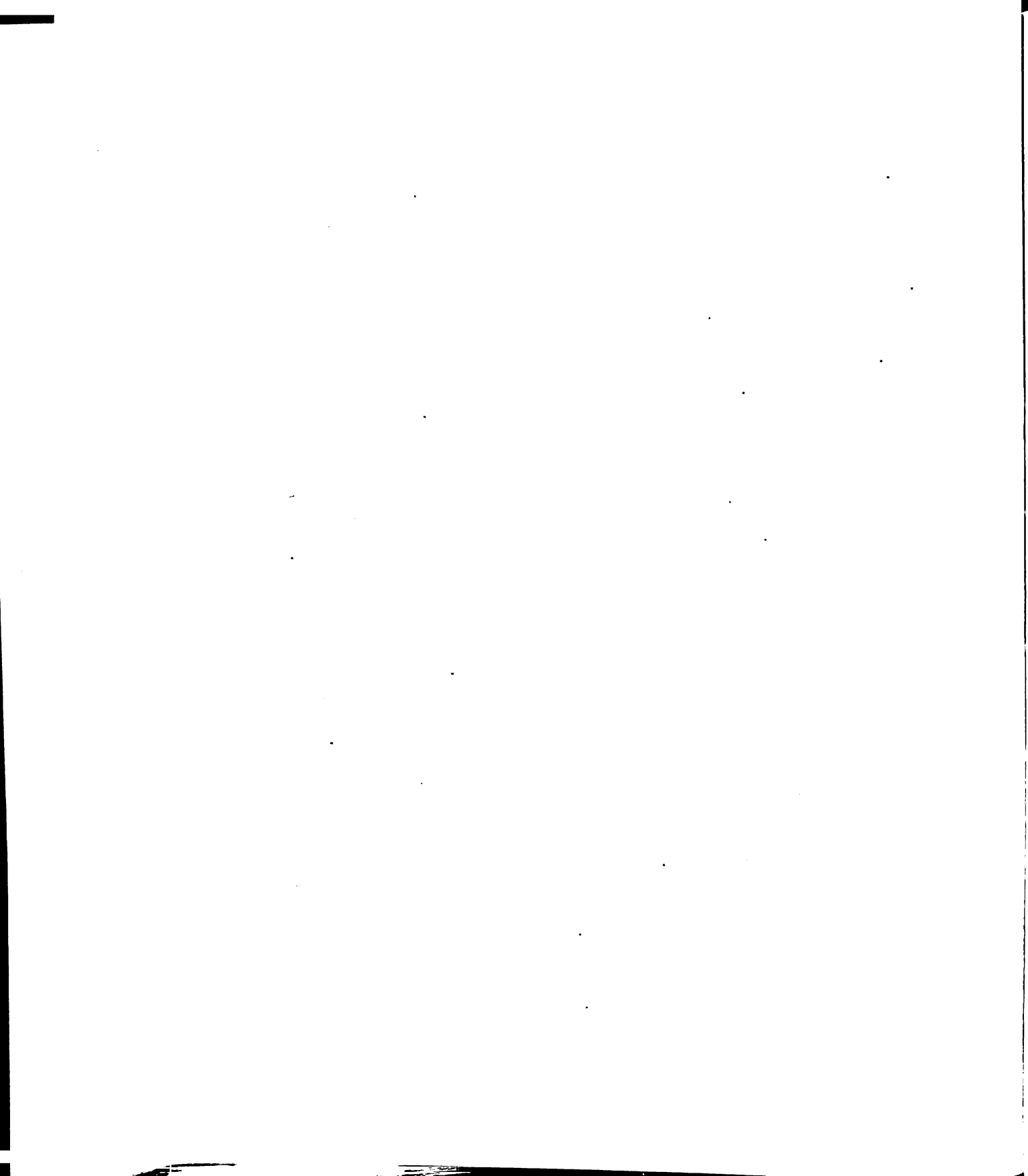


TABLE XVIII

SELLING CHARGES AT AN AUCTION LEVYING MOST COMMON CHARGES
AND COMPARABLE CHARGES AT THE DETROIT TERMINAL MARKET COMPARED*

Selling charge and market class of livestock	Charge per head in lots of		
	1 Head	5 Head	10 Head
Cattle (1000 lb. steer \$25.00/Cwt. equals \$250 per head).			
Most Common Auction charge	2.50	2.50	2.50
Detroit Terminal Market	2.66	2.44	2.44
Difference	-.16	-.06	-.06
Calves (160 lb. vealer, \$30.00/Cwt. equals \$18.00 per head)			
Most Common Auction charge	.99	.99	.99
Detroit Terminal Market	1.32	1.17	1.105
Difference	-.40	-.18	-.115
Hogs (220 lb. butcher \$25.00/Cwt. equals \$55.00 per head)			
Most Common Auction charge	.775	.775	.775
Detroit Terminal Market	1.06	.79	.775
Difference	-.285	-.015	-.000
Sheep or Lambs (80 lb. lambs, \$25.00/Cwt. equals \$20.00 per head)			
Most Common Auction charge	.55	.55	.55
Detroit Terminal Market	.92	.60	.585
Difference	-.37	-.05	-.035

*The major auction charges were a straight per head commission charge of \$1.25 on cattle, \$.75 on calves, \$.50 on hogs, and \$.45 on sheep and lambs with a service charge of 0.5 percent of gross selling price added. The major selling charges at the Detroit terminal market were composed of selling commission which varied with the number of head sold. An additional charge was levied by the stockyard company for yardage, weighing, yard insurance, and feed.

widely scattered over the state and therefore, there was one within a shorter distance to most farms than the terminal markets at either Chicago or Detroit.

Actually to draw an intelligent value judgment in selecting a place to sell, a farmer should have access to the following information:

1. The farmer should know the selling price at the two markets which were being compared. This would vary little between auction sales and the terminal market. The main differential would be transportation. Prices for comparison of the two markets were difficult to obtain. The terminal market, with its market news service gave a fairly complete account of prices by various grades and weight classes. Such unbiased, reliable reports were not available at the auction markets. The only reports from auctions were issued by the operators themselves and these operators usually confined themselves to reporting the top of the market. Such reports do not tell the complete story.

It was considered doubtful if adequate market reports could be obtained at the auction level. The auctions were widely scattered with heterogeneous receipts due to geographic location; they usually handled a relatively low volume of any one market class, and the livestock was not graded. It was believed that the cost of maintaining market reporters at even a few representative sales would be out of proportion to the value of such a service to farmers or other auction operators. A visit to the local sale after having heard the terminal market quotations would probably give the best indication of trend in prices between the two markets.

2. The farmers should also know the weight of his livestock. This weight and selling price would give the value of gross receipts, and should be computed for both markets.

3. The farmer should then investigate differences in marketing costs at the two markets. The first such selling cost was the selling charge. A list of commission charges at the terminal market could be obtained from the commission agency which operated on that market; the charges for yardage, feed and other services on the terminal market could be obtained from the stockyard company which owned the yard (on a terminal market the facilities and selling agencies were separate functions). A list of auction selling charges would have to come directly from the owner of the auction in which the farmer was interested.

4. The other major selling cost was transportation. This could be calculated on the basis of cost of operating the farmer's own vehicle or it could be obtained by calling local truckers. When estimating this cost the shrinkage should be considered as an integral part of such cost.

Once this information on estimated selling costs and estimated gross receipts was computed it was then possible for the farmer to make a fairly objective choice between the two markets on the basis of the net revenue. This difference or net revenue should be used as the criterion to answer the age old question of where to sell.

CHAPTER VIII

SUMMARY AND CONCLUSIONS

Summary: The first livestock auction started in the United States in 1836. The first livestock auction was established in Michigan in 1933. By 1937 there were thirteen livestock auctions in Michigan. The number grew until in June 1952 there were sixty-four licensed livestock auctions in Michigan. The desire of the farmer to sell near at home and watch his livestock being sold was a big factor in the expansion of the decentralized livestock auction.

The major portion of this study dealt with general livestock auctions. These were sales which handled all species of livestock and which obtained their major source of income from the handling of livestock. There were fifty-seven of these licensed in Michigan in 1952.

Twenty-two of these general livestock auctions were selected as a stratified purposive sample based on geographic location, size of business and type of ownership. These sampled auctions were visited during July and August, 1952. The major context of this thesis was derived from these interviews.

It was found that the Southern Livestock Area had the largest absolute number of auctions and the largest sized auctions. The auctions were the most numerous in proportion to livestock numbers in the Northern Livestock Area.

Here 31.5 percent of the state's livestock auctions were located in an area which contained only twenty-one percent of the state's livestock.

It was found that a limited number of auctions in the Upper Peninsula were providing a much needed outlet for this area of limited market outlets and scattered livestock population. There seemed to be a lack of competition between contiguous sales and it was concluded that this was largely due to multiple auction ownership by contiguous ownership entities. Feeder cattle were found to come the greatest distance to the auctions, while feeder pigs and sheep and lambs came from within a closer radius.

Considerable seasonal variation existed in receipts of livestock at the livestock auction markets of Michigan. The monthly seasonal pattern for all livestock showed that the peak month was October. At this time approximately thirteen percent of the yearly livestock receipts was marketed. For the state's auctions as a whole it was found that the largest number of cattle was marketed in September and October. July and December were the lowest cattle months. April was the largest calf month, while hog receipts were largest in October, and sheep and lambs were largest in October and November. This pattern varied somewhat when the state was divided into three major livestock areas.

It was found that eighty-six percent of the auction operators owned their auction buildings while the other fourteen percent rented them. Although the auction facilities used in Michigan varied greatly in

functional design, size, age, ease of operation and layout, it was found that seventy-seven percent of these auctions were occupying buildings built specifically for livestock auctions. The average cost of these facilities was reported to be 24,971 dollars. Ninety-one percent of the auctions provided lunchroom concessions. Furthermore, it was found that the average auction in Michigan had 9,927 square feet of pen space. Weighing facilities were provided at all of the state's auctions. The majority of Michigan's livestock pens were under cover. It was found that forty-five percent of Michigan's livestock auctions had over ninety percent of their auction pen space under cover. The average number of employees in these sampled auctions was nineteen.

The auction method of sale was conducted one day a week at each of the auction markets sampled. However, at twenty-three percent of these auctions livestock, especially hogs, was purchased on orders during the other days of the week. The sample included fifteen auctions with afternoon sales, and seven with evening sales. Although the sampled auctions averaged 205 sellers per sale, there were on the average only thirty-four buyers in attendance, and some sales reported as few as five buyers. At all Michigan auctions some form of price protection was allowed the seller. Radio market reports were found to be the major way that auction operators received price information. Selling charges varied greatly between sales. In general, the auctions charged a straight per-head commission charge regardless of the number of head consigned or the value of the consignment. There was in addition an insurance or service charge of one half to one and one-half percent at most of the auctions.

Conclusions: Three of the major operating problems cited by auction operators were:

1. The difficulty of obtaining good part-time help.
2. The need for having a veterinarian in attendance to spot sick animals and test cattle so they might be returned to the farm.
3. The difficulty of getting farmers to bring their stock in on time.

A fourth and the most important problem was their stated need for a credit bureau to check on the financial status of buyers or the establishment of a buyer's bonding law to require the bonding of commercial buyers on auction markets.

When new laws are being considered, the author believes first consideration should be given to establishment of a buyer's bonding law for the protection of the auction operators - the minimum bond should be at least equal to the average weekly purchases of the buyer. While at the same time consideration should be given to the raising of the auctions' bond requirements to an amount at least equal to the average weekly sale. This would give more realistic protection to seller and selling agency than the regulations now in effect.

The author noted the inadequacy of the loading and unloading facilities at many of the sales. The shortage of buyers at some of the small auctions, where there was often only one buyer per species established an unsound, uncompetitive market for the farmers. The evening sales in many cases should be eliminated or started earlier for when these sales

extended late into the night they limited the number of buyers which remained to bid on the last of the livestock. The author believes that as important as the establishment of new livestock auction laws is the need for more strict enforcement of laws which are already established. Perhaps a provision in the law for cancelling the licenses of license holders who do not live up to the law would quickly close up irresponsible auction operators.

Market prices should not be subject to manipulation by anyone connected with the auction, and all dealings should be fair and free from discrimination with respect to the livestock offered for sale. Selling charges should be published and should apply uniformly to all types of sellers. These selling charges should be reported to and subject to approval of the Michigan Department of Agriculture. To help insure payments to patrons; auctions should keep accounts for payments to these patrons separated from accounts for the expenses of the auction's operations and from the operator's own personal account.

The auctioneer should announce the name of the actual consignor when a lot is brought into the ring and the name of the buyer when the lot is sold. The law now requires that adequate records be kept. The author feels that weekly reports on livestock numbers and gross sales should be sent to the Michigan Department of Agriculture for use in establishing a bonding base and in evaluating trends in the industry.

These auctions were particularly valuable as a market outlet for the small producer, who could neither take advantage of selling in volume

at the terminal markets, nor market directly to packers. A few years ago the small producer was almost at the mercy of the country dealer; the only buying competition was between dealers. These dealers could usually out guess the farmer on weight and had a better insight into current prices; hence, the farmer was provided with an unsure, unsound, and often uncompetitive market. The auction's establishment has remedied some of that difficulty giving not only a more competitive outlet, but a place where the farmer can keep abreast of price trends.

The auctions have become almost a tradition in the state, and on the sale day are a social gathering place in the community. With the improvement of these sales as a marketing outlet at a high level of owner integrity, they will become even more firmly established as a livestock marketing outlet in Michigan.

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APPENDIX A

MAIL QUESTIONNAIRE

MICHIGAN STATE COLLEGE
DEPARTMENT OF AGRICULTURAL ECONOMICS
LIVESTOCK MARKETING PROJECT
LIVESTOCK AUCTIONS

Stan Parry
Graduate Assistant
Ag. Econ, M.S.C.

CONFIDENTIAL

1. Name of your auction _____
Address of your auction _____
2. Name of your manager _____
Address of your manager _____
3. Ownership of your auction...please check one (✓).
Individual _____
Partnership _____
Corporation _____ if you check this one please indicate number of stock-
holders _____
Cooperative _____ if you check this one please indicate number of mem-
bers _____
4. When was your auction first started _____?
5. What day or days of the week is your auction held? _____
Do you also provide a daily market for farmer's livestock? yes ___ no ___
6. What were your average weekly Gross receipts from sales in JUNE (1952)
From livestock? \$ _____
from other goods or merchandise? \$ _____
7. What is the average number of sellers in attendance at your auction? _____
8. What is the average number of buyers in attendance at your auction? _____
9. Personnel employed in operating your auction...please supply numbers.
Manager _____
Auctioneer _____
Ringmen _____
Yardmen _____
Weighters _____
Others _____
10. Did your auction lose any money from bad checks or nonpayment of bills during
1951? Yes ___ No ___
11. Would you be willing to cooperate with us in a more complete analysis of the
livestock auctions in the state of Michigan?
Yes ___ No ___

1. The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that proper record-keeping is essential for the integrity of the financial system and for the ability to detect and prevent fraud.

2. The second part of the document outlines the various methods used to collect and analyze data. It describes the use of statistical techniques to identify trends and anomalies in the data, and the importance of using reliable sources of information.

3. The third part of the document discusses the role of the auditor in the process. It explains that the auditor's primary responsibility is to provide an independent and objective assessment of the financial statements, and to ensure that they are prepared in accordance with the applicable accounting standards.

4. The fourth part of the document discusses the importance of communication in the audit process. It emphasizes that the auditor must maintain open and effective communication with the client, and must be able to clearly and concisely communicate the results of the audit.

5. The fifth part of the document discusses the importance of ethics in the audit process. It explains that the auditor must adhere to a strict code of ethics, and must be able to resist any pressure or influence that might compromise the integrity of the audit.

6. The sixth part of the document discusses the importance of the audit report. It explains that the audit report is the final product of the audit process, and that it must be prepared in a clear and concise manner, and must provide a clear and accurate summary of the results of the audit.

7. The seventh part of the document discusses the importance of the audit process in the overall financial system. It explains that the audit process is a critical component of the financial system, and that it plays a vital role in ensuring the integrity and reliability of the financial statements.

8. The eighth part of the document discusses the importance of the audit process in the context of the global financial system. It explains that the audit process is a key element of the global financial system, and that it plays a vital role in ensuring the stability and integrity of the global financial system.

APPENDIX B

QUESTIONNAIRE USED IN PERSONAL INTERVIEWS

DEPARTMENT OF AGRICULTURAL ECONOMICS
MARKETING PROJECT--LIVESTOCK AUCTIONS
MICHIGAN STATE COLLEGE

NAME OF AUCTION _____

ADDRESS _____

CODE NUMBER _____

Record this number on each page of the schedule and
file separately until all are collected - then des-
troy this,

THE ENCLOSED INFORMATION IS STRICTLY CONFIDENTIAL

1. How is your auction owned? Please check one.
 - a. individually _____
 - b. partnership _____
 - c. corporation _____
 - d. if checked here indicate number of stockholders _____
 - e. cooperative _____
 - f. if checked here indicate number of members _____
2. When was your auction first started? _____
3. What day or days of the week is your auction held? _____
4. Do you also provide a daily market for farmer's livestock?
 - a. yes _____
 - b. no _____
5. What is the average number of sellers in attendance at your auction? _____
6. What is the average number of buyers in attendance at your auction? _____
7. Please list number of personnel employed in the various categories as follows:
 - a. (1) Manager _____
 - (2) How long has this manager been a manager with livestock auctions _____ yrs.
 - b. Auctioneer _____
 - c. Ringmen _____
 - d. Yardmen _____
 - e. Weighters _____
 - f. Office Help _____
 - g. Others _____

Note: Answers to the above questions only required in cases where mail questionnaire was not returned...if previously answered remove this sheet before conducting study.

GENERAL INFORMATION

8. Average time of opening sale? _____ A.M.
P.M.
9. Average length of time for sale
a. summer _____ hrs.
b. winter _____ hrs.
10. What media of advertising do you use?
a. newspaper _____
b. radio _____
c. handbills _____
d. letters, postcards _____
e. posters _____
f. _____
11. How much do you spend on weekly advertisements? \$ _____
12. Complete the following blanks indicating order of sale by species - whether these species are sold in lots or individually, whether these are sorted, and whether these species are sold generally by weight or by head.

	ORDER OF SALE	GENERALLY SOLD				
		SORTED	IN LOTS	INDIVIDUALLY	BY WEIGHT	BY HEAD
		1	2	3	4	5
a. Feeder heifers and steers						
b. Slaughter heifers and steers						
c. Slaughter cows						
d. Calves (vealers)						
e. Bulls						
f. Dairy replacements						
g. Sheep and lambs						
h. Feeder lambs						
i. Feeder pigs						
j. Barrows and gilts						
k. Sows						
l. Boars and stags						

13. Why do you sell in the order listed under 12? _____

14. How is the livestock identified upon arrival at the sale?
a. Ear tag _____
b. Chalk _____
c. Patch _____
d. Paint _____
e. _____

15. How can the seller protect himself on price?
 a. Reject bid _____
 b. List minimum price he will take _____
 c. Make one bid _____
 d. Allowed to bye bid _____
 e. Other (explain) _____
16. What do you charge consignors who take home their own livestock as a result of price protecting operations as under 15?
17. Does the management buy on its own account to protect the price?
 a. Yes _____
 b. No _____
18. Is livestock insurance carried on the livestock while at your auction?
 a. Yes _____
 b. No _____
19. If the answer to 18 is yes...what does this livestock insurance cover?
20. Is a record kept of where animals are yarded?
 a. Yes _____
 b. No _____
21. Do you allow sale by private treaty previous to start of auction?
 a. Yes _____
 b. No _____
22. If the answer to 21 is yes, is regular commission charged?
 a. Yes _____
 b. No _____
23. Is a lunchroom concession provided?
 a. Yes _____
 b. No _____
24. If the answer to 23 is yes, is this lunchroom:
 a. Leased out _____
 b. Operated by auction operator _____
 c. Other arrangements _____
25. What is your most important source of market information? _____

OPERATING PROCEDURE

26. Office procedure - try to obtain forms used and order in which these are processed.
27. Try to get schedule of selling charges by species, or make out as complete as possible below (including yardage, commission, insurance, feed and service fees if any of these are required). Use back of page if necessary

- 31. Where would you say most of the following classes of slaughter livestock finally end up - City or Market
 - a. Bulls _____
 - b. Vealers _____
 - c. Sheep and lambs _____
 - d. Butcher hogs _____
 - e. Slaughter cattle _____

- 32. Where do you get most of your help on sale day?
 - a. Local farmers _____
 - b. Local schoolboys _____
 - c. Local factory workers _____
 - d. Regular traveling auction help _____
 - e. Other _____

- 33. What care is usually given to the livestock before the sale?
 - a. Feed and water _____
 - b. Water only _____
 - c. No feed or water _____

- 34. When does most of the livestock arrive for the sale? _____

- 35. Are there any guarantees made on consigned livestock?
 - a. Yes _____
 - b. No _____

- 36. If the answer to 10 is yes, what are these guarantees? _____

- 37. How much time do you give the buyers to remove their livestock from the yards? _____

- 38. What charge is made for leaving this livestock in the yards over the allotted time? _____

CREDIT POLICY

- 39. How do you check on the financial condition of new buyers?

- 40. Did you have any losses from bad checks or other non payments in 1951?
 - a. Yes _____
 - b. No _____

- 41. How much were your losses from these bad debts during the year 1951? _____

- 42. If you had losses in 1951 - from these bad debts - what were most of these losses due to?

- 43. How serious do you consider this problem of bad debts?

- 44. What method of settlement is followed for livestock sold through your auction? (Use back of this page if necessary.)

BUILDINGS AND GROUNDS

- 45. What was the original cost of the auction building? _____
- 46. What would you estimate it would cost to replace this building today? _____
- 47. Do you own or rent the present auction property?
 - a. Own _____
 - b. Rent _____
 - c. Other _____
- 48. How many acres are there surrounding the sale barn that you could make use of? _____ acres.
- 49. How many acres surrounding the sale barn do you actually use for yards, parking lots, etc. (exclude that part occupied by building)? _____ acres.
- 50. What is the total amount of pen space available (excluding alleys) _____ sq. ft.
- 51. Was the auction building built specifically for livestock auctions?
 - a. Yes _____
 - b. No _____
- 52. Is the sale barn a:
 - a. New building _____
 - b. Remodeled old building _____
 - c. Old building not remodeled greatly _____
 - d. Other as (fair grounds) _____

EQUIPMENT

- 53. What type of scales do you use?
 - a. Registered beam _____
 - b. Other _____
- 54. What is the approximate age of these scales? _____
- 55. How often are these scales tested? _____
- 56. What is the minimum graduation on the scales? _____
- 57. What is the minimum weight that can be handled on the scales? _____
- 58. What is the total beam capacity of these scales? _____
- 59. What facilities does the auction have for feeding and watering the livestock?

SPECIAL PROBLEMS

- 60. WHAT ARE YOUR MAJOR OPERATING PROBLEMS? (Continue on back if necessary).

FACILITIES - CHECKED BY INTERVIEWER

- 61. Is the livestock sold too fast?
 - a. Yes _____
 - b. No _____
- 62. What is the average length of selling time per animal? _____
- 63. Can the auctioneer be clearly understood? _____
- 64. How many unloading chutes are there? _____
- 65. How many loading chutes are there? _____
- 66. What would you estimate the seating capacity of the amphitheatre to be? _____
- 67. Are railroad facilities available at the auction?
 - a. Yes _____
 - b. No _____
- 68. Are buyers permitted in the sale ring?
 - a. Yes _____
 - b. No _____
- 69. What is the size of the sale ring? _____ sq. ft.

70.

	YARD CAPACITY AT ONE TIME	NUMBER OF PENS	APPROXIMATE SIZE OF PENS
	1	2	3
a. Cattle and calves			
b. Hogs and sheep			
c. Bull pens			

71. What percent of the total pen space is under cover? _____ %.

72. What type of flooring is used in:

- a. Pens _____
- b. Alleys _____
- c. Ring _____

73. Is an amplifier used by the auctioneer?

- a. Yes _____
- b. No _____

74. Rank the following:

	POOR 1	FAIR 2	GOOD 3	EXCELLENT 4
a. Pens (state of repair)				
b. Degree of cleanliness of pens				
c. Lighting in pens				
d. Lighting in ring				
e. Sound in ring (clearness and volume)				

March								
April								
May								
June								
July								

75. What percent of the cattle and calves in 1951 would you say were in the following groups?
- Slaughter cattle _____
 - Feeder cattle and calves _____
 - Dairy replacements _____
 - Vealers _____
 - Bulls _____
76. What percent of the hogs in 1951 would be:
- Feeder pigs _____
 - Butcher hogs _____
77. What percent of the sheep and lambs would be:
- Feeder lambs _____

APPENDIX C

AUCTION MARKET SELLING CHARGES

17 Reporting Cattle Charges

NUMBER OF AUCTIONS	COMMISSION	YARDAGE	SERVICE CHARGE
I. SEVEN CHARGED BY HEAD - NO VARIATION			
1	\$1.50	None	$\frac{1}{2}\%$
2	1.25	None	$\frac{1}{2}\%$
1	1.25	None	1%
2	1.00	None	1%
1	1.00	None	$\frac{1}{2}\%$
II. FOUR WITH VARIATION ACCORDING TO SALE VALUE			
2	(\$1.75 (\$200 sale)	\$1.00	5¢/head
	(1.80 (\$200-300)	1.00	5¢/head
	(2.00 (\$300-400)	1.00	5¢/head
	(2.20 (over \$400)	1.00	5¢/head
1	(\$1.50 (\$150 sale)	None	$\frac{1}{2}\%$ of gross sale
	(2.00 (\$150-200)	None	$\frac{1}{2}\%$ of gross sale
	(2.50 (Over \$200)	None	$\frac{1}{2}\%$ of gross sale
1	(\$1.00 (\$100 sale)	None	$\frac{1}{2}\%$ of gross sale value
	(1.25 (to \$150 sale)	None	$\frac{1}{2}\%$ of gross sale value
	(1.50 (to \$200 sale)	None	$\frac{1}{2}\%$ of gross sale value
	(2.00 (over \$200)	None	$\frac{1}{2}\%$ of gross sale value
III. VARIATION PER HEAD CONSIGNED			
1	(\$1.25 farmer	None	$1\frac{1}{2}\%$ gross
	(1.00 dealer	None	$1\frac{1}{2}\%$ gross
1	(\$1.25 10 head	None	$\frac{1}{2}\%$ gross
	(1.00 10 head and over	None	$\frac{1}{2}\%$ gross
1	(\$1.50 1 head	None	1% gross
	(1.40 15 head or less	None	1% gross
	(1.25 over 15 head	None	1% gross
IV. COMMISSION - PERCENT OF GROSS SELLING VALUE			
1	2% minimum 1.50 maximum 2.00	None	None
1	1% gross maximum 2.00	None	$\frac{1}{2}\%$ of gross
1	1% gross maximum 2.50	None	$\frac{1}{2}\%$ of gross

CALVES

17 Reporting

AUCTIONS REPORTING	COMMISSION	YARDAGE	SERVICE CHARGE
I. STRAIGHT CHARGE PER HEAD - NO VARIATION 12			
1	.80	None	$\frac{1}{2}\%$ gross
1	.75	None	$\frac{1}{2}\%$ gross
1	.75	None	None
2	.75 deacons 100# down	.25	5¢/head
	.75 (veal 100-400#)	.50	5¢/head
2	.60	None	$\frac{1}{2}\%$ of gross
3	.50	None	$\frac{1}{2}\%$ of gross
2	.50	None	1% of gross
II. VARIATION BY SALE AMOUNT 3			
1	(.50 (less than \$30)	None	$\frac{1}{2}\%$ of gross
	(.75 (greater than \$30)	None	$\frac{1}{2}\%$ of gross
1	(1.00 (greater than \$60)	None	1% of gross
	(.50 (less than \$60)	None	1% of gross
1	(.75 (greater than \$50)	None	$\frac{1}{2}\%$ of gross
	(.60 (less than \$50)	None	$\frac{1}{2}\%$ of gross
III. VARIATION BY HEAD DELIVERED 2			
1	.60 farmer	None	$1\frac{1}{2}\%$ of gross
	.50 dealer	None	$1\frac{1}{2}\%$ of gross
1	.75 (1 head)	None	1% of gross
	.60 (2-15 head)	None	1% of gross
	.50 (over 15 head)	None	1% of gross
	.50 (deacons)	None	1% of gross

1. Introduction

2. Methodology

3. Results

4. Discussion

5. Conclusion

6. References

7. Appendix

8. Tables

9. Figures

10. Summary

11. Abstract

12. Keywords

13. Introduction

14. Methodology

15. Results

16. Discussion

17. Conclusion

18. References

19. Appendix

20. Tables

21. Figures

22. Summary

17 Reporting Hog Charges

AUCTIONS REPORTING	COMMISSION	YARDAGE	SERVICE CHARGE
I. PER HEAD WITHOUT VARIATION ON 13 REPORTING NUMBER OR SALE VALUE			
1	(.20 barrows and gilts (.50 roughs	None None	$\frac{1}{2}\%$ gross $\frac{1}{2}\%$ gross
1	(.30 all	None	1% gross
1	(.35 all	None	1% gross
1	(.40 barrows and gilts (.50 <u>roughs</u> under \$50 (.75 <u>roughs</u> over \$50	None None None	$\frac{1}{2}\%$ gross $\frac{1}{2}\%$ gross $\frac{1}{2}\%$ gross
2	(.50 all	None	$\frac{1}{2}\%$ gross
1	(.50 (all except) (.75 (boars & stags over 300#)	None None	None None
1	(.50 all	None	1% gross
1	(.50 all except (.75 boars	None None	$\frac{1}{2}\%$ gross $\frac{1}{2}\%$ gross
2	(.30 straight (.40 roughs	.30 straight .60 roughs	5¢/head 5¢/head
1	.75	None	1 $\frac{1}{2}\%$ gross
1	.80	None	$\frac{1}{2}\%$ gross
II. PER HEAD WITH VARIATION IN CHARGE PER NUMBER CONSIGNED			
1	(.35 (1 head) (.30 (2-25 head) (.25 (over 25 head)	None None None	1% 1% 1%
1	(.25 (greater than 2 head) (.50 (less than 2 head)	None None	$\frac{1}{2}\%$ $\frac{1}{2}\%$
1	(.50 (less than 10 head) (.35 (greater than 10 head)	None None	$\frac{1}{2}\%$ $\frac{1}{2}\%$
1	(.50 (less than 6 head) (.35 (greater than 6 head)	None None	1% 1%
<u>1</u> 17			

10/1/17

10/1/17

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FEEDER PIGS

15 Reporting Charges

AUCTIONS REPORTING	COMMISSION	YARDAGE	SERVICE CHARGE
I. PER HEAD - NO VARIATION			
9	.25	None	None
2	.30	None	5¢/head
1	.30	None	None
2	.35	None	None
1	.35	None	1%

SHEEP AND LAMBS

12 Reporting

AUCTIONS REPORTING	COMMISSION	YARDAGE	SERVICE CHARGE
I. STRAIGHT PER HEAD - NO VARIATION			
2	.25	.20	5¢/head
1	.25	None	1½%
1	(.35 (lambs & ewes) (.50 (rams))	None None	½% ½%
1	.35	None	1%
1	(.35 (lambs) (.50 (ewes & rams))	None None	½% ½%
2	.50	None	½%
1	.60	None	½%
2	.30	None	½%
II. VARIATION PER HEAD DELIVERED			
1	(.30 (first 40 head) (.25 (next 40 head) (.20 (each head over 50))	None None None	1% 1% 1%

ROOM USE ONLY

NO 5 '53

Se 22 '54

Oct 25 '57