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LIVESTOCK AUCTIONS IN SOUTH DAKOTA .

BY

DALE ELDON ROTH

A thesis submitted
in partial fulfillment of the requirements for the
degree Master of Science, Department of
Economics, South Dakota State
College of Agriculture
and Mechanic Arts

June, 1959

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LIVESTOCK AUCTIONS IN SOUTH DAKOTA

This thesis is approved as a creditable, independent investigation by a candidate for the degree, Master of Science, and acceptable as meeting the thesis requirements for this degree; but without implying that the conclusions reached by the candidate are necessarily the conclusions of the major department.

Thesis Adviser

Head of the Major Department

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DER

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CHAPTER I

INTRODUCTION

Many changes have taken place in the marketing channels of the livestock industry in the last two decades. These changes have been due largely to technological advancements in refrigeration, transportation, and communication.

Livestock auctions have experienced considerable growth during this time.

Need for Study

Livestock sales accounted for 54 percent of the cash farm income in South Dakota in 1957.¹

The total value of livestock on farms in South Dakota, January 1, 1958, was \$518,573,000.² This indicates the livestock industry in South Dakota is comparatively large.

It is desirable to make periodic studies and to evaluate current information in order that producers and marketing agencies might revise their business operations. A periodic study is also useful as a guide for future research and a measure for evaluating the effectiveness of past research.

¹South Dakota Agriculture 1958, p. 55, South Dakota Crop and Livestock Reporting Service: Sioux Falls, South Dakota, 1959.

²Ibid., p. 33.

The latest regional study of marketing agencies in South Dakota was made in 1940. Since that time, many technological changes have been made which undoubtedly have influenced the marketing channels and outlets in the state.

Many livestock entrepreneurs come into contact with and transact business through livestock auction facilities since they are the most numerous of the marketing outlets in South Dakota.

Purpose of Study

A description of the various facets of auctions is necessary in order for livestock entrepreneurs to envisage more clearly the conditions and practices which prevail around such markets.

The objectives of this study were: (1) to determine the source and disposition of livestock handled by the auctions, and (2) to determine the statistical schema of tariffs charged by the auctions.

Procedure

The North Central Regional Livestock Marketing Research Project NCM-18 had two phases.

Phase I in South Dakota consisted of 600 farmer schedules. These schedules provided information as to the amount and type of livestock sold each year. Data were also obtained concerning factors influencing farmers in the selection of various channels, markets, and the time of marketing.

Phase II in South Dakota consisted of one terminal market schedule,

27 auction market schedules, 93 dealer schedules, 10 packing plant schedules, and 15 packer buyer station schedules. The above schedules provided information about ownership, organization, conduct of sales, source and disposition of livestock sold, source and disposition of purchased livestock, and market facilities.

This study of livestock auctions is only a portion of Phase II of the regional project.

The study of the livestock auctions began in December, 1957. The names and locations of the auctions operating in 1957 were obtained from the Livestock Sanitary Board in Pierre. The auctions were tentatively grouped into economic areas. This tentative arrangement was sent to the North Central Regional Livestock Marketing Research Committee. The Committee altered the tentative economic areas somewhat and then determined how samples were to be drawn from each area for adequate representation.

The sample auctions were selected by numbering them and then drawing the auctions through the use of the table of random numbers. There were 27 livestock auctions in the survey.

The answers received from the survey were tabulated and analyzed to obtain a description of the livestock auctions in South Dakota.

Definition of Terms

Auction Market

It is sometimes known as a sale barn. A sale ring is located in the barn usually surrounded on three sides by bleachers which the buyers

occupy while bidding on the livestock. The bidding is directed by an auctioneer.

Terminal Market

This market is oftentimes referred to as the public stockyards. It is usually found at the center of several means of transportation. Many commission firms rent office and holding pen space where they conduct their business. Livestock are sold through private treaty by the commission men at the terminal market.

Packing Plant

These firms slaughter and process the animals for human consumption. They do not assess any fees, thus encouraging direct selling to the packing plants.

Order Buyer

He is hired, on a commission basis, to buy a specified amount of a livestock species by anyone who wishes to hire him. Normally the order buyer is hired by a packing plant or a livestock feeder to purchase livestock.

Trader

A trader is also known as a scalper, trucker-buyer, or a speculator. He buys and sells livestock for speculation purposes only. Many farmers and ranchers are suspicious of a trader because they feel he may try to put something over on them during a business transaction.

Dealer

A dealer buys and sells livestock only on a marginal basis. He usually is contacted by a livestock buyer to deliver a specified number, grade, and specie of livestock for a prearranged price.

Packer Buyer

He is a salaried representative of a packing plant and purchases livestock for the plant to slaughter.

Entrepreneur

He is a businessman who may be engaged in any phase of the livestock industry. This can range from the producer to the packing plant.

CHAPTER II

APPRAISAL OF AUCTIONS

Livestock auctions in South Dakota have experienced a great increase in volume during the last ten years. The reason for the higher rate of increase in volume for livestock auctions may lie in the results of Phase I of this study.³

Advantages and Disadvantages of Auctions

Phase I revealed that producers who patronize the auction markets listed several reasons for choosing auction markets as their preferred marketing outlet. The primary reason given was that the auction market was more convenient and the movement of livestock to this market involved lower transportation costs. The second reason was that producers felt the livestock auction to be a broader market. The remaining reasons were that livestock had less shrinkage, livestock brought higher prices, and producers received higher net returns.

The Utah Experiment Station published an appraisal of livestock auctions in the Western States.⁴

Auction marketing of livestock as now conducted in the West performs useful services in concentration, selling, and disbursement of livestock to ultimate users. Such functions

³Unpublished data, Economics Department, South Dakota State College.

⁴Harold Abel and Dee Broadbent, Trade in Western Livestock at Auctions, Bulletin 352, p. 5, Utah Agricultural Experiment Station: Logan, Utah, May, 1952.

contribute to increased marketing efficiency in several ways: first, auctions facilitate the local exchange of stocker, feeder, and breeding animals between farmers and ranchers, and expedite feeding operations of the small producer; second, auctions provide a year-round supply of slaughter livestock for an expanding number of local packers, local butchers, and local locker plant operators; third, auctions serve as an educational medium whereby producers learn more about the market value of their livestock in relation to other consignments; fourth, auctions frequently provide the means whereby animals are moved from local deficit to local surplus feed areas, and, therefore, livestock and feed resources are combined more effectively, resulting in greater total output.

The reasons most frequently mentioned by South Dakota producers for selecting livestock auctions as their preferred marketing outlets were convenience and low transportation costs.

It can be assumed that convenience and transportation costs are important factors in the growth of the auctions in South Dakota since the only other broad major livestock market in the state is the terminal livestock market at Sioux Falls.⁵

In a study of livestock auctions in the western part of the United States, it was found that buying livestock from auctions was viewed less enthusiastically than selling through the auctions.⁵ There was considerable agreement among buyers on the advantages of buying through the auction market. The advantages given were: (1) being able to choose the type of livestock desired, (2) being able to choose the quality desired, and (3) the convenience of attending the local auction. The disadvantages of auction purchases were given

⁵Edwin C. Voorhies, Trade in Western Livestock at Auctions, Bulletin 740, p. 6, California Agricultural Experiment Station: Davis, California, April, 1954.

as follows: (1) danger of transmitting disease from one animal to another, and (2) low quality of animals. A disadvantage of selling through the auction was also given. Several patrons claimed that often an insufficient length of time is allocated to each consignment while in the sale ring in order to facilitate effective bargaining among buyers.

Comparison of Prices and Returns

A study conducted by the United States Department of Agriculture in the eastern states found that auctions needed to change their practice in selling livestock.⁶ A program of grading, sorting, and selling uniform lots of livestock was felt to be needed to save time. Quite often livestock sells at a higher price with this practice. One auction cut its operating time of selling lambs from three hours to 20 minutes, another cut its operating time from two hours to 20 minutes in selling calves just by grading, sorting, and selling in large uniform pooled lots.

A public relations and educational program might be needed before the auction managers could get the support of livestock consignors to carry out a program of pooling livestock for sale in large uniform lots.

⁶C. G. Randell, Ways to Improve Livestock Auctions in the Northeast, FCS Circular 16, p. 7, Farmer Cooperative Service, United States Department of Agriculture, United States Government Printing Office: Washington 25, D. C., June, 1956.

The advantages of pooling livestock for sale appear to out-weigh any disadvantages that may arise.⁷ The advantages are: (1) packer buyers would prefer to buy in large reasonably uniform lots, and (2) feeders prefer to purchase their livestock in large uniform groups rather than attempt to obtain the desired number of animals from numerous small consignments.

In a previous study, evidence was found that comparable prices do exist between auction markets and terminal markets for certain classes of livestock.⁸ This study was made in South Dakota of fourteen auctions and the terminal market at Omaha, Nebraska. The data seemed to indicate that the prices paid for all grades of yearling steers compared quite favorably with prices paid for the same grades at the Omaha terminal market when the cost of transportation was taken into account. Price comparisons indicated that lower grade steers brought higher prices at auctions while the top grades brought higher prices at the terminal market.

Prices paid at auction markets fluctuated widely between markets and from week to week at any one market. These fluctuations were attributed to weather and road conditions. Auction market prices are more unpredictable than the terminal market prices because of variations

⁷A. A. Dowell and Gerald Engelman, Livestock Auctions in Minnesota, Bulletin 352, p. 39, Minnesota Agricultural Experiment Station: St. Paul 1, Minnesota, June, 1941.

⁸Gerald E. Marousek, A Market News Service for Livestock Auctions in South Dakota, Master's Thesis, pp. 34-36, Department of Economics, South Dakota State College: Brookings, South Dakota, September, 1954.

in local supply and demand.

Auction managers listed circulars, telephone, radio, newspaper, television, and person-to-person contact as the means they used to reach livestock producers and buyers. There was some evidence that telephone and person-to-person contact were considered the most desirable means of contact. Whenever an auction market manager is informed that a certain consignment of livestock will be made at his market, he contacts buyers whom he feels might be interested. This service performed by the auction managers can be undertaken if they are given sufficient notice before the livestock are delivered to their sale barn. This service is beneficial to both consignor and buyer since the consignor may receive a higher price for his stock and the buyer may be able to purchase livestock more suitable to his needs.

Several instances were cited by auction managers of livestock being shipped to the terminal market, sold, and then brought back into the same neighborhood. The auction managers felt that if the auction had been used as the marketing outlet, shipping charges would have been much less for both parties concerned, realizing greater returns to both parties.

Livestock Consigned by Traders

Some livestock consignors to auction markets have complained that traders dominate the livestock auction markets in certain areas. Table I gives some indication of the percentage of livestock that was consigned by producers, auctions, and others. The traders were included

in the group listed as "others". This group is not made up of traders exclusively and may contain consignments made by other types of consignors. These consignors may have included packing plants, order buyers, and dealers. Normally these individuals would be only buying but they may sell some livestock. One reason as to why they would sell is if after purchasing a particular lot of livestock, a few head were culled out as unsuitable for a particular purpose. These livestock might then be re-sold through the sale ring. The degree to which this happens cannot be determined here.

Nineteen of the 27 auctions in this study reported at least some amount of livestock consigned by traders and others. One particular auction reported that traders, dealers, etc., consigned approximately 42 percent of its total volume in 1957. The next highest ranking auction reported that approximately 30 percent of its total volume in 1957 was consigned by traders, dealers, etc.

The traders and others appear to consign more cattle than any other livestock species to the auction markets. The average consignment by traders and others of cattle was 7.12 percent of the total volume of the auctions. The average consignment for hogs and sheep of the total volume by traders, dealers, etc., are 2.13 percent and 2.27 percent respectively (Table I.)

It is quite possible that speculators are dominating some of the livestock auctions, particularly in cattle. It might be desirable to undertake a study to determine if prices of livestock are affected by the presence of traders. It must be kept in mind, however, that an

TABLE I. PERCENTAGE OF ALL LIVESTOCK CONSIGNED TO AUCTIONS
BY TYPES OF CONSIGNORS AND SPECIES OF LIVESTOCK
IN SOUTH DAKOTA, 1957.

Type of Consignor	Cattle	Hogs	Sheep
		Percent	
Producers	88.46	97.25	97.32
Auctions	4.42	.52	.41
Others	7.12	2.13	2.27
Totals	100.00	100.00	100.00

Exact breakdown of livestock consigned by traders is not known, so before any conclusions can be drawn more information would have to be obtained.

Livestock Purchased By Traders

Livestock purchased by traders or speculators was not as great as the percentage that appeared to be consigned by traders and others.

Two auctions reported that 30 percent of their total volume in 1957 was purchased by traders. The next highest auction reported that 12 percent of its volume was purchased by traders.

Only nine of the 27 auctions reported that traders or speculators had purchased any livestock.

Traders purchased a larger percentage of cattle than of any other species, however it was only by a narrow margin. The traders purchased on average of two percent of the total volume of cattle in 1957. The average percentage of hogs purchased by traders was .79

TABLE II. PERCENTAGE OF ALL LIVESTOCK PURCHASED THROUGH AUCTIONS
BY TYPES OF BUYERS AND SPECIES OF LIVESTOCK
IN SOUTH DAKOTA, 1957.

Type of Consignor	Cattle	Hogs	Sheep
		<u>Percent</u>	
Producers	48.29	33.58	45.68
Dealers	13.81	3.25	9.77
Packers	13.65	41.11	18.23
Order Buyers	22.25	21.27	24.77
Others	<u>2.00</u>	<u>.79</u>	<u>1.55</u>
Totals	100.00	100.00	100.00

and the percentage of sheep purchased was 1.55 (Table II).

CHAPTER III

GROWTH OF LIVESTOCK AUCTIONS IN SOUTH DAKOTA

The Yankton Livestock Sales Company was probably the first regular weekly auction market to begin operation in South Dakota. Harry L. Slaughter of Yankton began operating the Yankton Livestock Sales Company Saturday, September 13, 1930, at which time 440 pigs were sold. Within a few weeks, the auction was consigning some cattle along with pigs and lambs.

Livestock auctions in South Dakota were first controlled by state regulations in 1937. No record could be found of the growth of auction markets prior to 1937. There were 34 auctions operating in South Dakota in 1937. The number and volume of livestock auctions continued to grow steadily. There were 64 auction markets operating in the state in 1957. The volume of livestock sold through auctions in South Dakota has increased an average of 86 percent over the last ten years (fiscal years 1947-1948 to 1956-1957), or an increase of 103 percent for cattle, 70 percent increase for hogs, 85 percent increase for sheep (Table III.) In comparison, the total average increase of volume in the Sioux Falls terminal market during the same period was 12.3 percent, or an increase of 57 percent for cattle, 19 percent increase for hogs and a decrease of 39 percent for sheep. The increase in volume of all livestock sales in South Dakota was 26.3 percent, or an increase of 51 percent for cattle, 10 percent increase for hogs, and 18 percent increase for sheep (Table III.)

TABLE III. PERCENTAGE CHANGES IN LIVESTOCK MARKETING THROUGH SIOUX FALLS TERMINAL MARKET AND SOUTH DAKOTA AUCTION MARKETS FROM JULY 1, 1947, TO JULY 1, 1957, AND TOTAL LIVESTOCK MARKETING IN SOUTH DAKOTA FROM JANUARY 1, 1948, TO DECEMBER 31, 1957.

Time Period		Cattle	Hogs	Sheep	Average Change
		Percent			
July 1, 1947, to July 1, 1957.	Terminal Market	+ 57.0	+ 19.0	-39.0	+12.3
	Auction Market	+103.0	+ 70.0	+55.0	+86.0
January 1, 1948, to December 31, 1957.	State of South Dakota	+ 51.0	+ 10.0	+18.0	+26.3

These comparisons show that auction markets have made large gains in volume as compared to the terminal market.

Several factors have contributed to the expansion of the livestock auction. They are also the main reasons causing the decentralizing of the livestock marketing system which has occurred during and since the thirties.⁹ They are: (1) the improvement and extension of the hard surfaced roads which has encouraged the use of more trucks; (2) the increase in the number of small packers located away from the terminal market; (3) the development of more uniform grades and weight

⁹Gerald Engelman and Betty Sue Pence, Livestock Auction Markets in the United States, Marketing Research Report 223, pp. 5-6, United States Department of Agriculture, Agricultural Marketing Service, Marketing Research Division, United States Government Printing Office: Washington 25, D. C., March, 1958.

classifications for livestock; and (4) the extensive collection and dissemination of market news to the farmers and ranchers.

A study of the various marketing outlets for livestock was made by the United States Department of Agriculture in 1958.¹⁰ The study found that one of the most dynamic changes in the livestock marketing system during the last few decades was the increased patronage and growth of auction markets.

A further examination of the volume growth of South Dakota auctions can be made by observing Figure 1.¹¹ This figure depicts the volume growth of cattle, hogs, and sheep sold through auction markets from the fiscal year 1937-1938 to fiscal year 1956-1957. There are three separate fiscal years for which no data were available; however, this does not alter the overall picture. The volume of sheep sold through auctions increased from 47,906 head, 1937-1938, to 383,984 head, 1956-1957. Cattle volume has shown the largest increase of all three species of livestock. In the fiscal year 1937-1938, 134,534 head of cattle were marketed through auctions. This increased to 1,252,947 head sold through auction facilities in the fiscal year 1956-1957. The amount of hogs marketed has fluctuated considerably

¹⁰ Victor B. Phillips and Gerald Engelman, Market Outlets for Livestock Producers, Marketing Research Report 216, p. 7, United States Department of Agriculture, Agricultural Marketing Service, Marketing Research Division, United States Printing Office: Washington 25, D. C., March, 1958.

¹¹ Annual Report of the Livestock Sanitary Board, Livestock Sanitary Board, State Office Building: Pierre, South Dakota, 1937-1938 to 1956-1957.

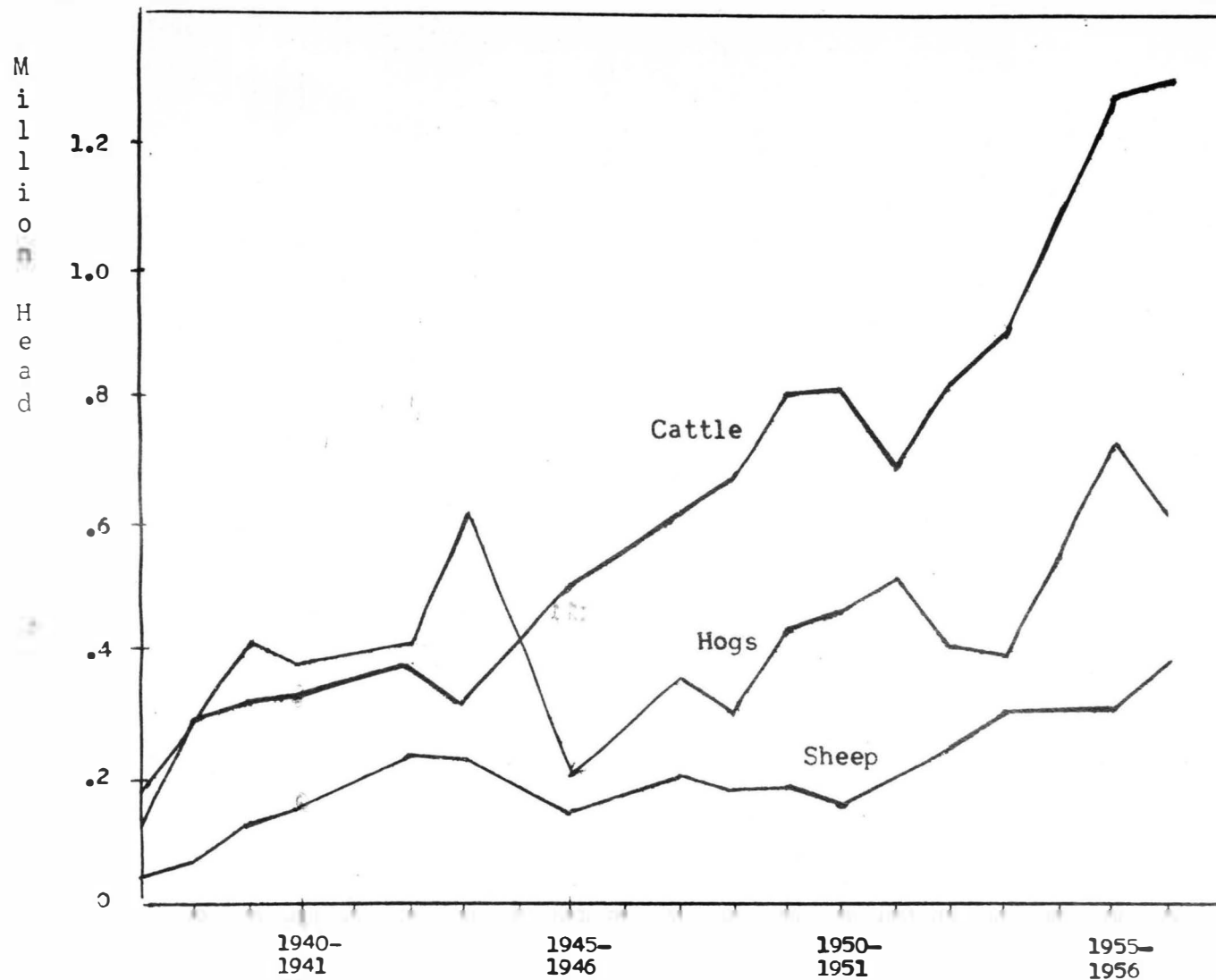


Figure 1. Number of Cattle, Hogs, and Sheep Marketed Through South Dakota Livestock Auctions By Years, July 1, 1937, to July 1, 1957.

during these two decades but has increased substantially. The hogs marketed through auctions have increased from 173,741 in 1937-1938 to 605,630 in 1956-1957.

Figures 2, 3, and 4 compare the volume growth of South Dakota livestock auctions, the Sioux Falls terminal market, and the total livestock marketed in South Dakota from the fiscal year 1947-1948¹² to the fiscal year 1956-1957¹³ for cattle, hogs, and sheep.

Figure 2 shows the number of cattle marketed in South Dakota has increased from 919,000 head in 1948 to 1,389,000 in 1957. The cattle sold through auctions was 616,649 in 1947-1948 and has increased to 1,252,947 head in 1956-1957. The terminal market had an increase from 288,942 cattle sold through its facilities in 1947-1948 to 453,466 in 1956-1957.

Figure 3 indicates that hogs marketed in South Dakota increased from 1,875,000 in 1948 to 2,057,000 in 1957. The volume handled by auctions increased from 355,816 in 1947-1948 to 605,630 in 1956-1957. The number of hogs sold through the terminal market during this same period increased from 603,660 to 716,530.

Figure 4 shows a change in the trend that has been seen in the previous figures. The Sioux Falls terminal market had a decrease in the volume of sheep handled through its facilities. In the fiscal year

¹²South Dakota Agriculture 1950, pp. 36-37, Crop and Livestock Reporting Service: Sioux Falls, South Dakota, 1950.

¹³South Dakota Agriculture 1958, p. 46, Crop and Livestock Reporting Service: Sioux Falls, South Dakota, 1958.

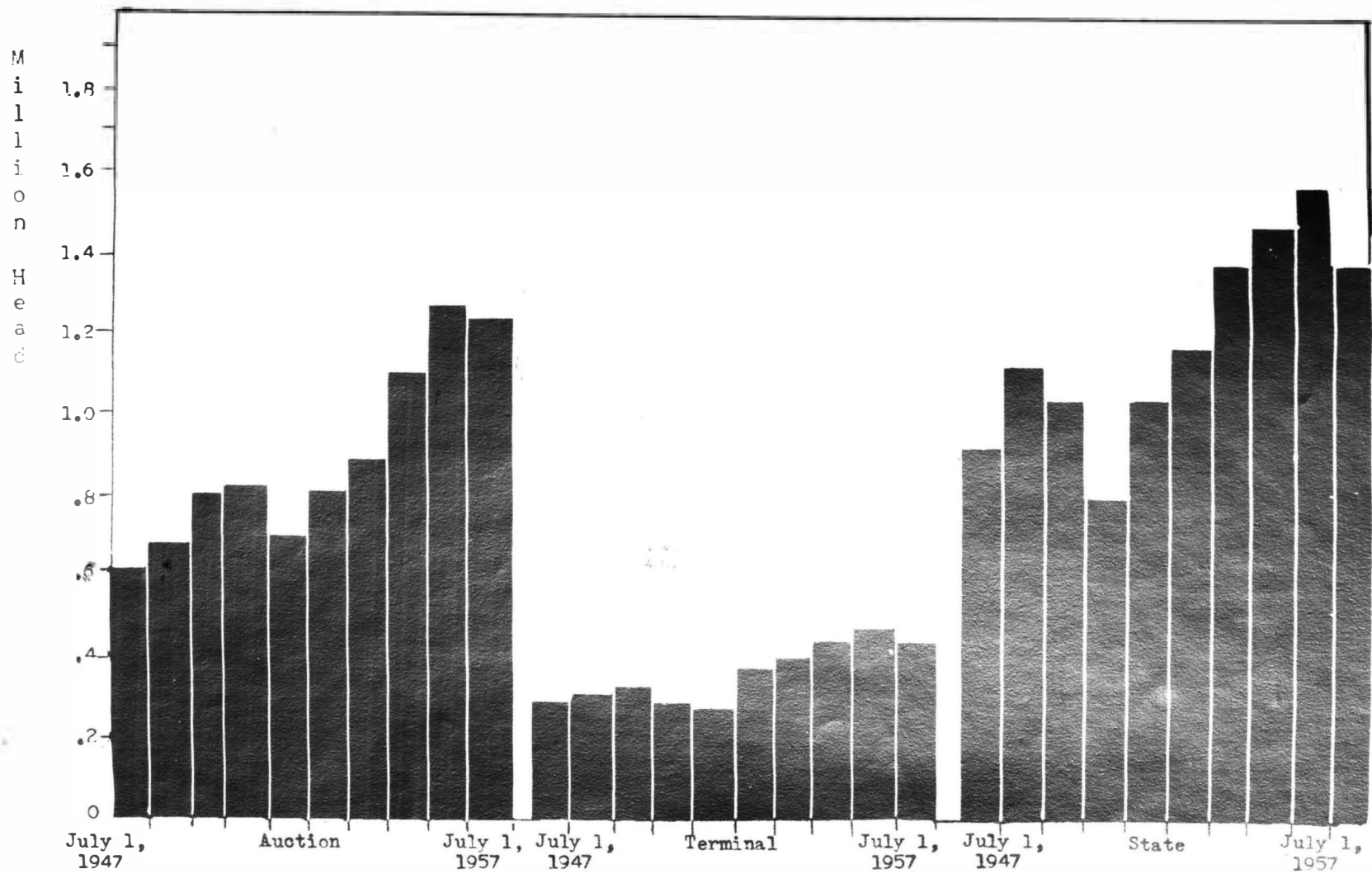


Figure 2. Number of Cattle Marketed Through South Dakota Auction and Terminal Markets and State Totals by Years, July 1, 1947, to July 1, 1957.

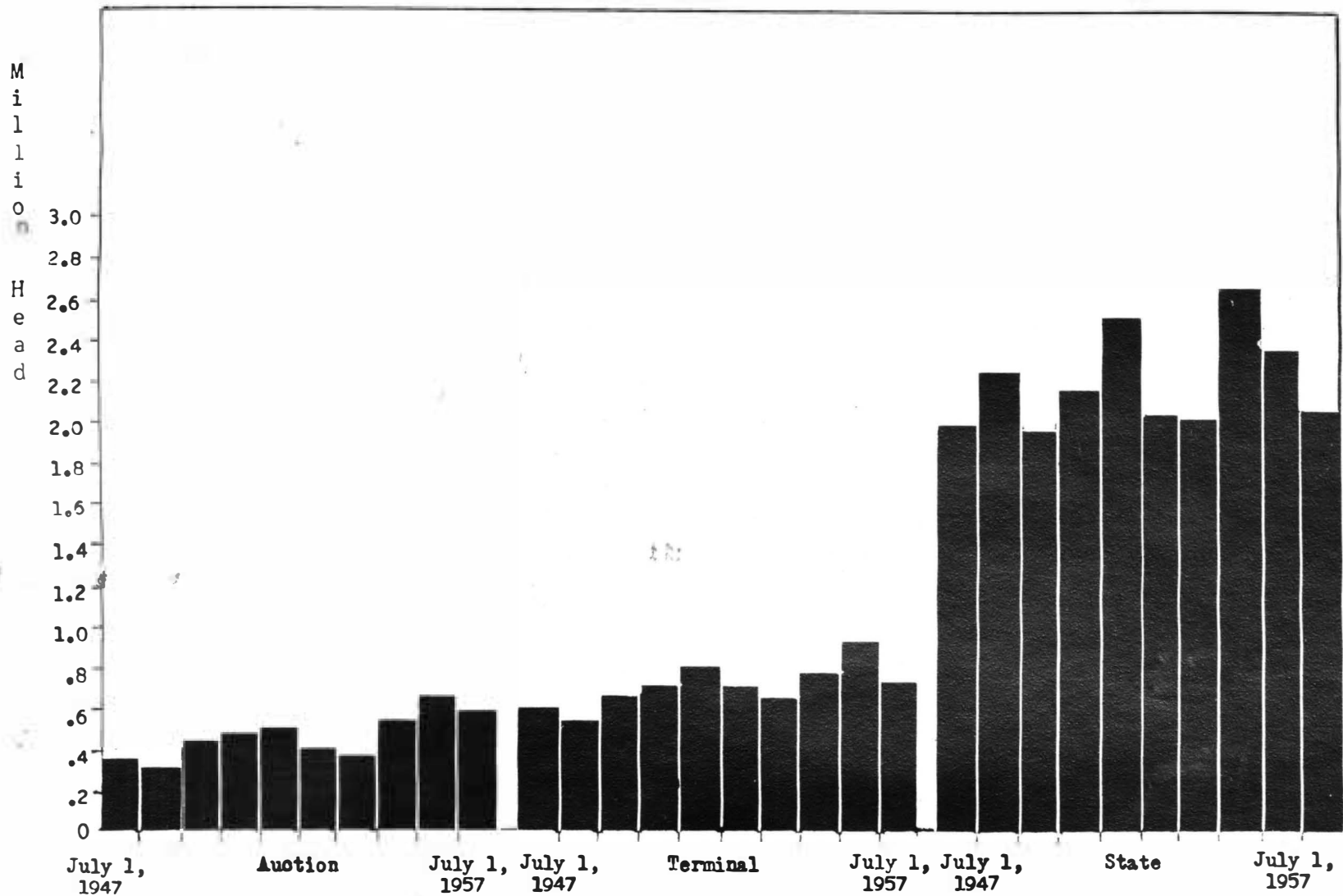


Figure 3. Number of Hogs Marketed Through South Dakota Auction and Terminal Markets and State Totals by Years, July 1, 1947, to July 1, 1957.

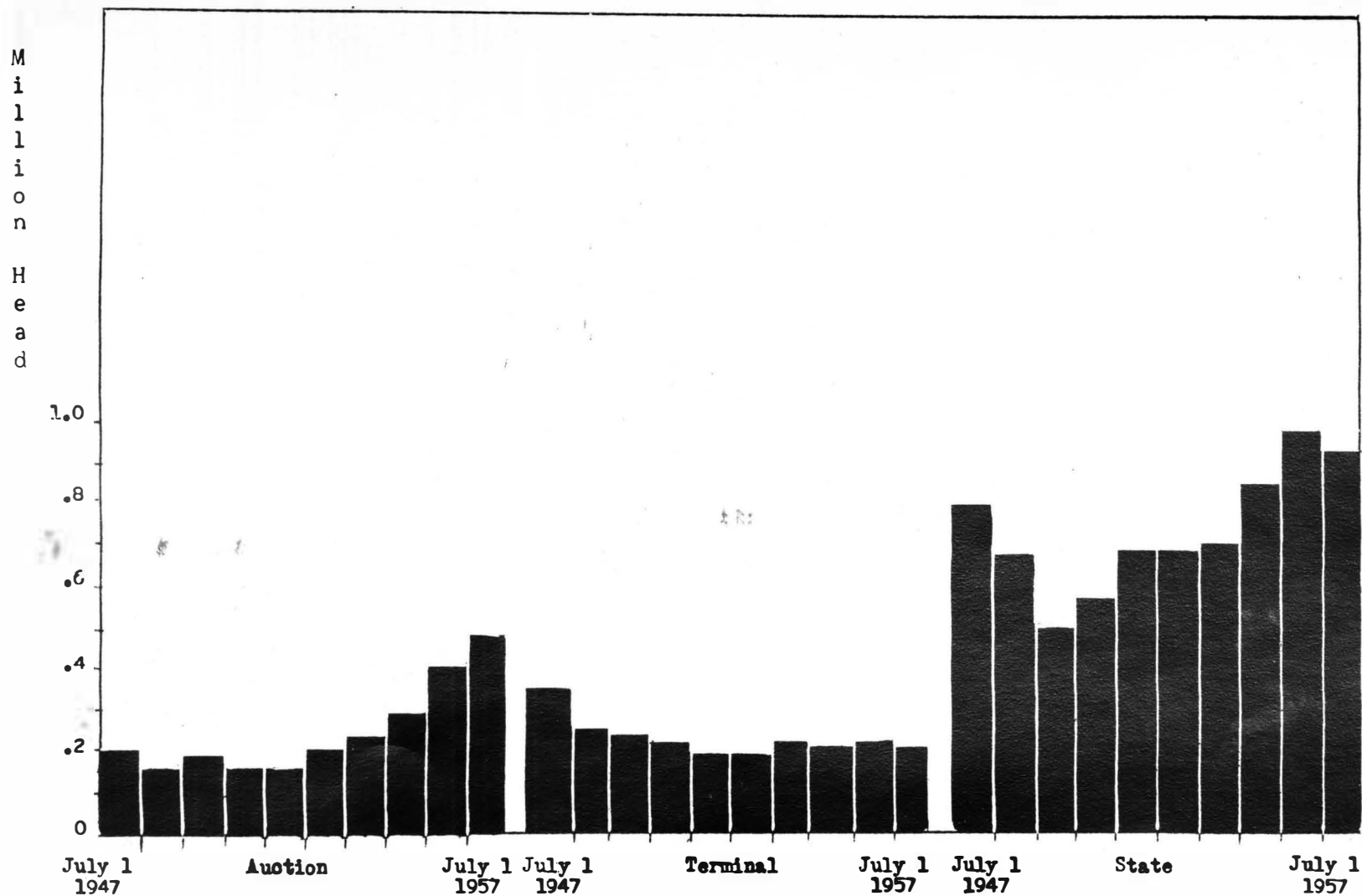


Figure 4. Number of Sheep Marketed Through South Dakota Auction and Terminal Markets and State Totals by Years, July 1, 1947, to July 1, 1957.

1947-1948, 354,707 sheep were sold at the terminal market. The volume decreased steadily to the fiscal year 1956-1957 at which time 214,758 sheep were sold. During this same period, the livestock auctions had an increase in volume from 207,818 to 383,984 sheep sold. The total sheep marketed in the state increased from 795,000 to 938,000 during this period.

CHAPTER IV

PATRONAGE OF AUCTIONS IN SOUTH DAKOTA

Producers consigned an average estimated 88.46 percent of all cattle sold through auctions. Consignors not specifically labeled consigned 7.12 percent of the cattle to the auctions and the remaining 4.42 percent was consigned by the auctions themselves (Table I).

Approximately 97.25 percent of all hogs consigned to auctions were brought by producers. The auctions consigned only .62 percent of the hogs and the remaining 2.13 percent was consigned by the rest of the consignors (Table I).

Sheep consignments present a picture very similar to that of the hogs. Approximately 97.32 percent of the sheep were consigned by producers. The auctions consigned a mere .41 percent of the sheep and the remaining 2.27 percent of the sheep were consigned by other types of consignors not specifically mentioned (Table I).

Reviewing the total picture, it can be seen that producers have consigned the large majority of livestock sold through auction markets. This does not mean producers raised all their livestock. They can speculate with livestock the same as any regular trader who appears in the row labeled--others.

The high percentage of producers as consignors of livestock may indicate that they have found it is to their advantage to sell through the facilities offered by the auction market. An auction market is usually located closer to the producer than a packing plant or terminal

market. Shipping to the closest marketing outlet generally means less shrinkage and lower transportation costs, therefore a higher net return could be realized. These reasons favor patronizing auction markets.

Several other studies of livestock auctions in other parts of the United States have delved into the patronage of the auctions. This study only asked for information on the percentage of livestock consigned by each patron.

In the western part of the United States, it was found that livestock operators who raised both cattle and sheep were more inclined to patronize auctions than the operators who raised only sheep.¹⁴ It was thought that perhaps the sheep range operators were probably further from the auction and their stock was more uniform and in larger lots.

The Corn Belt Livestock Marketing Research Committee, which preceded the present North Central States Livestock Marketing Research Committee, undertook a study in 1940 which is very similar to this study.¹⁵

The Committee found that auctions generally patronized by packers were those which divided up and/or pooled the consigned livestock into uniform lots usually of deck size. The auctions using this method of selling livestock are in a favorable position to attract buyers who are in the market for livestock in large uniform lots. The packers also

¹⁴Voorhies, op. cit., p. 26.

¹⁵Knute Bjorks, Marketing Livestock in the Corn Belt Region, Bulletin 365, p. 36, South Dakota Agricultural Experiment Station: Brookings, South Dakota, November, 1943.

patronized auctions having rather large volumes even though livestock was sold in small lots or singly. It was found, however, that oftentimes the packers had made arrangements with livestock dealers to purchase livestock and then deliver them to the packing plants.

CHAPTER V

LIVESTOCK CONSIGNMENTS TO AUCTIONS

The traders and dealers consigned a much larger percentage of the stocker, feeder, and other livestock class than they did of the slaughter livestock class. A possible reason for this is that the number of market outlets for the stocker, feeder, and other livestock class is not confined to a comparatively small number of buyers and sellers as in the slaughter livestock market.

Slaughter Livestock

Slaughter livestock marketed through auctions in 1957 numbered approximately 386,876 head of which 100,737 were cattle and calves, 243,030 were hogs, and 43,109 were sheep. Producers consigned approximately 93.92 percent of slaughter cattle and calves, 98.46 percent of slaughter hogs, and 98.33 percent of slaughter sheep (Table IV). Livestock auctions consigned very few slaughter livestock. The possible reason for auctions consigning any slaughter livestock at all was perhaps that management had to buy them from a previous sale in order to protect the market for that particular day. This reason probably would not apply if a sufficient number of the regular slaughter livestock buyers were present at the sale since it is conceivable that they would bid higher than would most speculators.

TABLE IV. PERCENTAGE OF SLAUGHTER LIVESTOCK CONSIGNED TO AUCTIONS
BY TYPES OF CONSIGNORS AND SPECIES OF LIVESTOCK
IN SOUTH DAKOTA, 1957.

Type of Consignor	Cattle	Hogs	Sheep
		<u>Percent</u>	
Producers	93.92	98.46	98.33
Auctions	1.50	.29	.34
Others	<u>4.58</u>	<u>1.25</u>	<u>1.33</u>
Totals	100.00	100.00	100.00

Stocker, Feeder, and Other Livestock

Stocker, feeder, and other livestock marketed through the auctions in 1957 numbered approximately 794,005 head, 485,732 of which were cattle and calves, 117,132 were hogs, and 187,141 were sheep. Producers consigned approximately 87.69 percent of the stocker, feeder, and other cattle, 95.13 percent of the feeder and breeding hogs, and 96.90 percent of the feeder and breeding sheep (Table V). The auction markets consigned only a small portion of the stocker, feeder, and other livestock class. Auction markets consigned 4.62 percent of the cattle and calves, .66 percent of the hogs, and 1.05 percent of the sheep (Table V).

The auction markets consigned approximately three times (298 percent) more stockers, feeders, and other livestock than they did of the slaughter livestock. The total number of the stocker, feeder, and other livestock was 2.05 times the number of the slaughter livestock class sold through auctions. The large percentage of stocker, feeder, and other livestock consigned by auction markets cannot be explained

TABLE V. PERCENTAGE OF STOCKER, FEEDER, AND OTHER LIVESTOCK
CONSIGNED TO AUCTIONS BY TYPES OF CONSIGNORS
AND SPECIES OF LIVESTOCK IN
SOUTH DAKOTA, 1957.

Type of Consignor	Cattle	Hogs	Sheep
		<u>Percent</u>	
Producers	87.69	95.13	96.90
Auctions	4.62	.66	1.05
Others	<u>7.69</u>	<u>4.21</u>	<u>2.05</u>
Totals	100.00	100.00	100.00

solely by the fact that this was larger. This may have been due to speculation or auctions may have gone into the country to buy this type of livestock to bolster their volumes.

Many of the auction managers indicated that if the sale price of some consignments were too low, they would bid in order to protect the market or to set the market price for the day. The auction markets often buy several head of livestock each sale day.

CHAPTER VI

LIVESTOCK PURCHASES THROUGH AUCTIONS

Approximately 1,180,000 head of livestock were purchased through auctions in 1957. Of this total, 590,469 were cattle, 360,162 were hogs, and 230,250 were sheep. Producers purchased the largest amounts of all three livestock species (Table II).

Slaughter Livestock

Packer buyers were the most important buyers of slaughter livestock. Most, if not all, auction managers like to have a representative of a packing plant attend the sales regularly. This encourages the slaughter livestock consignors to patronize the auction. Livestock dealers and order buyers were nearly equal as the second and third most important buyers of slaughter cattle and sheep. Order buyers were the second most important buyer of the slaughter hogs. Generally, order buyers attended auctions which were not convenient for packer buyers to attend and those that did not have enough volume to warrant the presence of a packer buyer. Livestock dealers bought slaughter livestock on their own and resold to packing plants on a marginal basis. Dealers bought mostly slaughter cattle and sheep (Table VI). Neither producers nor speculators bought many slaughter livestock.

TABLE VI. PERCENTAGE OF SLAUGHTER LIVESTOCK PURCHASED THROUGH AUCTIONS
BY TYPES OF BUYERS AND SPECIES OF LIVESTOCK
IN SOUTH DAKOTA, 1957.

Type of Consignor	Cattle	Hogs	Sheep
		Percent	
Producers	3.08	1.25	1.90
Dealers	17.58	3.33	17.62
Packers	62.85	67.08	60.48
Order Buyers	15.69	27.92	17.62
Others	<u>.80</u>	<u>.42</u>	<u>2.38</u>
Totals	100.00	100.00	100.00

Stocks, Feeder, and Other Livestock

Producers ranked high as buyers of the stocker, feeder, and other livestock (Table VII). The percentages of the three livestock species purchased by producers were cattle 58.62, hogs 85.75, and sheep 64.19.

Order buyers ranked second, followed by dealers in the purchase of this class of livestock. The amount purchased by these two types of buyers was far less than the amount purchased by producers. Traders purchased only 2.58 percent of the cattle, 1.33 percent of hogs, and 1.43 percent of sheep (Table VII).

Nine of the 27 auctions reported that packers bought some stocker, feeder, and other livestock through their sale rings. One auction reported that 31 percent of this class of livestock sold through its ring was purchased by packers, of which 6 percent were cattle and

TABLE VII. PERCENTAGE OF STOCKER, FEEDER, AND OTHER LIVESTOCK
PURCHASED THROUGH AUCTIONS BY TYPES OF
BUYERS AND SPECIES OF LIVESTOCK
IN SOUTH DAKOTA, 1957.

Type of Consignor	Cattle	Hogs	Sheep
		<u>Percent</u>	
Producers	58.62	85.75	64.19
Dealers	14.25	5.75	12.74
Packers	2.13	.29	1.19
Order Buyers	22.42	6.88	20.45
Others	<u>2.58</u>	<u>1.33</u>	<u>1.43</u>
Totals	100.00	100.00	100.00

25 percent were sheep. The average percentage purchased by packers from all 27 auctions are as follows: cattle 2.13, hogs .29, and sheep 1.19 (Table VII).

CHAPTER VII

DISTANCES LIVESTOCK WERE TRANSPORTED
TO AND FROM AUCTIONS

The distances that livestock were shipped to auctions were divided into four concentric zones: zone 1 - less than 10 miles, zone 2 - 10 to 24 miles, zone 3 - 25 to 50 miles, and zone 4 - more than 50 miles.

The further away livestock were located from the auction outlet, the smaller the percentage the auction received of the total livestock in that area. This was due in part to influences from various competitive market outlets.

The distances that livestock were shipped from auctions ranged from the nearby country to destinations more than 250 miles away and in some instances half way across the nation. There were many indications given by auction managers that out-of-state livestock feeders and packing plants were importing livestock from this state in extensive numbers. Many specific instances had been cited of livestock being shipped to both coasts.

Undoubtedly approximate limits existed beyond which certain classes and species of livestock were not transported.¹⁶ It was found

¹⁶Ira R. Stevens and R. L. Fox, Improving Livestock Marketing Efficiency, General Report 39, p. 9, Farmers Cooperative Service, United States Department of Agriculture, United States Government Printing Office: Washington 25, D. C., January, 1958.

in a study carried on by the United States Department of Agriculture that hog farmers hauled their stock only one-third as far as the cattle producers.

Several auctions in the more heavily populated areas in South Dakota received comparatively few livestock consignments beyond the 50 mile radius. Auction markets generally were located close enough to each other so that it was unnecessary for the consignors to transport their stock more than 50 miles (Figure 5). The exception to this in South Dakota was the West River area due to its sparse population.

Cattle

Most stocker, feeder, and other cattle sold through auctions came from within a 50 mile radius. The auction managers did not have a record of the distances cattle consignments originated from but they gave estimates which they believed to be somewhat accurate. An estimated 27 percent of the stocker, feeder, and other cattle originated in zone 1, 29 percent in zone 2, 26 percent in zone 3, and 18 percent in zone 4, (Table VIII).

The slaughter cattle consigned to auctions from each concentric zone differed appreciably from the stocker, feeder, and other cattle (Table IX). The auction managers estimated 30 percent originated from zone 1, 37 percent from zone 2, 24 percent from zone 3, and 7 percent from zone 4. One West River auction manager reported that approximately 37 percent of the slaughter cattle consigned to his market came from zone 4.

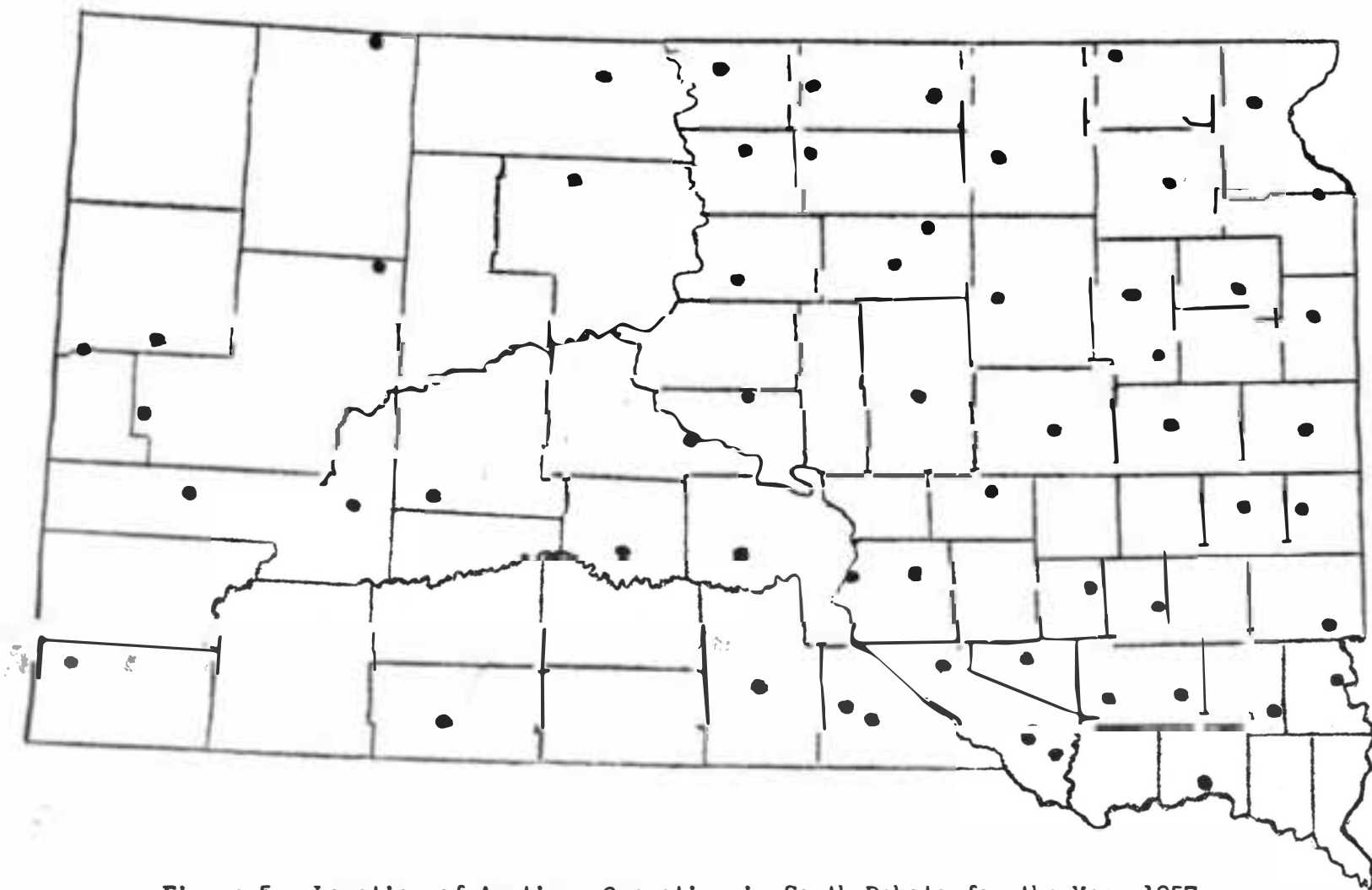


Figure 5. Location of Auctions Operating in South Dakota for the Year 1957.

TABLE VIII. PERCENTAGE OF STOCKER, FEEDER, AND OTHER LIVESTOCK
CONSIGNED TO AUCTIONS BY ZONES AND SPECIES OF
LIVESTOCK IN SOUTH DAKOTA, 1957

Zone	Miles	Cattle	Hogs	Sheep
			<u>Percent</u>	
1	Less than 10	27.11	33.00	25.52
2	10 - 24	29.31	34.21	30.33
3	25-50	26.08	25.62	26.81
4	More than 50	<u>17.50</u>	<u>6.17</u>	<u>17.34</u>
Totals		100.00	100.00	100.00

TABLE IX. PERCENTAGE OF SLAUGHTER LIVESTOCK CONSIGNED TO
AUCTIONS BY ZONES AND SPECIES OF LIVESTOCK
IN SOUTH DAKOTA, 1957.

Zone	Miles	Cattle	Hogs	Sheep
			<u>Percent</u>	
1	Less than 10	30.46	31.00	27.61
2	10 - 24	37.04	37.57	32.61
3	25 - 50	24.85	25.04	25.39
4	More than 50	<u>7.65</u>	<u>6.39</u>	<u>14.39</u>
Totals		100.00	100.00	100.00

The estimated percentage of cattle shipped less than 50 miles from auctions was 39, 50 to 250 miles was 44, more than 250 miles was 17 (Table X).

Hogs

An estimated 33 percent of feeder and breeding hogs originated in zone 1, 34 percent in zone 2, 27 percent in zone 3, and 6 percent in zone 4. The number of feeder and breeding hogs originating in zone 4 was much smaller than either cattle or sheep (Table VIII).

The number of hogs that were transported less than 50 miles from auctions amounted to 41 percent and an equal percentage was shipped from 50 to 250 miles. The remaining 18 percent was transported beyond 250 miles (Table X).

Three of the 27 auctions had 80 to 90 percent of their hogs transported beyond 250 miles. These auctions were in the central part of the state. The major hog buyers at these auctions were producers, packer buyers, and order buyers.

Sheep

The estimated percentage of sheep shipped less than 50 miles was 47, 50 to 250 miles was 49, and beyond 250 miles was 4 (Table X). The percentage of sheep transported beyond 250 miles was much lower than either cattle or hogs.

It was found in this study that more than four times more feeder and breeding sheep were consigned to the auctions than slaughter sheep.

TABLE X. PERCENTAGE OF ALL PURCHASED LIVESTOCK SHIPPED FROM
AUCTIONS BY DISTANCES AND SPECIES OF LIVESTOCK
IN SOUTH DAKOTA, 1957.

Miles	Cattle	Hogs	Sheep
		<u>Percent</u>	
Less than 50	39.35	40.63	47.38
50 - 250	43.46	41.46	48.57
More than 250	<u>17.19</u>	<u>17.91</u>	<u>4.05</u>
Total	100.00	100.00	100.00

Feeder and breeding sheep originated mostly from within a 50 mile radius (Table VIII). An estimated 26 percent originated from zone 1, 30 percent from zone 2, 27 percent from zone 3, and 17 percent from zone 4.

The percentages of slaughter sheep originating from each zone were somewhat comparable with slaughter cattle and hogs with the exception of zone 4 (Table IX). The estimated percentages of slaughter sheep originating within zone 1 was 28, zone 2 was 32, zone 3 was 25, and zone 4 was 14 (Table IX).

Two auction managers indicated a rather large percentage of consigned slaughter sheep that came from beyond the 50 mile radius. One of these auctions had an estimated 52 percent of its slaughter sheep that originated from beyond 50 miles and the other auction received 70 percent from beyond the 50 mile radius.* Both of these auctions were from the West River area.

CHAPTER VIII

TARIFF CHARGED BY AUCTIONS

The charges made at the 27 sampled auctions varied widely.

Several auctions omitted some charges entirely but some of the other charges were unusually high, indicating possible padding of the fees charged. The commission fees of the auctions were usually a flat rate charge per head, however, five auctions charged on a percentage basis.

Many of the auction managers may have been unaware of the wide range of charges among various auction markets. Some of the auction managers indicated that they thought their charges were equal or possibly lower than their competitors rates.

The wide variations in methods of assessing selling charges and in the charges made at auctions suggest the desirability of working towards greater uniformity. The rates should be as equitable as possible both from the standpoint of the management and of those of consign live-stock for sale. The posted rates should be applied uniformly to all consignors.¹⁷

It is possible that tariffs charged by auctions should be examined more closely and more uniform rates adopted. This should prevent any misunderstanding between the auction manager and the auction patrons on this point.

Table XI depicts the mean, mode, and range of tariff charged by the auction markets in South Dakota.

¹⁷ Dowell and Engelman, op. cit., p. 39.

TABLE XI. THE MEAN, MODE, RANGE, AND TYPE OF TARIFFS
CHARGED BY AUCTIONS BY SPECIES OF LIVESTOCK
IN SOUTH DAKOTA, 1957.

Types of Tariff	Cattle	Hogs	Sheep
Commission			
Mean	\$1.32	\$.43	\$.36
Mode	1.50	.50	.35
Range	1.00-1.80	.25-.70	.25-.50
Yardage			
Mean	\$.32	\$.08	\$.07
Mode	.25	.05	.05
Range	.10-.60	.05-.15	.01-.12
Feed			
Mean	\$.32	\$.18 ¹	\$.07
Mode	.25	.00	.05, .10 ²
Range	.20-.50	none	.03-.10
Insurance			
Mean	\$.06	\$.04	\$.03
Mode	.05	.01	.01
Range	.02-.27	.01-.10	.01-.10
Veterinarian			
Mean	\$.06	\$.03	\$.03
Mode	.05	.02	.02
Range	.05-.10	.02-.05	.02-.05
No-Sale³			

¹Only three auctions listed a feed charge for hogs.

²Ten auctions listed 5 cents and ten auctions listed ten cents as their charge for feed.

³It was not possible to tabulate a mean, mode, and range of no-sale charges. Only six auctions reported a no-sale tariff. One auction charged 40 cents for cattle, ten cents for sheep, and no charge for hogs. One auction charged no commission plus balance of fees. Two auctions charged one-half of the regular commission plus balance of fees. Two auctions charged only one-half of the regular commission.

Commission Fees

Five auctions charged their commission on a percentage basis for the sale of cattle. The range of the percentage fees were from 1.0 to 2.5 percent of the sale. Two auctions also extended the percentage fee to hogs. The rates charged were 1.5 and 2.5 percent of the sale for the commission fee. Only one of the auctions used a percentage basis for the commission fee in the sale of sheep. The fee charged was 1.5 percent of the sale.

The remaining 22 sampled auctions charged a flat rate per head of livestock. The mean commission charges for the cattle, hogs, and sheep, respectively, were \$1.32, \$0.43, \$0.36 (Table XI). The range of the charges for cattle was from \$1.00 to \$1.80 with a modal charge of \$1.50. The modal charge for hogs was 50 cents and the commission fees charged by the 27 sampled auctions ranged from 25 cents to 70 cents per head. The range of fees assessed for the sale of sheep were from 25 cents to 50 cents and the modal charge was 35 cents.

Yardage Fees

The mean yardage fees collected by the 27 auctions were 32 cents for cattle, 8 cents for hogs, and 7 cents for sheep. The modal charges for cattle were 25 cents and 5 cents for both hogs and sheep. The range of charges for cattle was quite wide, it went from 10 cents to 60 cents per head. Hogs did not have as wide a range as cattle in the variation of fees charged. The range was from 5 cents to 15 cents. The range of

charges for sheep was from 1 cent to 12 cents per head with the modal charge of 5 cents. Ten auctions listed 5 cents as their fee for yardage for sheep, however, nine auctions charged 10 cents. The modal charge was 5 cents but it was not the true picture since an almost equal number of auctions charged 10 cents.

Feed Fees

Cattle, hogs, and sheep were charged a mean of 32 cents, 18 cents, and 7 cents, respectively, for feed. The mean fee of 18 cents for hogs is misleading. Only three auction managers stated that they charged a fee for hogs and one of them only if the hogs were actually fed.

The modal fees charged were 25 cents for cattle and no charge for hogs. The modal charges for sheep were 5 cents and 10 cents. Ten auctions listed 5 cents and another ten auctions listed 10 cents as their feed charge for sheep. The range of charges for cattle was 20 cents to 50 cents. The range for sheep was from 3 cents to 10 cents per head.

Insurance Fees

The mean fee charged for insurance by the auctions for cattle was 6 cents. The modal charge was 5 cents per head and the range was from 2 cents to 27 cents per head. One auction charged 27 cents per head of cattle for insurance but this was not representative of the other auctions. This fee was much greater than the fees charged by the remaining auctions, the highest of which was 10 cents per head. By

omitting this one auction, the range of fees charged would be from 2 cents to 10 cents. The mean fee charged for hogs was 4 cents and for sheep it was 3 cents. The range of fees charged for both hogs and sheep were 1 cent to 10 cents. The modal charge for the hogs and sheep was 1 cent for both species.

Veterinarian Fees

The mean charge, modal charge, and range of charges were all the same for the hogs and sheep. The mean charge was 3 cents, modal charge was 2 cents and the range of charges was 2 cents to 5 cents per head. The cattle had a mean fee of 6 cents per head and a modal fee of 5 cents. The fees charged by the auctions ranged from 5 cents to 10 cents per head for cattle.

No-Sale Fees

Only six of the auctions indicated that they made a charge when the consignor declined to sell his livestock after the highest bid was obtained. One auction charged 40 cents per head of cattle, nothing for the hogs, and 10 cents per head of sheep. Two auctions charged one-half of their regular commission in the case of a no-sale, two auctions charged one-half of their regular commission plus the balance of the regular fees, and one auction charged no commission but did charge the balance of the regular fees.

CHAPTER IX

SUMMARY

Since the first livestock auction began its regular weekly operation in 1930, the number of auctions and their volumes have steadily increased. At the time of this study, 64 auctions were operating in South Dakota.

The factors that were thought to have contributed to the expansion of the auctions are: the improvement of roads, increased number of small packers throughout the state, development of uniform grade and weight classifications, and an extensive dissemination of market news to producers.

It was found as a result of this study that convenience to auctions and lower transportation costs were major reasons for patronage of the market outlets.

Auction managers have listed telephone, person to person contact, radio and newspapers as the most widely used means of communication to contact patrons. The person to person contact and telephone had the best results. In the course of this study, it was found that auctions in other parts of the United States found that pooling livestock into large uniform lots tended to attract packers and other large volume buyers. The use of livestock pooling brought higher prices and in turn encouraged more patronage by producers.

South Dakota auctions were the major outlets for stocker, feeder, and other livestock. The number in this class consigned to auctions

was more than twice as large as the slaughter livestock class.

Traders, dealers, and auction markets consigned a higher percentage of stocker, feeder, and other livestock class than they did of slaughter livestock. No definite evidence was available to explain this, but it might be due to the fact that slaughter livestock were sought out by the packers. They probably bid more than any other buyers cared to, thus discouraged speculation. Livestock producers were found to be the largest consignors to auctions.

The producers were also the largest purchasers of the livestock consigned to auctions, even though the packers purchased the major portion of the slaughter livestock. This was due to the large purchases made in the stocker, feeder, and other livestock class. The large purchases and consignments of the above class by producers may indicate several things. (1) Auctions were used as a place of exchange between feed deficit areas and feed surplus areas and (2) producers speculated with livestock.

It was found in this study that auctions received and shipped livestock various distances. There were undoubtedly many factors influencing the distances livestock were transported. The distances livestock were transported from South Dakota auctions ranged from the nearby country to both coasts.

The tariffs charged by auctions were found to have considerable ranges for each of the fees listed. There were five auctions that charged commissions on a percentage basis. The remaining auctions charged their commissions on a flat rate basis. The remaining fees

charged by all the auctions were on a flat rate basis. Some of these auctions had omitted a fee, but it could be seen that one of the remaining fees were larger than usual.

Some areas indicating additional research are: (1) A comparison of returns for each specie and class of livestock sold through all market outlets in South Dakota. (2) A study of tariffs to ascertain whether the ranges are justified among the auctions. (3) A study to determine if a more effective system is needed for individual auctions to bring consignors and prospective buyers together. (4) A study to determine the volume an auction needs to operate efficiently and to attract a sufficient number of buyers to better assure high returns to the producers.

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