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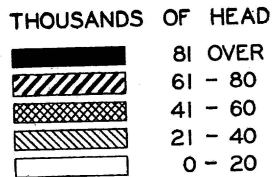
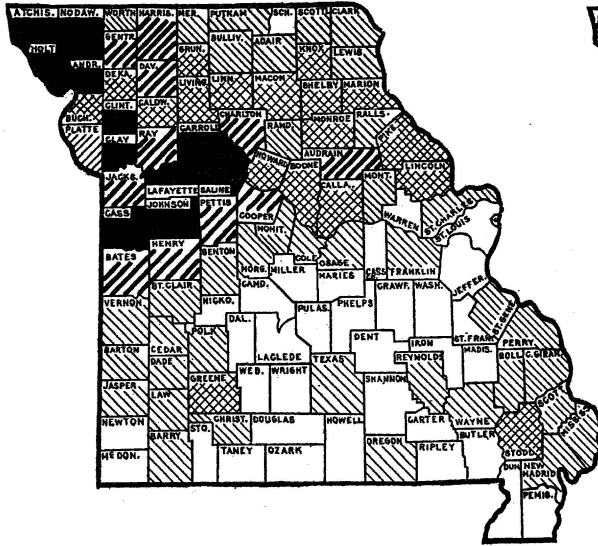
F. B. MUMFORD, *Director*

How Missouri Hogs Are Marketed

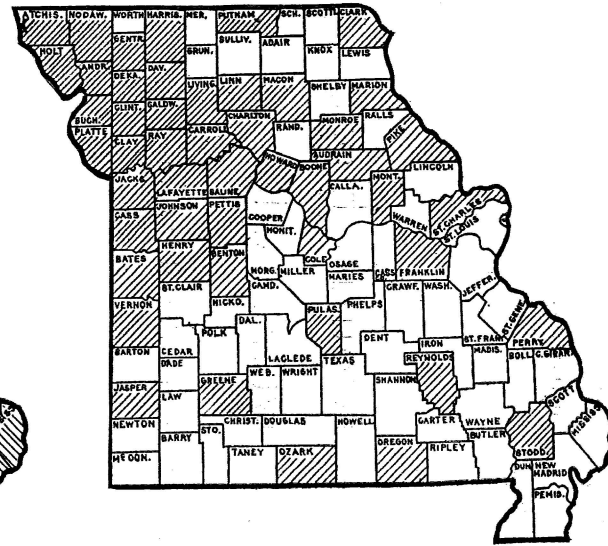
F. L. THOMSEN AND EARL B. SMITH

COLUMBIA, MISSOURI

HOG POPULATION, 1933



COUNTIES FROM WHICH SALES RECORDS WERE OBTAINED



NO RECORDS OBTAINED FROM COUNTIES IN WHITE

Fig. 1.—Counties from Which Hog Sales Records Were Obtained, and the Distribution of Hog Population by Counties.

How Missouri Hogs are Marketed

F. L. THOMSEN AND EARL B. SMITH*

This report covers the analysis of hog sales recorded on AAA form C.H.-54 by approximately 13,672 Corn-Hog Contract signers located in 49 counties, an average of 279 per county.† Fig. 1 shows the counties included, and for purposes of comparison the 1933 hog population by counties. Sufficient contracts were obtained from each county to furnish a representative sample. In some counties this amounted to about every other contract, while in others it was every third, fourth, or fifth contract. Since the contracts were selected at regular intervals, and the signers had no particular incentive to distort the entries, there is every reason to believe that they represent the marketing of hogs in these counties during the period of time covered. In some cases, no doubt, the designation of method of sale was insufficiently definite to give an accurate indication, but for most of the classifications such possible errors should be negligible.

The data originally collected covered the period December, 1933 to October, 1934, inclusive. Because of the drought, conditions existing subsequent to July were considered to be abnormal. For this reason, the tabulations by counties and the totals for the State cover only the period December 1933 to July 1934, inclusive, except where otherwise indicated. The omission of August, September, October, and November from the tabulations affects the representativeness of the data only to the extent that normal seasonal variation exists in the proportion of hogs marketed through the different channels. Such seasonal variation is believed not to be sufficient to have a material effect.

The percentage of hogs sold through each of the more important marketing channels, for the State as a whole, is shown in Table I and Fig. 2. These percentages show a somewhat greater diversification of outlets than might be expected in view of Missouri's reputation as a terminal marketing state. Interior or large local packers, packer concentration points, and large local buying yards are not found in Missouri to the same extent as in many other corn-belt states. Missouri hogs move mostly to the three principal terminal markets or direct to packers located at or near those markets. However, the table indicates that

*The data were collected and tabulated by workers employed under Mo. FERA work project No. 29-10-F2-25. Mr. Smith, a graduate student in agricultural economics, supervised the collection of data. Tabulations were made by Albert Eads and Howard Teter, students, under the direction of Professor F. L. Thomsen, who prepared this report.

†Data given in connection with Form C.H.-14, for the years 1932-33, were found to be in such shape as to preclude obtaining an accurate sample of hog marketings therefrom.

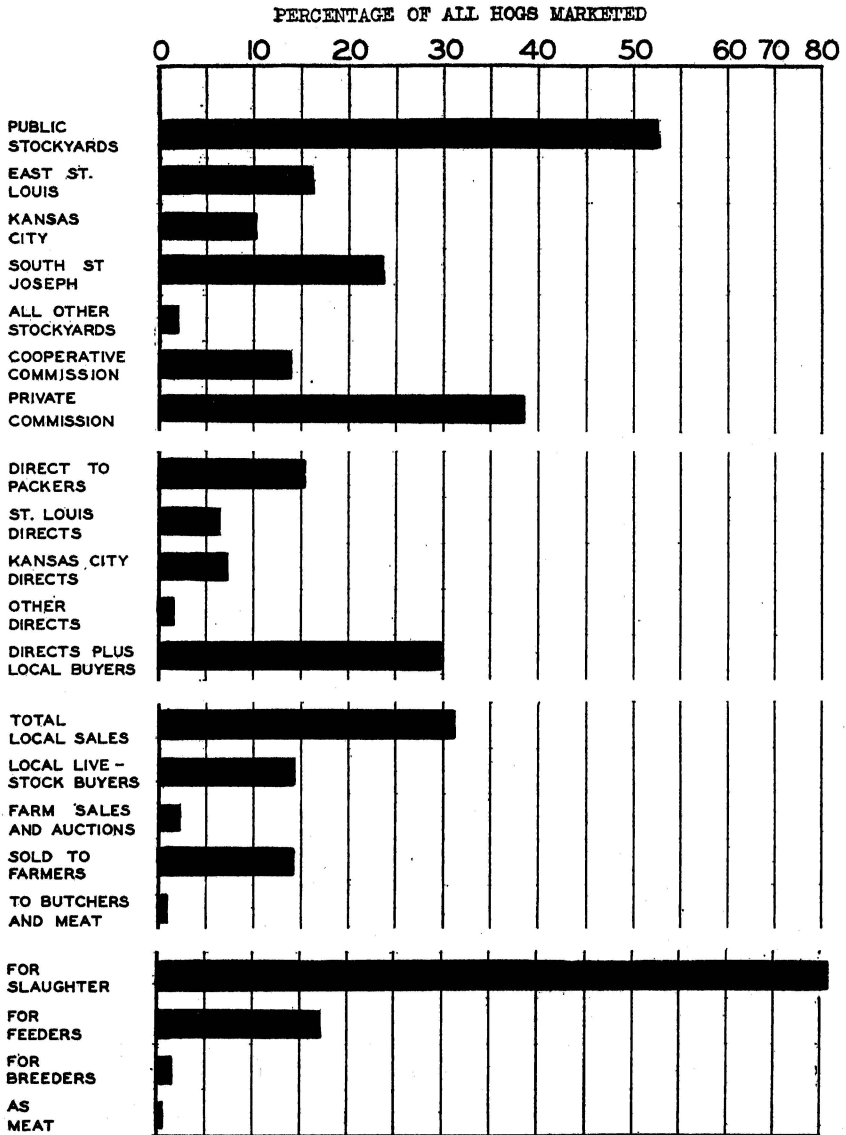


Fig. 2.—Proportion of Hogs Marketed Through Principal Channels, December 1933 to July 1934, Inclusive.

miscellaneous outlets through farmers, local buyers, and for local slaughter are more important than commonly considered. A large part of the hogs purchased by local buyers are sold by them to packers, or to other farmers as feeders.

TABLE 1.—PERCENTAGE OF HOGS SOLD THROUGH DIFFERENT MARKET OUTLETS, AND AVERAGE WEIGHTS, DECEMBER 1933 TO JULY 1934, INCLUSIVE

	Number of Hogs	Per Cent of Total	Per Cent of Group	Average Weight
Total:	354,613			183
Public Stock Yards, Total.....	188,156	53.0	100.0	207
National Stock Yards, E. St. Louis, Total.....	58,285	16.4	31.0	196
Private Commission Firm.....	31,837	9.0	54.6	---
Cooperative Commission Firm.....	26,448	7.4	45.4	---
Kansas City Stock Yards, Total.....	37,277	10.5	19.8	205
Private Commission Firm.....	30,429	8.6	81.6	---
Cooperative Commission Firm.....	6,848	1.9	18.4	---
South St. Joseph Stock Yards, Total.....	85,145	24.0	45.2	215
Private Commission Firms.....	69,280	19.5	81.4	---
Cooperative Commission Firms.....	15,865	4.5	18.6	---
Other Missouri Public Stock Yards, Total.....	6,705	1.9	3.6	199
Private Commission Firms.....	5,598	1.6	83.5	---
Cooperative Commission Firms.....	1,107	.3	16.5	---
Out of State Public Stock Yards, Total.....	744	.2	.4	---
Chicago.....	429	.1	57.7	224
Omaha.....	315	.1	42.3	230
Private Commission Firms, Total.....	137,724	38.8	73.2	---
Cooperative Commission Firms, Total.....	50,432	14.2	26.8	---
Direct to Packer Shipments, Total.....	55,938	15.8	100.0	207
St. Louis.....	23,249	6.6	41.6	---
Kansas City.....	26,639	7.5	47.6	---
Other Missouri Directs.....	5,077	1.4	9.1	---
Out of State Directs.....	973	.3	1.7	---
Directs plus local buyers, Total.....	106,021	29.9	---	---
Local Outlets, Total.....	110,519	31.2	100.0	---
Local livestock buyers.....	50,083	14.1	45.3	177
Sales and auctions.....	7,659	2.2	6.9	94
Sold to Farmers, Total.....	50,808	14.3	46.0	102
Within State.....	50,180	14.1	98.8	---
Out of State.....	628	.2	1.2	---
Local Butchers, retailers and consumers.....	1,969	.6	1.8	---
Use or Type, Total.....	354,613	100.0	100.0	---
For Slaughter.....	289,166	81.5	81.5	207
For Feeders.....	60,191	17.0	17.0	80
For Breeders.....	4,813	1.4	1.4	188
Sold As Meat.....	443	.1	.1	---

Seasonal Changes.—Figure 3 shows the proportion of hogs, for the State as a whole, marketed through the principal outlets, by months.

In late winter and early spring the proportion shipped to public stock yards decreased, while sales to farmers increased materially. This seasonal movement follows the end of the market movement for spring pigs, and the increase in movement of feeder pigs from the previous fall's crop to other farmers.

The proportion of direct-to-packer shipments increased in the spring. This conforms with the experience of a large Missouri packing plant receiving direct shipments, the receipts of which increase more than those of the nearby terminal market in the spring and early summer, and decrease more in the late summer months.

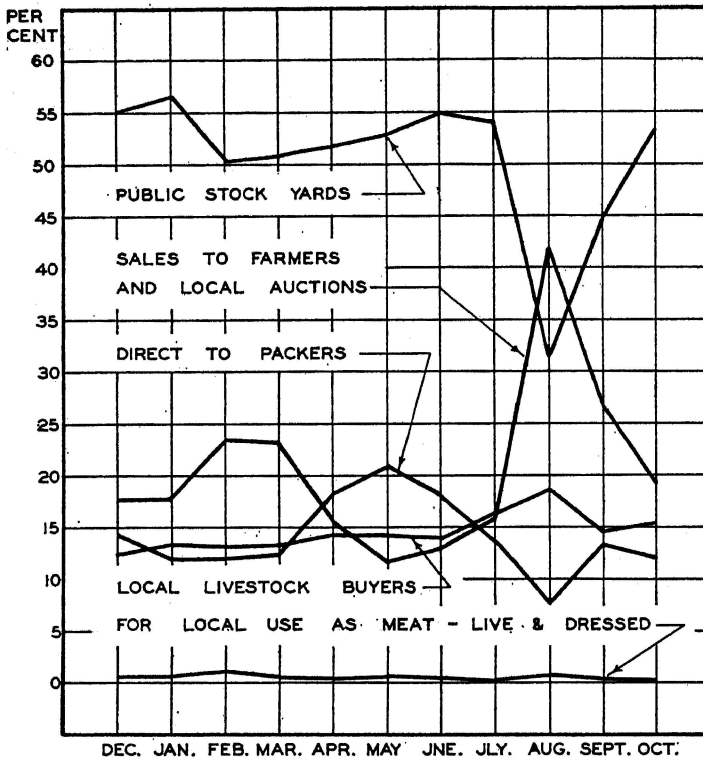


Fig. 3.—Proportion of Hogs Marketed Through Principal Channels, by Months, December 1933 to October 1934, Inclusive.

A pronounced drop in the proportion of hogs shipped to the public stock yards, as well as those shipped direct to packers, occurred in August, with the proportion of sales to farmers increasing sharply, and sales to local buyers rising slightly. This is partly a reflection of the normal seasonal movement of feeder pigs from the spring crop, which greatly increases the ratio of feeders to slaughter hogs. This seasonal movement probably was considerably more pronounced than usual in 1934, and came a month or two earlier, because of the prospective shortage of feed in Missouri resulting from the drought, and the relaxation of restrictions on purchase of feeder pigs under the 1934 corn-hog contract beginning August 1.

Weight of Hogs Marketed.—The normal late summer increase in the movement of feeder pigs, accelerated by the 1934 drought liquidation, was reflected in the average weight of all hogs marketed. Until late summer, the average weight fluctuated narrowly between 180 and 190

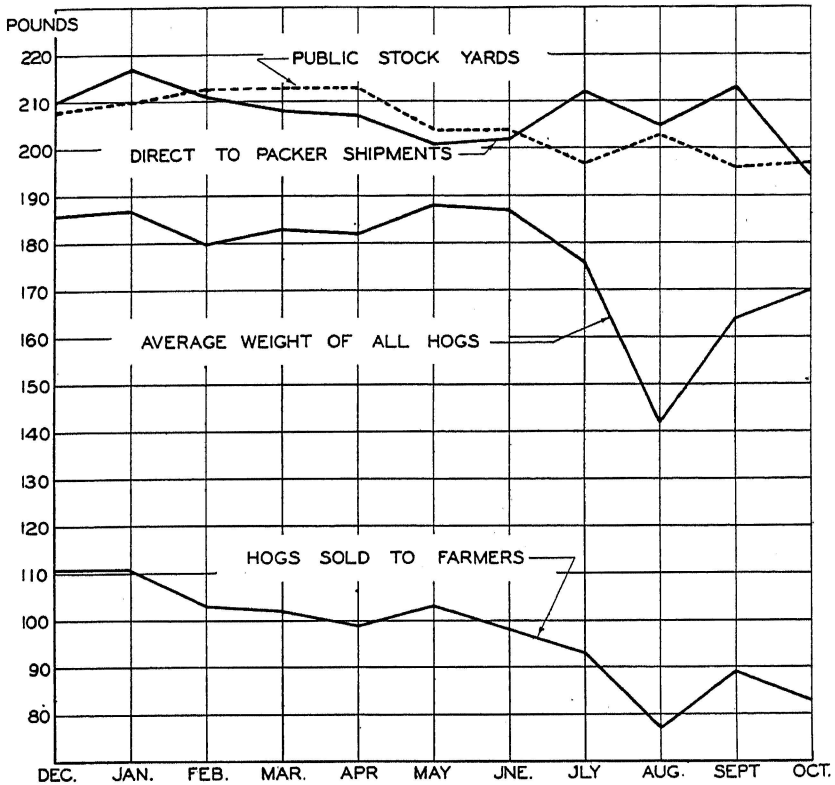


Fig. 4.—Average Weight of Hogs Marketed Through Different Channels, December 1933 to July 1934, Inclusive.

pounds per head, but in August dropped below 140 pounds, and during the next three months varied between 150 and 170 pounds. This is shown in Fig. 4, together with the average weights of hogs marketed through public stock yards, direct to packers and to farmers.

The average weight of all hogs marketed from December to July, inclusive, by counties, is shown in Fig. 5. Relatively, these weights run approximately according to expectations based on the type of production in each county. For nearly all of the counties, however, the average weights are somewhat less than might be expected.

The average weight of hogs from all counties marketed through the different channels is shown in Table 1. It is evident that Missouri hogs are materially lighter than those from nearby states shipping to the same markets.

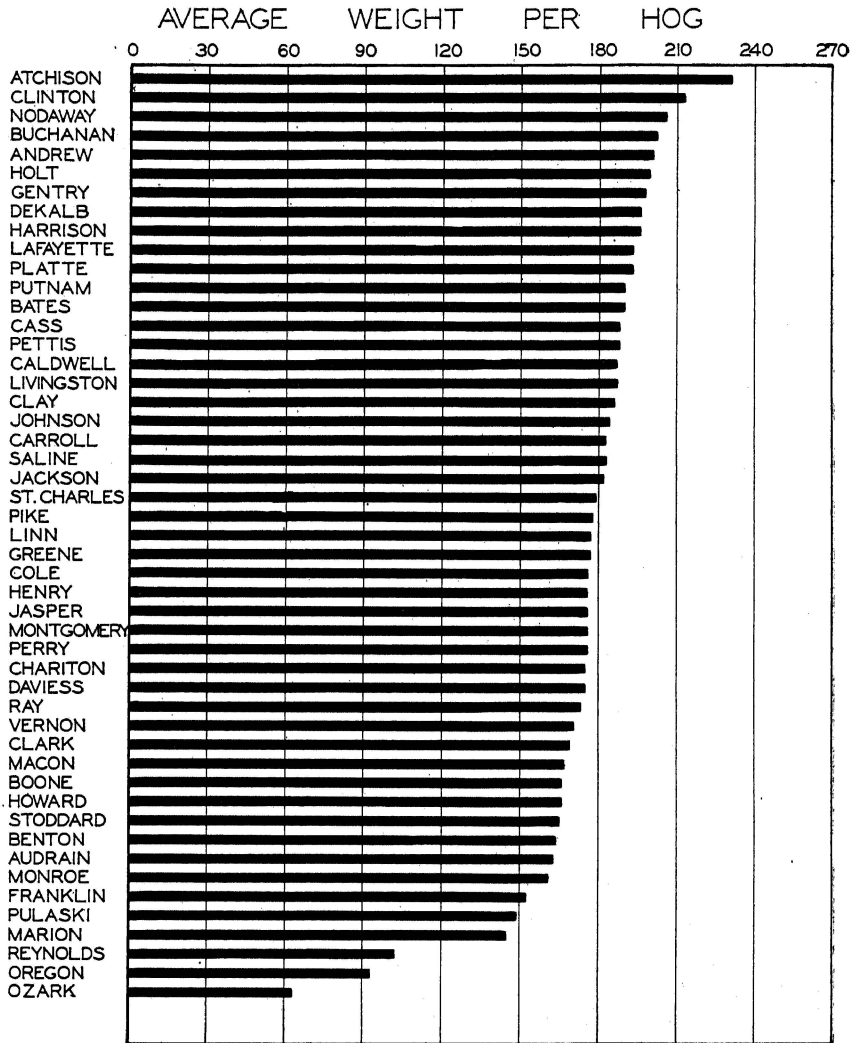


Fig. 5.—Average Weight of all Hogs Marketed, by Counties, December 1933 to July 1934, Inclusive.

Marketing Through Public Stock Yards.—From December, to July, inclusive, 53 per cent of the hogs were marketed through the public stock yards. Of these, 31 per cent went to East St. Louis, 20 per cent to Kansas City, 45 per cent to St. Joseph, 3.6 per cent to smaller Missouri public stock yards (Mississippi Valley, Springfield, Joplin), and only 0.4 per cent to Chicago and Omaha combined (Table 1).

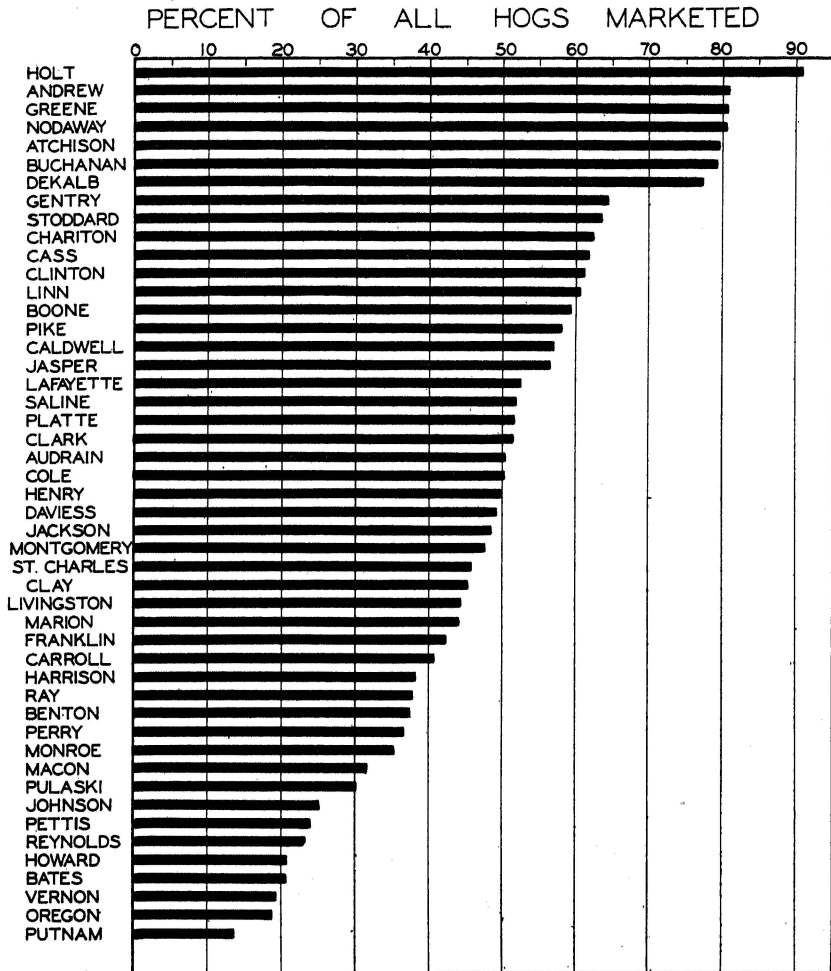


Fig. 6.—Proportion of Hogs Marketed Through Public Stock Yards, by Counties.

There was a wide variation among the different counties in the proportion of hogs marketed through the public stock yards, as shown in Fig. 6. These differences are largely a result of location, the proportion of hogs raised to slaughter weights, and the strength of cooperative marketing and anti-direct marketing sentiment in the county. The northwestern counties, which sell few feeder pigs, are near the St. Joseph market, and are relatively distant from the major packers buying direct, have the highest percentage of hogs sold through the public stock yards. The counties south of the Missouri River have the smallest proportion

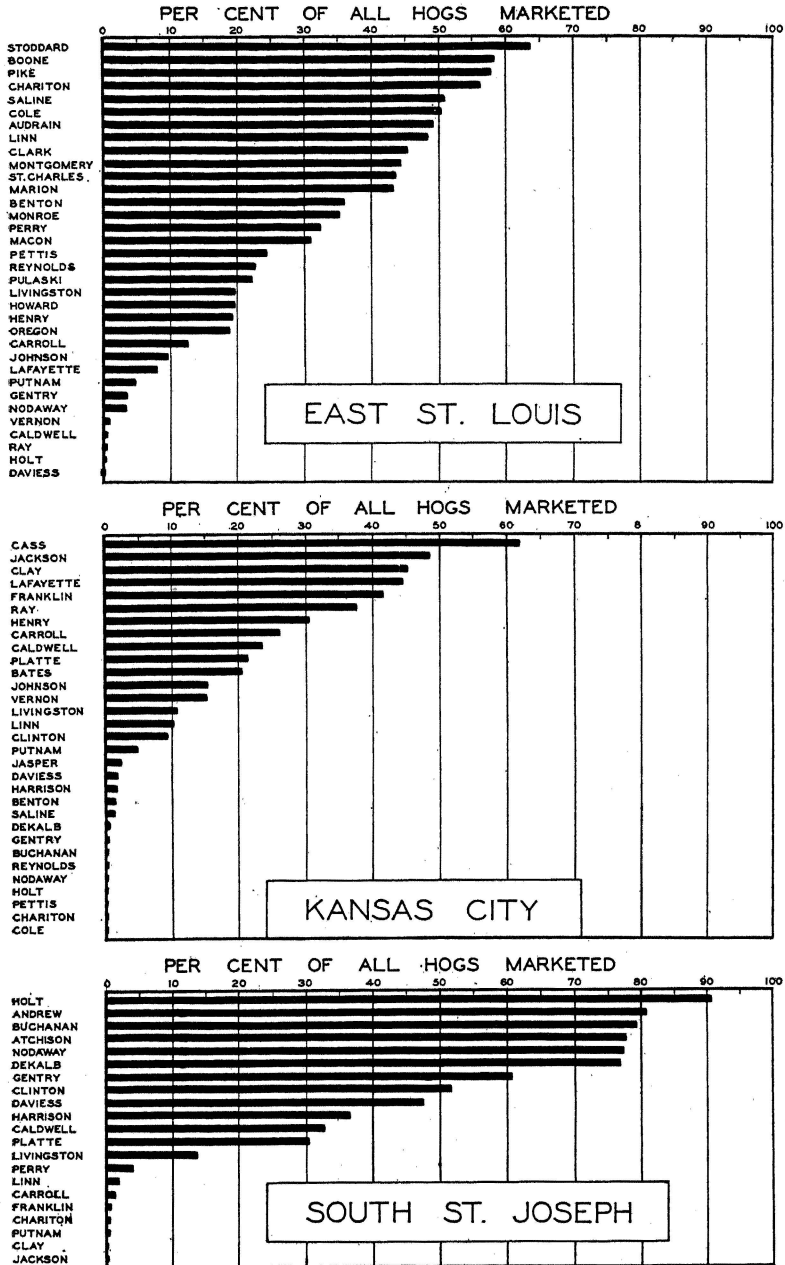


Fig. 7.—Proportion of Hogs Marketed Through St. Louis, Kansas City and St. Joseph Public Stock Yards, by Counties.

so marketed, because of the direct movement of feeder pigs from that territory, and their location relative to public stock yards, local livestock buying yards, and packers receiving direct shipments.

The percentage of hogs marketed from each county which go to each of the principal public stock yards is shown in Fig. 7. St. Louis covers the widest territory, but St. Joseph gets the largest proportion of hogs from the individual counties in its immediate territory. Over 90 per cent of the hogs from Holt county went to St. Joseph, and about three quarters of the hogs sold from Andrew, Buchanan, Atchison, Nodaway and DeKalb counties.

The Mississippi Valley Stock Yards drew 8 per cent of the hogs sold from Pulaski county, 5 per cent of those from Chariton county, 3.6 per cent from Montgomery, and 2 per cent from St. Charles. Of the other counties from which data were obtained (see Fig. 1), negligible percentages of the hogs sold went to the Mississippi Valley Stock Yards from Boone, Audrain, Howard, Putnam, Carroll, Macon, Perry, Linn, Reynolds, Pike, Clark, Marion, and Monroe counties.

Forty per cent of the hogs sold by contract signers from Jasper county were shipped to the Joplin Stock Yards. Vernon county shipped a small percentage of its hogs to that market.

Greene county shipped 81 per cent of its hogs to Springfield, Jasper 12 per cent, Vernon 3 per cent, and Benton less than one per cent.

The Chicago Stock Yards received 6 per cent of the hogs sold by contract signers in Clark county, nearly three per cent of those from Putnam, and negligible percentages from Chariton and Marion.

The Omaha Stock Yards received nearly 2 per cent of the hogs from Atchison county.

Cooperative and Private Commission Firms.—Only 27 per cent of the hogs shipped to public stock yards from the counties included in these tabulations were sold through cooperative commission firms. The percentages for each market are shown in Table 1.

Of hogs shipped to public stock yards, the proportion sold through cooperative commission firms varied widely by counties, as shown in Fig. 8. Benton county leads the list, with nearly 90 per cent. The counties having the lowest percentages are generally those along the northern and central western border of the State.

Sales Direct to Packers.—15.8 per cent of all the hogs included in the tabulations were shipped direct to packers by farmers. The percentages for packers located at St. Louis, Kansas City, other Missouri points, and out of state, are shown in Table 1. Practically all of these sales are direct shipments, since packers buy practically no hogs in the country in Missouri.

In addition, a large proportion of hogs bought by local buyers is shipped to packers without going through the public stock yards. Sales

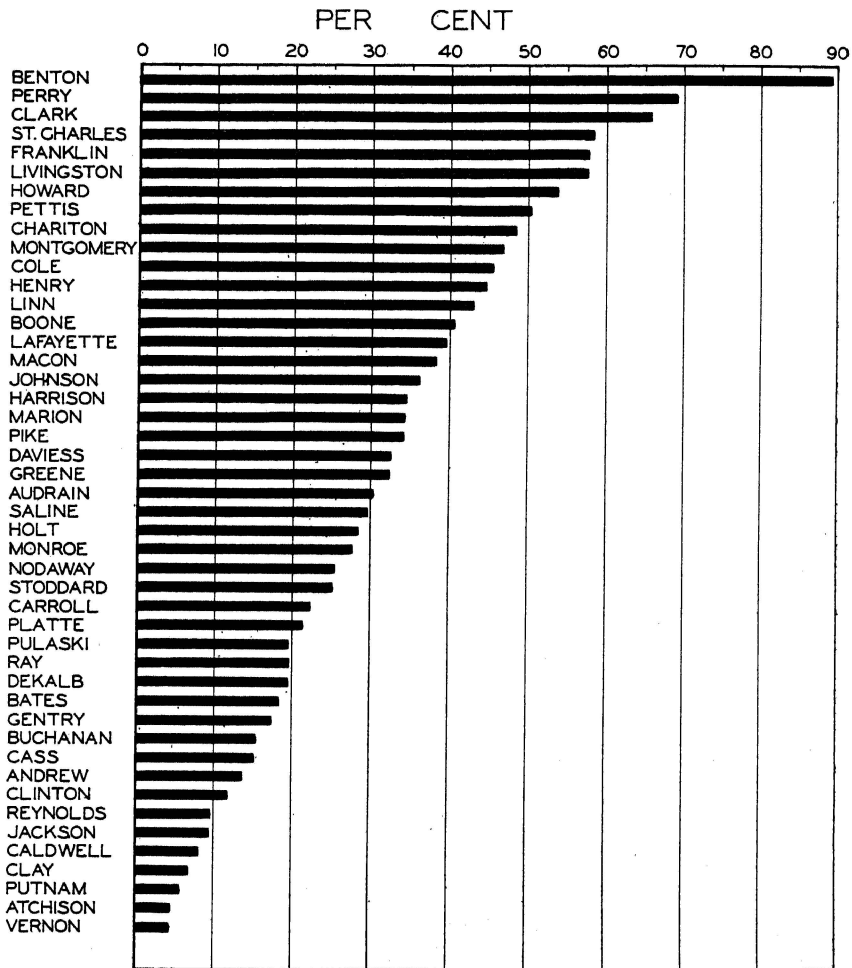


Fig. 8.—Proportion of Hogs Marketed at Public Stock Yards Which Were Sold by Cooperative Commission Firms, by Counties.

to local buyers, plus direct shipments by farmers to packers, constitute 30 per cent of the total hogs marketed (Table 1). Therefore, it is probable that about a fourth of all hogs marketed from the counties included in these tabulations are shipped direct to packers. After allowing for the fact that 17 per cent of all the hogs marketed during this period were feeder pigs, it is evident that about one third of the slaughter hogs were shipped direct to packers.

For the State as a whole, it seems probable that an even larger percentage of the slaughter hogs are marketed direct to packers, either by farmers or local buyers. Some of the light producing southern counties

not included in the tabulations probably ship a larger proportion direct to packers than do the heavier producing northwestern counties given greater representation in these data. Also, it must be remembered that some of the hogs bought at Springfield and Joplin Stock Yards eventually are found among direct receipts of packing plants located at other points.

The only other available data throwing light on the proportion of hogs sold direct are those collected by E. A. Logan, State Agricultural Statistician, who obtains annual statistics on receipts at all public stock yards, and at direct buying plants, of hogs which originated in Missouri. The Missouri hogs going to direct buying plants in 1934 constituted 34.5 per cent of all hogs marketed. However, the total does not include feeder pigs sold to farmers, or local slaughter, and allowance for the latter would reduce the proportion of all hogs marketed direct to about 29 per cent of all hogs produced. The State Statistician's figures do not represent slaughter hogs, since the public stock yards receipts include many feeder pigs.

Taking all of these facts into account, it may be estimated that more than one fourth of all hogs produced in Missouri are marketed direct to packers, and slightly more than one third of all slaughter hogs are so marketed. These estimates include hogs bought from farmers by local buyers and shipped direct to packers, as well as those shipped direct to packers by farmers.

The percentage of hogs shipped by farmers direct to packers, by counties, is shown in Fig. 9. Except for the northwestern group of counties which ship so preponderantly to St. Joseph, location seems to have little to do with the proportion shipped direct, since the leading counties are well scattered over the State.

Fig. 10 shows the percentage of hogs shipped by farmers direct to packers located at St. Louis and Kansas City, by counties. Putnam county farmers shipped 5 per cent of their hogs to out of State packers, Vernon county 3 per cent, Platte 2 per cent, Henry 1.5 per cent, and Clinton, Clark, and St. Charles counties negligible percentages.

Local Livestock Buyers.—Fourteen per cent of all the hogs marketed from the 49 counties were sold to local livestock buyers, representing 45 per cent of all local sales. Only a few years ago most of the livestock moved to terminal markets by rail, to a large extent through livestock shipping associations. The latter almost completely eliminated the local buyer. With the advent of trucks and direct marketing, shipping associations almost disappeared, because they refused to utilize these new methods of marketing. This brought the local buyer back into the picture in many communities. The local buyers in Missouri operate in a comparatively small way, as compared with those found in several

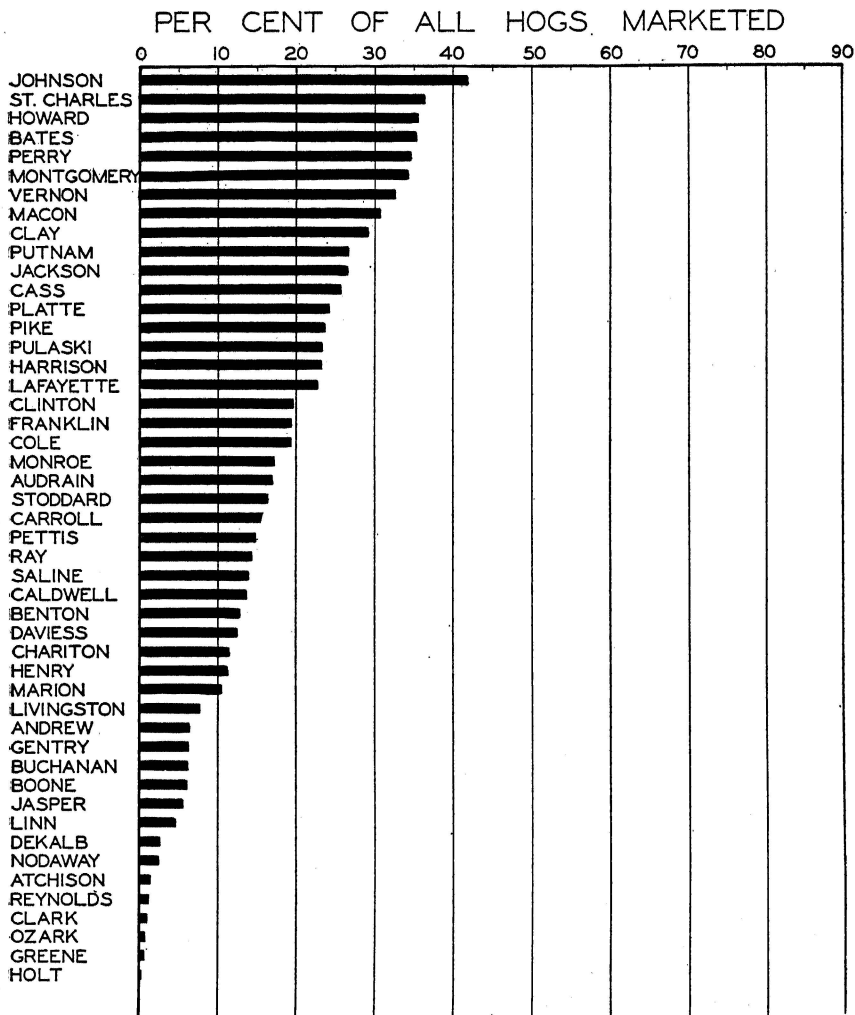


Fig. 9.—Proportion of Hogs Shipped by Farmers Direct to Packers, by Counties.

other corn-belt states. They usually have no special shipping facilities and do not attempt to sort hogs or to fill specific packer orders, but merely ship everything bought to a packer receiving direct shipments, or to a public stock yards.

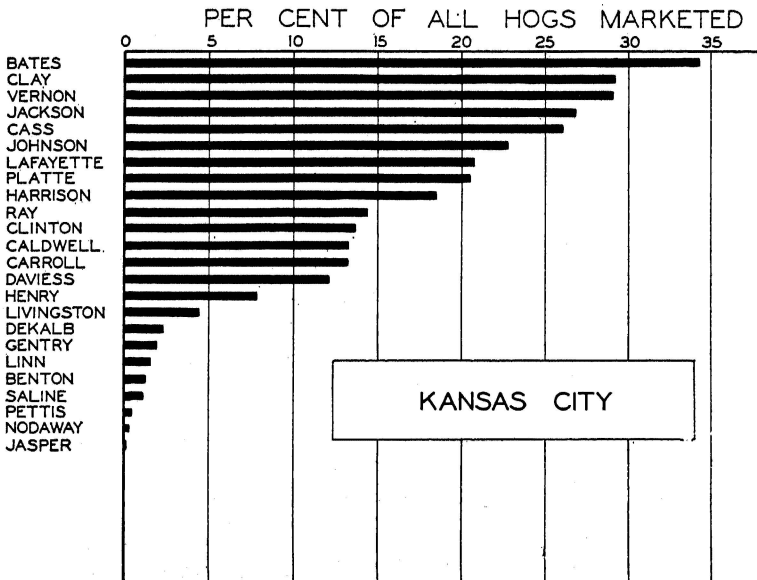
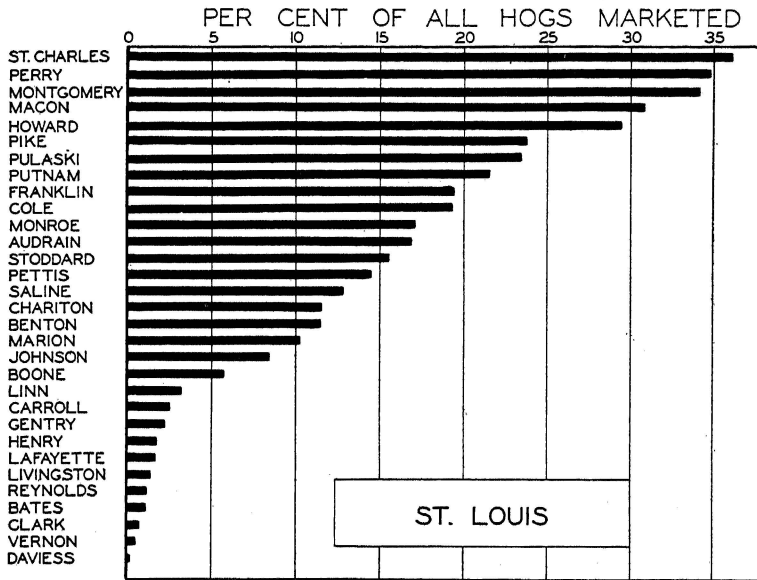


Fig. 10.—Proportion of Hogs Shipped by Farmers Direct to Packers at St. Louis and Kansas City, by Counties.

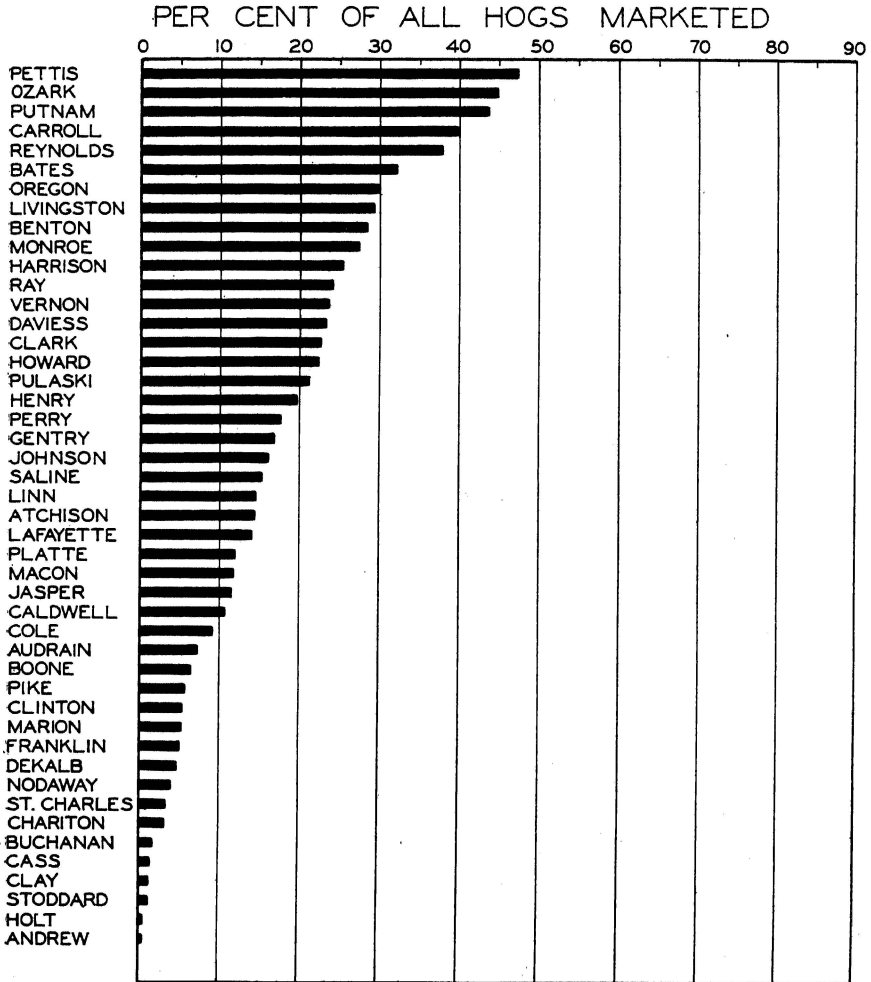


Fig. 11.—Proportion of Hogs Sold to Local Livestock Buyers, by Counties.

The percentage of all hogs marketed which were sold to local buyers, by counties, is shown in Fig. 11.

Sales to Farmers.—Hogs sold to farmers constituted 14.3 per cent of all the hogs marketed. Of these, 98.8 per cent were sold to farmers located within Missouri, and only 1.2 were sold directly to farmers located in other states. Slightly more than 2 per cent of the hogs were sold through local farm or town sales and auctions, and most of such

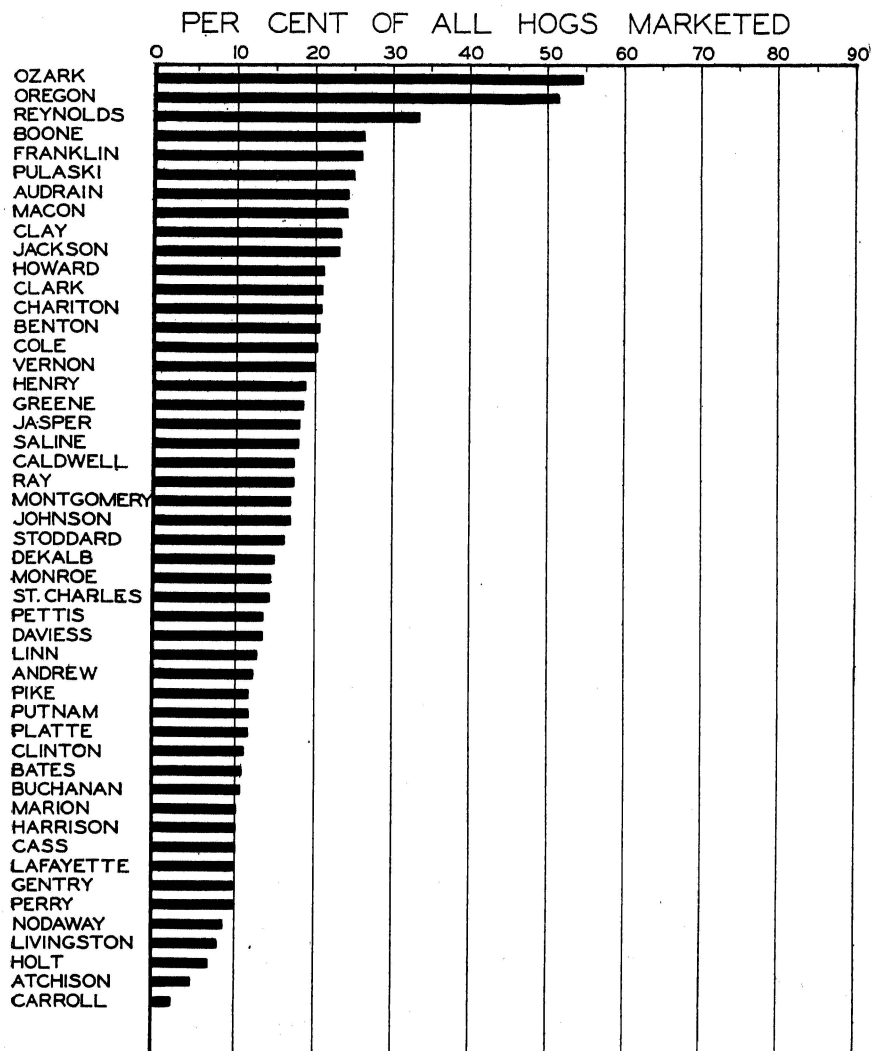


Fig. 12.—Proportion of Hogs Sold to Farmers, by Counties.

hogs are bought by farmers, making the total of approximately direct sales to farmers over 16 per cent of all hogs marketed.

Many of the hogs sold through terminal markets or other outlets, of course, were feeders which eventually reached farmers in Missouri and other states. As far as could be ascertained from the designations in the contract forms and from the weights in cases not so designated, 17 per cent of all the hogs marketed from these counties were feeders, and 1.4

per cent were for breeding (see Table 1). The movement of feeder hogs is discussed in another publication of the Agricultural Experiment Station.*

Fig. 12 shows the proportion of hogs marketed which were sold to farmers, by counties. Counties south of the Missouri River market a much larger proportion of their hogs in this manner, particularly in recent years since direct shipments to other counties by truck have been practicable.

Other Local Outlets.—Slightly more than two per cent of the hogs from all counties were disposed of through local farm or town sales and auctions. These sales comprised nearly seven per cent of all local sales. In Marion county nearly 30 per cent of the hogs were sold in this manner, in Livingston over 10 per cent, and about five per cent in Jasper, Monroe, Linn, Nodaway, Putnam, and Clark. In the other counties sales and auctions accounted for a negligible proportion of total marketings.

Only slightly more than one half per cent of the hogs marketed from these counties were sold live or dressed to local butchers, retailers or consumers, and such sales constituted less than 2 per cent of all local sales. The counties ranking highest in sales of live hogs to local butchers did not rank high in local sales of dressed meat. Seven per cent of the hogs from Franklin county were sold direct to butchers, about 4 per cent in Reynolds and Ray counties, about 2 per cent in Jasper, Vernon, Stoddard, and Boone counties, and about one per cent in Holt, Perry, and Audrain.

The leading counties in sale of meat were Linn (1.6 per cent), Montgomery, Cole, Clinton, and Clay.

*Mo. Agr. Expt. Sta. Res. Bul. 146, and Mo. Agr. Ext. Ser. Cir. 262, *Marketing Stock Hogs in Missouri*, by Preston Richards and F. L. Thomsen.

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