
Oregon Agricultural College Extension Service

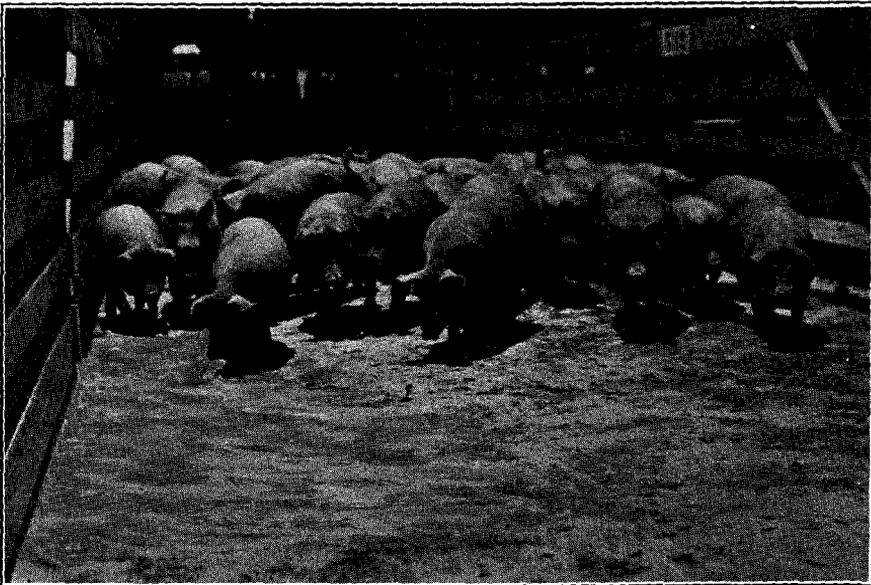
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Marketing Hogs in Oregon

BY

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ON THEIR WAY TO LIFT THE MORTGAGE

CORVALLIS, OREGON

Oregon State Agricultural College and
United States Department of Agriculture cooperating

The Bulletins of the Oregon Agricultural College are free to all
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EXTENSION SERVICE
OREGON AGRICULTURAL COLLEGE

The Extension Service of the Oregon Agricultural College embraces all instructional work done by the College staff outside the institution. This includes institute, lecture, and fair work, supervision of county work provided for by State legislation; Boys' and Girls' Industrial Club work; correspondence courses; preparation of educative exhibits; publication of bulletins and distribution of news matter; cooperative work with granges, farmers' unions, schools, churches, commercial clubs, and other progressive organizations in the promotion of industrial and social enterprises. The Extension Service, in short, consists of carrying out to the people of Oregon practical and usable information on all subjects taught at the College.

Applications for assistance along any of the lines indicated, together with all particulars relating thereto, should be sent to the Director of Extension as far in advance as possible. It is the desire of the College to help all who apply, but its staff, facilities, and funds are limited; consequently, short-notice requests may not find the department in position to render the best service.

Particular attention is called to the fact that counties desiring to organize for agricultural field and demonstration work, under the provisions of Chapter 110, Laws of 1913, must make an initial appropriation in order to secure the State aid. Those interested in promoting this work should communicate with the Director of Extension, or the State Leader, at the Oregon Agricultural College, with reference to the best methods of procedure.

MARKETING HOGS IN OREGON

BY

EDWARD B. FITTS, Associate Professor of Dairy and Animal Husbandry

INTRODUCTION

The hog raised on the farm may be disposed of in any one of the following ways. He may be butchered at home and used in the farmer's family or the carcass may be cut up and sold to neighbors or the products cured and sold in that form. He may be sold to a retail butcher in a nearby town, or shipped by express to a retailer in a more distant city, or sent to a commission man who in turn will sell to the retailer. He may be sold alive to the local butcher who will kill and retail over the block or to a local packer. He may be sold to a buyer who represents a large packing house, or to a shipper who makes a business of getting together car loads of hogs for shipment to the stock yards. If his owner raises pigs in sufficient numbers, he may be shipped in a car load to the stock yards market; or if from a smaller herd, he may go to market in a cooperative shipment or be hauled in an auto truck.

It is thus seen that a variety of ways for marketing are open to hog growers, wherever transportation facilities are at hand. The net returns, however, are seldom the same. The variation may be, and often is, considerable, and may make the difference between profit and loss. At each particular time or place there are usually one or two ways in which hogs may be marketed that will yield greater returns than will the others. A careful study of markets and a comparison of prices is therefore at all times essential to the establishing of a good marketing practice.

This bulletin has been prepared for the purpose of giving to the hog growers of Oregon information regarding markets, marketing, and the function and operation of the various organizations or methods concerned in the handling of hogs over the route between the grower and the packer, the retailer or the consumer. It makes no recommendations as to possible changes or improvements in any system of marketing but leaves that interesting subject for future consideration.

THE PORTLAND LIVE STOCK MARKET

By far the greater number of hogs raised in the United States find their way to market through stock yards such as those at Chicago, Omaha, Kansas City, and other central points. Oregon hogs are marketed largely through the stock yards at North Portland, which are typical of the yards in the larger centers. A description of the Portland Union Stock Yards and its method of handling business is here given. The same description would apply with but slight modifications to the stock yards at Chicago, Kansas City, Omaha, and other large live-stock centers, as well as to the yards at Seattle and Spokane. There are a number of organizations and agencies operating in connection with the marketing of live stock through the yards, each serving a separate and distinct purpose and each under separate management. That a distinction between these may be made plain, a brief outline of the functions of the more important ones will also be given.

THE PORTLAND UNION STOCK YARDS

The Portland Union Stock Yards are owned, operated, and managed by the Portland Union Stock Yards Company, a corporation organized and incorporated under the laws of the State of Oregon.

The yards at North Portland were opened in 1909. Previous to this date live stock entering Portland was handled at 15th and Vaughn Sts., where the Portland Union Stock Yards Company started its business.

The Stock Yards cover many acres, with railroad tracks, unloading facilities, docks, pens, and buildings adequate to the transaction of the business of receiving, yarding, feeding, watering, weighing, and delivering or reshipping live animals. The Union Stock Yards Company neither buys, sells, nor slaughters live stock, but provides facilities for handling animals of all classes for the convenience of buyers, sellers, and shippers.

The daily capacity of the yards is 4,000 cattle, 10,000 hogs, 15,000 sheep and 300 horses.

Feeding and Watering. All stock arriving at the yards are fed and watered soon after being unloaded and located in the pens. This work is done by stock yards employees and requires no attention on the part of the owner, although he or his commission man may give instructions as to the amounts and kinds of feed, and the time of feeding and watering. All feed is supplied by the stock yards company from the sale of which it derives a part of its income. Animals are fed and watered before being offered for sale and are given an opportunity fully to satisfy their appetites or acquire what is known as a "fill." In the case of hogs whole wheat is usually fed and ordinarily a car load of hogs will eat 250 to 500 pounds. The shrinkage in weight en route is often largely made up by this "fill."

Weighing. All animals are weighed as soon as possible after being sold. The weighing is done in the presence of both seller and buyer. The weighmaster, who is an employee of the Stock Yards Company, is under bonds to do accurate work; and the scales are tested each month. The weight is automatically recorded on the sales slips which are made out in triplicate, one copy of which goes to the buyer, one to the seller



Fig. 1. THE SCALES. Buyer and seller observing the weighing of a load of hogs.

and one left on file with the Stock Yards Company. Every scale ticket must represent a bona fide sale and must carry the name of the buyer, the name of the seller, the number of animals and the price at which sold. From these sales slips a report is made up each day giving the volume of business passing through the yards and the prices received, which information is given out daily to the press. Anyone interested can inspect these sales slips at any time. A heavy penalty attaches to the falsifying of these slips in any particular.

There are three scale houses in the yards, each in the charge of a separate weighmaster. Any person dissatisfied with the weighing of his animals can, on request, have them reweighed on either of the other scales. The purchaser of the stock is given, with his weigh slip, a gate order which allows him to remove his animals from the yards.

Charges or Fees. A yardage fee of five cents a head for sheep, eight cents for hogs, with a maximum of \$8.00 a car, and twenty-five cents for cattle is made for all animals sold through the yards. If no sale is made before the animals are removed from the yard this fee is not

collected. A charge is also made for feed eaten by stock while in the yards. Stock is usually sold before three o'clock on the day of arrival so the amount of feed used is small. Insurance is carried on all stock in the yards against fire, either direct or indirect, for which a charge of ten cents a car is made.

These charges are a lien on the stock and are deducted by the commission man from the gross sales before returns are made.

Hours of Business. The hours for buying and selling at the yards are from 8:00 a. m. to 3:00 p. m. except on Sundays or holidays. No stock is sold except during regular business hours. Employees, however,

PORTLAND UNION STOCK YARDS CO.										Date <i>Apr 26, 1917</i>		Correct	
Sold By <i>Benson Com. Co.</i>					Scale No. 2					Correct			
Sold To <i>Barton & Co.</i>										Correct			
Sold For <i>Harrington</i>										Correct		Reper	
Pen	Cattle	Hogs	Sheep	Weight	Dues	Price	Amount						
<i>830</i>			<i>97</i>	<i>18900</i>	<i>40</i>	<i>16</i>	<i>301760</i>						
Sows		Stage		No 27719		<i>Read</i> Weighmaster							
<i>Sevier</i>		Inspector		<i>Read</i> Weighmaster									
				<i>Read</i> Weighmaster									

SPACE TO RIGHT FOR PURCHASER ONLY

Fig. 2. SCALES REPORT. Always made out in triplicate.

are on duty at all hours of the day and night for the purpose of unloading, feeding, and otherwise looking after the stock under their charge.

Commission Men

Sales at the stock yards are almost invariably made through commission men, although any person shipping stock to the yards can make his own sales if he so desires. Following is an alphabetical list of the commission firms that have offices in the Stock Exchange building and that are bonded and licensed to do business in the yards.

- Benson Live Stock Commission Co.
- Bodine & Clark Commission Co.
- Hunt Commission Co.
- O. D. Jones, Commission Merchant.
- Kidwell & Caswell Livestock Commission Co.
- Lacey Commission Co.
- Sevier Commission Co.
- Willard Commission Co.

The men composing these firms are familiar with live stock, are efficient salesmen, and are consequently able to offer the live stock shipper expert service. They keep posted as to market conditions, know the buyers and the type and quality of animals for which they are

looking, and are thus often able to secure more for stock than could the owner, who is unknown to the buyers and not familiar with the market. All sales take place in the presence of the animals being sold and each lot goes to the highest bidder. The animals are not auctioned, however, but the salesmen get in touch with the various buyers, show their animals, and sell to the best possible advantage. The various commission firms are active competitors and in order to build up their business make every effort to secure the highest possible price for their shippers.

The method usually followed is to ship direct to one of these commission men, who will take full charge of the stock on arrival, the owner accompanying the car or not as he sees fit. All sales are for cash and are usually made before three o'clock on the day of arrival. Remittance is made promptly with freight, commission, and yardage charges deducted. If no sale is made and the animals removed from the yards by the owner, there is no commission charge.

The rate of commission is fixed by the stock yards exchange. For single animals the amount is, sixty cents for cattle, twenty cents for hogs, and twenty cents for sheep. For carloads the maximum charge is \$15.00 for cattle, \$10.00 for hogs, and \$10.00 for sheep. For double-deck cars of hogs or sheep the charge is \$15.00. For mixed cars the single animal rates govern, but in no instance shall the total charge be more than \$15.00 a car. The same rate prevails whether the stock is shipped by one or several owners.

Buyers

A number of the larger packing plants of the Northwest maintain buyers continuously at the yards. Numerous other buyers are daily or at least frequently in the market. Anyone who wants live stock for any purpose can buy at the stock yards. Following is a list of buyers together with the number of animals purchased by each during the year 1916.

Disposition of Livestock Sold at the Portland Stock Yards

Year Ending December 31, 1916

	Cattle	Calves	Hogs	Sheep	H & M.
Portland Buyers					
Union Meat Co.....	29,366	1,277	179,923	105,660	13
Butchers	1,780	62	617	1,356	8
S. & O. Co.....	2,341	39	4,348	2,359	.....
North	5,875	18	25,837	516	6
F. L. Smith.....	5	.....	489	.....	.....
Steusloff	29	.....	.....	.....	.....
Gill Co.....	1,905	2	.....	.....	.....
R. Fairchild.....	1,846	8	260	9	.....
T. Howitt	1,741	65	6,859	1,411	21
Misc. Portland.....	513	44	416	318	7
Misc. Oregon.....	1,557	313	1,076	1,566	85
Feeders, Oregon.....	3,845	788	1,702	7,340	390
Other Buyers					
Carstens & Co., Tacoma	10,778	39	51,258	5,444	.....
Chambers	55	.....	.....	.....	.....
Frye & Co., Seattle.....	890	209	3,560	.....	.....
Jas. Henry, Seattle.....	1,613	.....	11,022	6,227	.....
Tacoma Meat Co.....	817	44	4,905	865	.....
Barton & Co., Seattle...	2,417	6	6,168	25,196	.....
Seattle Yards.....	1,023	3	12,711	.....	5
Puget Sound Pkrs.....	1,005	.....	9,653	771	.....
Misc.	1,670	362	1,145	3,429	1,835
Feeders, Mont.....	3,771	651	.....	.....	52
Misc. Idaho.....	5	.....	.....	.....	.....
Feeders, Idaho.....	256	93	59	12	149
Calif.	157	74	405	2,681	6
Montana	118	96	.....	.....	.....
Misc. Washington.....	603	29	80	2,669	166
Feeders, Washington...	2,162	259	603	5,682	140
Feeders, California.....	73	.....	92	2,188	.....
Misc. B. C.....	4	2	.....	451	12
Total	78,220	4,519	322,898	176,150	2,895

The plant of the Union Meat Company, the largest purchaser on the market, adjoins that of the Portland Union Stock Yards Company and because of similarity of names these two organizations are often confused. While both plants are owned and controlled by the same interests, they have different officers and different lines of business. The Union Meat Company buys its supplies at the yards. It also makes use of facilities offered by the stock yards for feeding and holding stock. The Union Meat Company has facilities for handling 350,000 to 400,000 hogs annually, if these are fairly well distributed throughout the year.

Speculators

The speculator operates on the market buying hogs when prices are low and holding for more favorable conditions. At the Portland yards the speculator deals largely in a class of hogs more or less unfit for market, thin hogs or under weights, for which the butcher will pay only a low price. Many cars of mixed hogs contain from a few to many of these undesirable animals. The speculator buys these at a price often in advance of what the butcher can afford to pay and gets them together in sufficient numbers to attract bids from men who make a business of feeding hogs for market. Or the speculator may himself be also a feeder. These hogs are usually taken outside the yards for feeding and when in condition returned for sale.

The operations of the speculator in live hogs may at times have a steadying effect on the market and so be of benefit to the shipper.

Business Facilities at the Yards

In addition to the business organizations already mentioned there is maintained at the yards a joint railroad agency, representing all the lines entering Portland, telephone and telegraph stations, a post office, a live-stock loan company, a serum company, and a bank.

The Stock Yards Exchange

The shipper of live stock has no direct dealings with this organization. It exercises supervisory powers, however, over the business at the yards, and for that reason a brief description of its organization and work is here given.

The Stock Yards Exchange is a voluntary association of packers, buyers, commission men, bankers, and others interested in a business way at the yards. Its specified objects include the following: to promote uniformity in customs and usages at the yards; to provide facilities for the orderly and prompt conduct of business; to facilitate the speedy adjustment of disputes and generally to promote the welfare of the Portland market.

This body is identified with the National Live Stock Exchange, which includes local exchanges at the various markets over the country. It neither buys nor sells live stock, but is regulative and protective in its functions. It fixes commission charges and promulgates rules and regulations for the conduct of business and the safeguarding of interests concerned. A heavy penalty attaches to a violation of its rules and the offender may be suspended and prevented from doing business on the yards.

Handling a Carload of Hogs Through the Stock Yards

Having briefly outlined the function of the various organizations concerned in stock-yard activities, it will doubtless be of interest to the multitude of hog growers who seldom, or never, visit the yards to know just how their hogs are handled on arrival.

When a car arrives and is switched to the unloading docks it is unloaded at once whether the hour be day or night. Employees set the dock aprons and gates and drive the hogs to the dock pens. Other employees make note of the number of the car, count the animals and drive them to a pen in the yards where they are again counted, locked in, and held until their ownership is determined. If the car should happen to contain dead or injured animals note is made of this fact also.

The hogs are fed in troughs provided for the purpose, whole wheat being the grain used. The pens are provided with clear, fresh, running water.

As soon as the hogs have rested and eaten what they want, or made what is called a "fill," they are ready for sale. Bargaining may begin at once with the various buyers, who look the hogs over carefully, moving about among them observing each individual. If the car contains animals of different classes, a price is agreed upon for each class. Seldom is a car of mixed hogs sold for a straight or uniform price.

When a sale is made, the animals are separated by buyer and seller and weighed. In separating or cutting out the animals of the different classes, the buyer and seller stand by the gate and together determine the class in which each hog belongs. In weighing, the scales are first carefully balanced and each lot weighed separately. As the animals leave the scales they are scrutinized carefully by the official dockerman, employed by the stock yards exchange, who docks each stag eighty pounds and each piggy sow forty pounds. The number of stags and piggy sows is entered on the weigh master's slip and the amount of the dockage is deducted from the actual weights. A final count of the hogs is made at the scales.

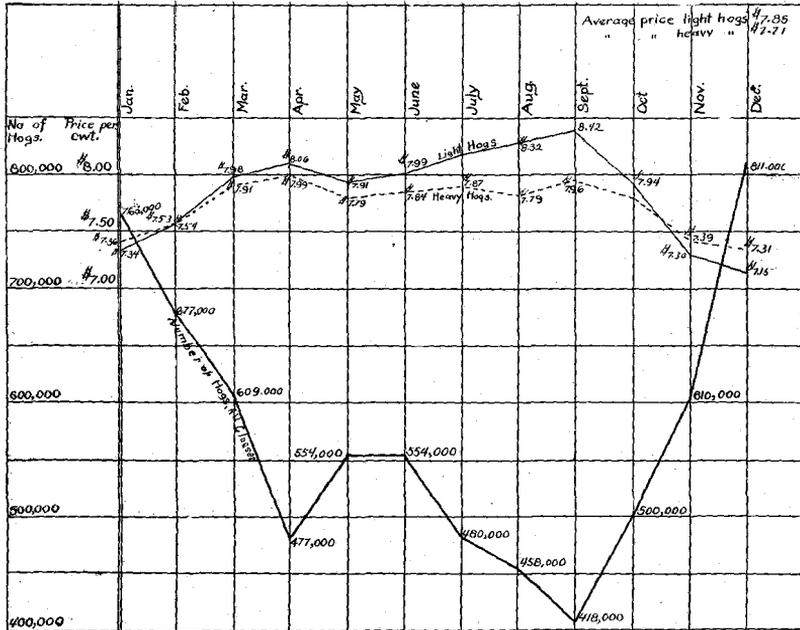
As soon as the hogs leave the scales they become the property of the buyer and all responsibility of the seller ceases. The buyer is given a gate order which permits the removal of the animals from the yards. He may remove them immediately or leave them at the yards as long as he chooses.

Sales are invariably for cash and the owner is given a check before leaving the yards, or if he is not present the check is mailed to him that day. When the supply of stock is light the buyers work rapidly so as to fill their orders before the stock is all sold or before the price advances. In this case practically everything will be sold by 11:00 a. m.; but if there is a heavy run the buyers get rather independent and hold off as long as possible with the hope of getting the stock for less money.

MARKETING LIVE HOGS

A majority of the hogs raised on the farms of Oregon are sold in their live form. In Oregon as in other states a marked variation exists as to the number of hogs sold and price paid at different seasons of the year. The normal time for fattening and finishing the hog is during the fall months after it has made its growth, largely on pasture during the

summer, and when the season's grains are available. This often results in the market being somewhat over supplied at this season, with a consequent depression in price.



Monthly Supply and Price of Hogs at Chicago
Average for Seven Years, 1909-1915, Inc.

Fig. 3. DIAGRAM OF MONTHLY SUPPLY AND PRICE OF HOGS AT CHICAGO. Average for seven years, 1910-1915, Inc.

The farmer who can so adjust his farming and hog raising that his hogs will be ready for market during the summer months will usually realize a higher price for them.

There are a number of channels through which live hogs move from farm to market; these will be described in the following paragraphs.

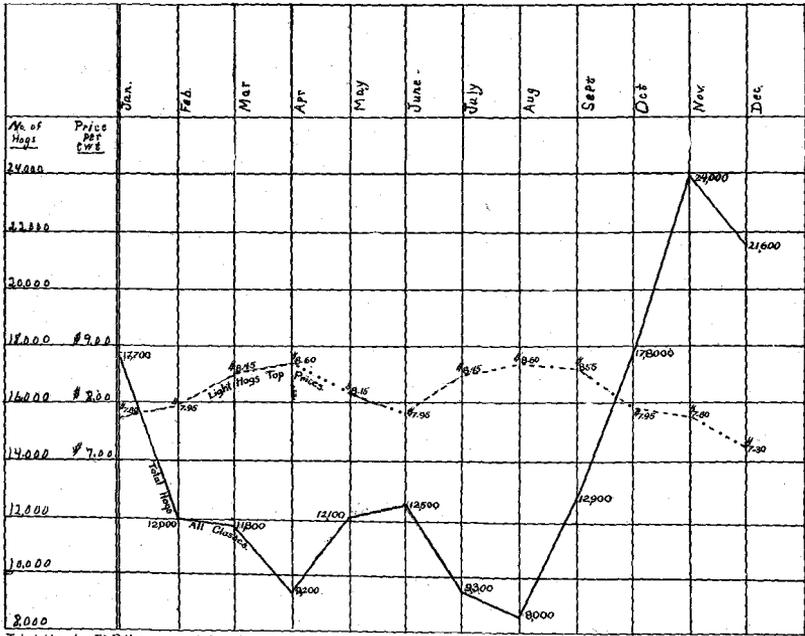
Individual Car-Lot Shipments. Men who raise hogs in sufficient numbers to enable them to make car-lot shipments usually make direct shipments to the stock yards consigned to some commission firm. They will secure exactly as much for their hogs as would the shipper or middleman and thus save the handler's profit for themselves.

Shippers. Live-stock shippers are men who make a business of buying live stock from the farmers and shipping to the large central markets. The shipper buys a few hogs here and a few there until he has a car load and then takes them to market. In nearly every locality in Oregon there is a shipper doing business. Hogs cannot be shipped in less than car lots without undue cost, and hence the buyer or shipper is almost a necessity in communities where hogs are raised in comparatively

small numbers unless growers get together and make cooperative shipments or are near enough to Portland to make use of the auto truck.

The shipper keeps posted as to market conditions and buys on a margin that will enable him to meet the expenses of the shipment and make a profit for himself.

To enable shippers to buy on a narrower margin with less risk, some of the packers furnish shippers with a guaranteed price on good hogs. This information, which is wired the shippers twice a week, is based on the bulk of sales on Mondays and Thursdays. These guaranteed prices,



Tubulation by E.L. Batten.

Monthly Supply and Price of Hogs at North Portland.

Average for seven years 1909-1915 Inc.

Fig. 4. DIAGRAM OF MONTHLY SUPPLY AND PRICE OF HOGS AT NORTH PORTLAND. Average for seven years. 1909-1915, Inc.

therefore, are not very different from the average price obtained on the open market, but they do remove some of the uncertainty and so enable the shipper to do business with less risk.

The practice of guaranteeing prices was established in the early days of the yards for the purpose of promoting and encouraging shipments from Willamette Valley points where there were but few hogs and where the farmers had been in the habit of shipping their hogs dressed. The practice has been confined to the Willamette Valley and the stock yards officials say that even there will probably be discontinued within a few months.

Cooperative Marketing. Through cooperative marketing the advantages of access to the wide market at the stock yards can be realized by hog raisers generally, even though the number of animals kept be few. By this means a sufficient number of hog growers combine their shipments and so make up a car load. The expense of handling at the yards is no more than if the shipment was made by a single individual.

Cooperative marketing associations are in operation in Oregon and the result of their work is so satisfactory that the general plan of organization and method of operation is given elsewhere in this bulletin in considerable detail. (See Appendix I.)

Marketing by Auto Truck. With the advent of the automobile and the improvement of roads, the number of live hogs going to market by auto truck is rapidly increasing. At the Portland Union Stock Yards only 300 hogs were received by this means during 1910, while during the year 1916 the number brought in by truck had increased to 15,000. It is estimated that 20,000 hogs will arrive by truck during 1917. The reason for the phenomenal growth in this method of marketing lies in the fact that the hogs are picked up at the various farms and that inexpensive

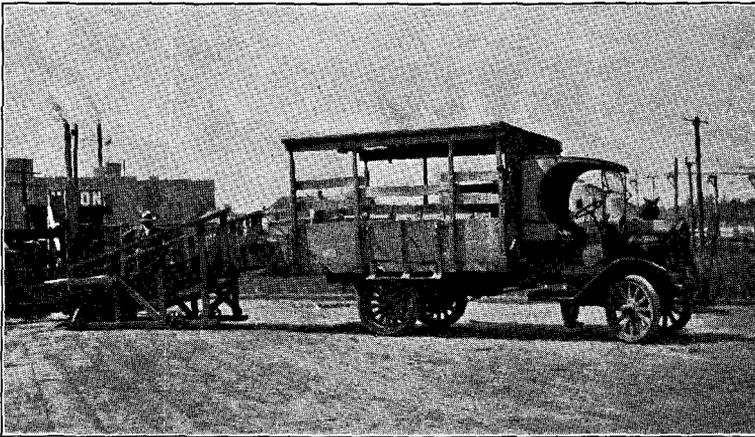


Fig. 5. AUTO TRUCK USED IN DELIVERING HOGS TO MARKET.

and rapid transportation is provided for less than car-load lots. Some truck men have regular routes that they cover two or three times a week. Further hard surfacing of country roads will result in these auto trucks operating over a much wider area than at present.

The business is variously handled. Some truck owners are also live-stock buyers and purchase the hogs outright from the farmers. Others deliver to the stock yards at an agreed price per head or hundred weight, and sales are made by commission men the same as in the case of rail receipts. In the latter case the animals of each owner are so marked that they can be identified on arrival at the yards.

Country Buyers. Some of the larger packing plants employ buyers to purchase hogs for them direct from the growers and ship from various country points in car lots. These men are usually employed on a salary. They know hogs, thoroughly, are kept posted as to market conditions, and are keen buyers. Cash is paid for the hogs at the shipping point, the price being governed largely by the condition of the market at Portland or other central market. Portland packers employ practically no country buyers, but the Seattle and Tacoma packers obtain a large share of their supplies in this way. These Washington buyers work largely in Eastern Oregon.

Local Butchers and Packers. Nearly every town in our State has one or more local butchers who buy live hogs from the farmer. In selling to these butchers the farmer is usually required to deliver the hogs to a slaughter house in the outskirts of the town. The butcher slaughters and dresses the hogs and cuts them up for his own retail trade. Many of the butchers buy in excess of their retail needs and ship the surplus either alive or dressed to Portland.

Prices paid to the farmer usually correspond more or less closely with quotations on the Portland market, less a reduction for the expense of reaching that market. In localities isolated from railroads or other means of transportation, the local butcher may be practically the only market for hogs. Under these conditions the price is mainly dependent upon supply and demand and may move one way or another irrespective of market quotations.

Some local butchers operate regular packing plants and prepare and cure hams, bacon and other pork products which are sold, mainly, to the trade in their own section of the State. These plants depend largely upon the farmers in their own community for their supply of live hogs. The prices paid to the farmer for his hogs usually correspond with Portland quotations less a reduction for the necessary expense for reaching that market.

THE MARKET FOR DRESSED HOGS

There is a considerable demand for dressed hogs in all parts of the State. Often the farmer has a choice of the following ways of disposing of them. (1) To the local butcher or retailer. (2) On the public market. (3) As cured products. (4) The Portland market, to the retailer or through the commission man.

The Local Butcher. Many retail butchers in the towns and smaller cities of the State receive all or a considerable part of their supply of pork direct from the farm in the form of dressed hogs. This market is limited, however, to the local consumption of pork, and only a small part of the hogs raised in a community can, ordinarily, be sold in the home town or trading place. Prices vary in different communities, but in towns located in or near transportation lines the price is governed more or less by quotations on the Portland market.

The Public Market. A number of the cities of the State maintain public markets where the farmer is given the opportunity of selling direct to the consumer. The cost of a booth in the market is nominal, and if one knows how to cut up a carcass he can realize more for his pork than if sold in any other way. Prices are fixed by the market master and are somewhat lower than city retail prices. It requires considerable time to dispose of hogs through the market and the additional price received must be considered in part as wages for this extra work.

Home Curing. The practice of curing hams and bacon at home in sufficient amounts to meet family needs is followed by a large number of hog raisers. More home-grown product is thus consumed on the farm, and the meat secured at a much lower price than if bought from market or store at retail rates.

Many growers have worked up a considerable trade in their home communities or nearby towns for these products, and often find through this means a better market for their hogs than if sold alive or as dressed pork. The demand for home-cured pork, however, is limited; and unless the farmer is expert at curing and can make a reputation for putting up a fancy product he often may better sell his hogs in some other way.

The Portland Market. Country dressed hogs make up a considerable portion of the pork supply of Portland. Dr. E. E. Chase, City Meat Inspector, reports that 27,872 carcasses were received in Portland during 1916 from country points. These hogs were received mainly by express from a large number of shippers in different parts of our State. Dressed hogs are handled by both retailers and commission men. The retailer usually makes arrangements for shipments in advance and at an agreed price or in other words, purchases the hogs outright. The commission men accept all shipments, whether previously notified or not, and sell on commission. The rate of commission is usually 5%, the shipper paying transportation charges. All dressed hogs received in Portland are subject to inspection by the City Meat Inspector. If the carcass shows evidence of disease or if the meat is spoiled, all or a part will be condemned, in which case the loss falls on the shipper. Meat is extremely perishable and not infrequently lack of proper preparation or delays in transportation will cause spoilage and consequent loss.

In dressing hogs and shipping them to market care should be taken that they arrive in the best possible condition, and as near as possible in accord with the market demands. A man accustomed to dressing for the city trade should do the work, and the killing should be done the day before shipment, that opportunity be given for the carcass to become thoroughly cooled. Kidneys should be left in the carcass but all other organs removed. If the animal is a large one, split the backbone from the inside at the shoulder for a foot or more nearly to the outside skin, in order that the animal heat may more readily escape. Sour meat sometimes results if this is not done. A short stick placed across inside

the carcass will keep the sides apart and aid in cooling. Work neatly done and a carcass thoroughly cleaned and washed presents an appearance that makes a good reputation for the grower and favorably affects the selling price. The whole carcass must be shipped, for the inspector will not pass a part of a carcass. Each carcass must be covered before shipment, in accordance with the following ruling of the Dairy and Food Commissioner:

Regulation 22. Meat for Transportation

"Any meat or meat food product which is hauled or carried on the street or road must be completely covered so as to protect it from dirt and flies. Each and every part of carcass, or whole carcass, before being delivered to any express, railway or transportation company or carrier for transportation from one point to another within the State of Oregon, for shipment, must be tied in a clean sack or well wrapped in a clean cloth, or otherwise protected in such a manner that it cannot be contaminated with dirt or flies, and no transportation company or other carrier for transportation shall receive for shipment any such carcass, or part of carcass, unless it is so protected; Provided, that the provision of this Regulation shall not apply to car loads of carcasses, in which case the carcasses must be placed on racks and kept off the car floor."

The covering referred to in this regulation may be returned to the shipper and if clean can be used again.

The advantages of shipping dressed hogs are: (1) a market is always at hand even though the shipper has only one or two hogs to sell. Dressed hogs can be shipped in lots of one or more from any railroad station in our State while live hogs can be shipped to advantage only in car lots; (2) the dressed hog can be delivered to the station more easily; (3) a high-class hog, well fattened and finished, may, because of a high dressing percentage, bring a little more in the dressed form than if sold alive.

The disadvantages of shipping in the dressed form are: (1) necessity for some butchering equipment and the work involved in dressing and preparing for market; (2) Danger of spoilage and loss en route to market; (3) Lack of a check on weight and selling price; (4) Partial loss of offal and by-products; (5) bad name for poor dressing and handling.

The following table shows prices dressed hogs must bring in comparison with definite prices for live animals, if the same sum is to be realized. Dressing or marketing costs are not included in this comparison, which is based on dressing percentages of 70%, 75%, and 80%.

The average dressing percentage for fairly well-finished hogs is about 75%. The dressing percentage is the number of pounds of dressed pork secured from each 100 pounds live weight.

Live Price, per cwt.	Dressed Price, per cwt.		
	70%	75%	80%
\$ 7.00	\$10.00	\$ 9.33	\$ 8.75
7.50	10.71	10.00	9.38
8.00	11.43	10.67	10.00
8.50	12.14	11.33	10.63
9.00	12.86	12.00	11.25
9.50	13.57	12.67	11.88
10.00	14.29	13.33	12.50
10.50	15.00	14.00	13.13
11.00	16.43	15.33	14.38
12.00	17.14	16.00	15.00
12.50	17.86	16.67	15.63
13.00	18.57	17.33	16.25
13.50	19.29	18.00	16.88
14.00	20.00	18.67	17.50
14.50	20.71	19.33	18.13
15.00	21.43	20.00	18.75
15.50	22.14	20.67	19.38
16.00	22.86	21.33	20.00
16.50	23.57	22.00	20.63
17.00	24.29	22.67	21.25

By comparing prices offered on the market for live and dressed hogs and deducting all expenses in connection with marketing, one can readily determine in which form the greatest net returns will be received.

If hogs are sold in the dressed form, the dressing percentage has a market effect on the amount that will be realized. To illustrate: A 250 pound hog selling alive at \$15.00 per cwt. would bring \$37.50. If the dressed price was \$20.00, the carcass would bring, on a 70% dressing basis (175 lbs.), \$35.00; on a 75% basis (187.5 lbs.), \$37.50; and on an 80% basis (200 lbs.), \$40.00.

A fat, well-finished hog gives a high dressing percentage; a thin hog a low dressing percentage.

CLASSES AND GRADES OF HOGS

The classification and grades of hogs given below are generally recognized on the Portland market. It should not be understood from this, however, that hogs are classified and graded on arrival at the market. This is not done. Each sale is made on the merits of the animals being sold and class or grade may not be mentioned in connection with the transaction. No hard and fast rule can be laid down as defining the line between classes or grades, except in the case of typical animals. Market conditions are also continually changing, a fact which in turn always affects the dividing line. If the market is strong for any particular class or grade, then animals will be accepted in that class by the buyer that would be cut out under the opposite conditions. The terms "strong" or "active" and "slow" or "dull" refer to condition

of the market and not at all to prices. The terms "high" and "low" refer to prices only. It is possible to have a low strong market or a high slow market. Prices under the former condition would tend upwards while in the latter, they would tend downwards.

Classes and grades are used at all the stock yards of our country in reporting daily sales of hogs. They are also used everywhere by educational institutions in connection with their instruction and work in hog raising. It is of first importance, therefore, that men engaged, or interested, in the hog-raising industry familiarize themselves with the generally accepted classes and grades and be able to recognize typical representatives on sight.

Market Classes and Grades of Hogs at Union Stock Yards, Portland

CLASSES	GRADES
Heavy butcher hogs 235 to 350 pounds.....	{ Prime Good Common
Light butcher hogs 150 to 235 pounds.....	{ Prime Good Common
Pigs 90 to 150 pounds.....	{ Choice Good
Rough heavy 250 pounds up.....	{ Stags Old sows
Stockers, hogs too thin to butcher.....	{ Good Common
Skips, odds and ends, not in any recognized class	{ Usually very light pigs 50 to 90 pounds
Cripples. Hogs injured en route.	

HEAVY BUTCHER HOGS

Hogs in this class will vary in weight from 235 to 350 pounds, or may even run somewhat heavier. Market demands in recent years have tended toward a lighter hog and the proportion of heavy hogs appearing on the markets has been less from year to year.

Less than ten percent of the hogs received at the stock yards during 1916 were of this class. The price paid for heavy hogs is dependent to a great extent upon the price of lard.

At the present time, there is a shortage of animal fats in the world's food supply, and consequently heavy hogs now command good prices with a strong demand. The cost of producing a pound of pork increases materially after the hog reaches the weight of 250 pounds, and this fact will prevent any great increase in the proportion of hogs of this class unless a decided advance in prices above lighter classes should be maintained for a considerable period.

Hogs of this class are graded as "prime," "good," and "common."

Prime Heavy Hogs. To grade as a prime hog, whatever the class, the animal must show much excellence in form, quality, and condition or finish. These points are closely related to dressing percentage and to

quality of finished product, and, therefore, are indications of actual value. The term "prime" refers to a definite condition of a hog relative to the points mentioned above.

FORM: The form of a prime hog must show a broad back, wide, well-filled shoulders, broad and deep hams, short, heavy neck, heavy jowls, deep sides and short legs. These parts must be well developed and at the same time the hog must be symmetrical and compact.

QUALITY: In using this term we refer to the refinements that are characteristic of well-bred swine. The head should be clean cut, of medium size, with no surplus fat or wrinkles of skin, the ears of medium size and fine; the skin smooth, pliable, and free from wrinkles; the hair

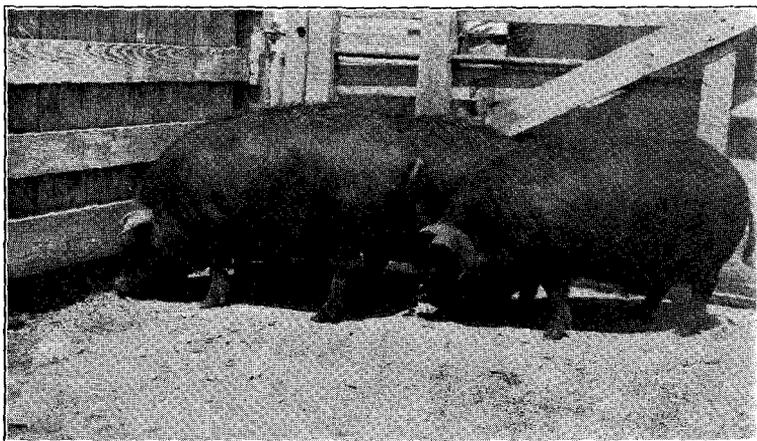


Fig. 6. PRIME HEAVY HOGS. Age 15 months. Average weight 275 lbs. These topped the market of date of sale. Raised, fed, and marketed by J. A. Eggleston, Joseph, Ore.

fine and silky and lying close to the skin; the bones fine, firm, and free from coarseness at the joints; and the tail smooth, tapering, and not too long.

CONDITION: By condition is meant the degree of fatness. Since the amount of lard a carcass will yield is dependent upon its condition or degree of fatness, this point may be a greater factor than either form or quality in determining the grade to which a fat hog belongs. Prime hogs must be covered with a thick layer of fat over the entire body, have a broad, fat back and well-rounded rump; be well filled out on the neck up to the face; have deep, full sides and flanks, with much fat on the belly, and be well filled in the twist. In addition they must be free from flabbiness and show a firm, even, symmetrical development.

Good Heavy Hogs. Hogs of this grade although ranking below prime are still in a good state of development and usually bring within ten to

twenty-five cents a hundred weight of the price paid for the higher grade. They may be deficient in form or lacking a little in quality or condition.

Common Heavy Hogs. A more marked deficiency in condition and finish is shown in this class but they are still fair butcher hogs. Lack of condition and finish indicates a low dressing percentage and correspondingly lower prices will be realized.

LIGHT BUTCHER HOGS

The ordinary limit of weights for this class of hogs is from 150 to 235 pounds. The type of hog for which the highest price is paid is dependent altogether upon the type and quality of hog products for which there is the greatest demand. Recent years have shown a steadily increasing demand for light hams and shoulders containing a considerable proportion of lean meat and for a lighter bacon with alternate layers of

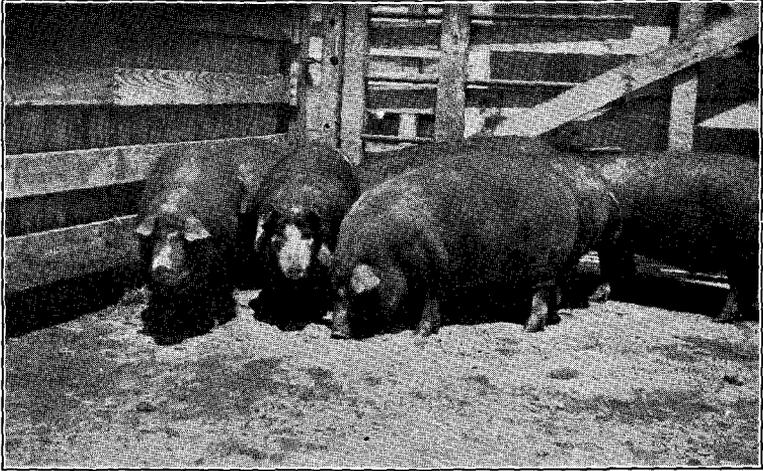


Fig. 7. PRIME LIGHT HOGS. Average weight 205 lbs.

(Marketed by G. W. Eyre, Salem.)

fat and lean. This has resulted in top prices being paid for this class, consequently hogs have been finished at a younger age and with lighter weights. This condition has been of advantage to the feeder because of the economy of gains and quicker returns in the younger hog. Above fifty percent of the hogs received at the stock yards during recent years have been of this class. Top prices have been realized until very recently, when the unprecedented demand for lard has forced the heavy hog to the top of the list. Hogs in this class are commonly graded as "prime," "good," and "common."

Prime Light Hogs. To grade as "prime," hogs of this class must show much excellence of form, quality, and condition. There must be the refinement incidental to good breeding. The form must be such as will

insure a high dressing percentage and a quality and condition that guarantees a superior product. The body must be covered with an even layer of fat and be smooth and compact.

Good Light Hogs. Hogs in this class rank just below "prime." They are in good condition for the butcher but show some deficiency in form, quality, or finish, the most common deficiency being a lack of condition or finish.

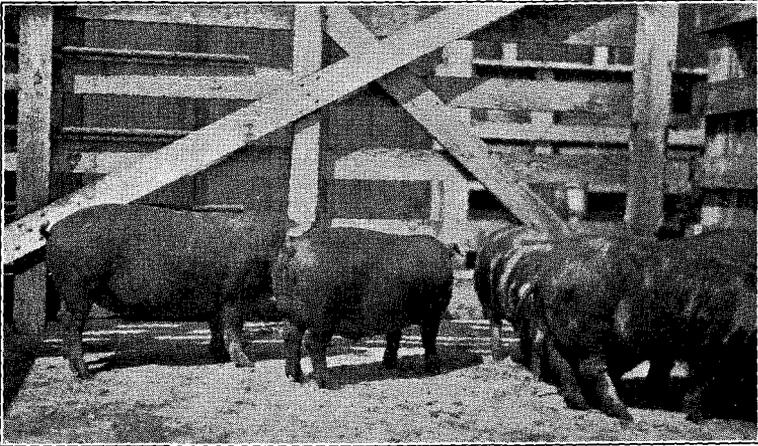


Fig. 8. GOOD LIGHT HOGS.

Common Light Hogs. Common light hogs are only in fair condition for the butcher and show a decided lack of finish when compared with

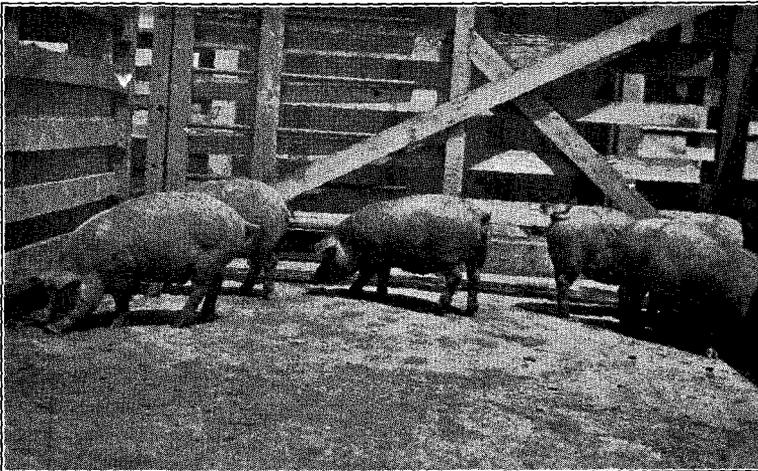


Fig. 9. COMMON LIGHT HOGS.

“prime” or “good” hogs. They sell at a reduction in price below “good” hogs that corresponds with their lack of condition. Whenever there is an over abundance of these unfinished hogs the lighter weights go to augment the classes of “pigs” and “stockers.”

PIGS

This class on the market includes animals 90 to 140 pounds in weight that are in good condition for the butcher. Most cars of light



Fig. 10. GOOD PIGS.

hogs will include a few animals of this class that will be cut out and weighed and sold separately. Pigs are usually graded as “good” and “common,” and sell at a discount of \$1.00 to \$2.00 under the price paid for prime light hogs. There are seasons of the year when there is almost no sale on the market for pigs. Whenever possible they should be retained in the feed lot until they more nearly meet market demands.

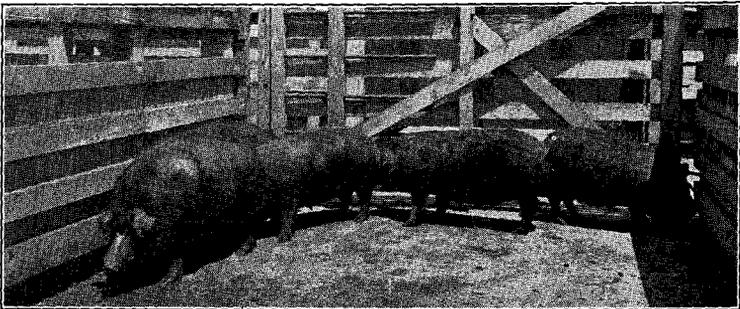


Fig. 11. ROUGH HOGS.

ROUGH HEAVY HOGS

Animals in this class weigh from 250 pounds up and are mainly stags and old sows. They may be in good condition but are coarse and rough. When arriving with other hogs they are always cut out and weighed and sold separately. The price is usually \$1.00 or more a hundred under that of good heavy hogs and in addition each stag is docked 80 pounds and each piggy sow 40 pounds. These amounts are deducted from actual weights before settlement. See Fig. 11.

STOCKERS

Stock, or feeder hogs, as they are sometimes called, are thin hogs not in condition for the butcher. There are considerable numbers of this

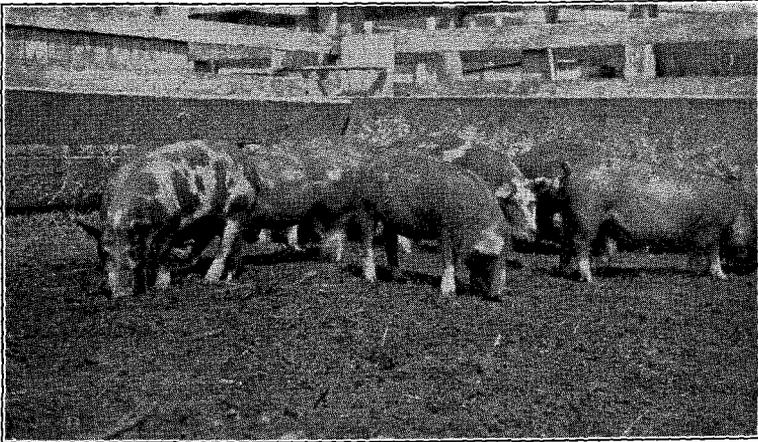


Fig. 12. STOCKERS AS FEEDERS.

class of hogs moving through the yards at nearly all seasons of the year. The price paid for them is largely dependent upon the relation between the price of feed and that of market hogs. They are purchased mainly by men who make a business of feeding and finishing for the market. They are taken to some outside point for this purpose and when in condition returned to the yards for sale. A ruling of the U. S. Department of Agriculture makes it necessary that all live hogs removed from the yards be vaccinated. A serum company has headquarters here and facilities are furnished for vaccinating quickly and cheaply.

CRIPPLES

Cripples, or "crips" as they are commonly called, are hogs that have been injured en route. If the injury is of short standing and the animal's temperature not unduly high the hog is sold to a packing firm at \$1.50 a hundred weight below the prevailing price of the class to which the animal belongs, and he is butchered as soon as possible. In case the

animal shows high fever, or there is evidence of disease, it is killed and thrown entire into the rendering vat, and the same nominal price given as in the case of hogs that are dead on arrival.

SKIPS

This is a term given odds and ends of hogs that will not pass in any of the recognized classes. They may be very young, lightweight pigs or older pigs seriously stunted. They sell at low prices and may be taken out by a feeder or sold to a butcher who kills them at once.

DEAD HOGS

Nearly every day some dead hogs are found among the car shipments. These are thrown into a vat, cooked under very high temperature, and converted into fertilizer and other by-products. If they weigh 100 pounds or more, a nominal sum is paid for them.

APPENDIX I.

HOW TO ORGANIZE COOPERATIVE SHIPPING ASSOCIATIONS

Cooperative marketing of live stock is sometimes taken up by farmers' organizations already in existence, such as the Grange or Farmers' Union. It is often advisable to conduct the work as one branch of the activities of these organizations rather than to form a new association for the purpose. The privilege of shipping, however, should not be limited to membership of such organizations but should be available to every stock grower in the community. Rules and regulations are necessary for the conduct of the business, and these should be agreed to by all availing themselves of its advantages. A manager should be selected and the business conducted in much the same way as by a separate organization.

Where a separate association is formed a simple form of organization suffices. Very little capital is required, as payment is not made until returns are received. It is necessary that the farmers meet together and adopt a constitution and by-laws, specifying the manner in which the business will be conducted. They will also elect officers and a Board of Directors who in turn will select a manager. It is not necessary to incorporate, but it may be of advantage to do so. If not incorporated, the Association cannot sue and be sued and in case of loss of stock through railroad accidents or other cause, the manager could not enforce claims for damages for the association but each shipper would have to present his individual claims. If incorporated, also, the liability of each member is limited to the amount of his holdings of capital stock. The amount of capital stock need not be large, and the cost of incorporating is but ten dollars with a small additional fee for recording the articles of incorporation.

A model constitution and by-laws for a cooperative shipping association and assistance in organizing can be secured through the Extension Service of the Oregon Agricultural College.

The Manager. The success of cooperative shipping will depend largely upon the integrity and ability of the manager. It is essential that he be honest and capable with a good knowledge of live stock and have an understanding of business principles and methods. He should be able to grasp the spirit of cooperation and to win and hold the con-

fidence of the farmers. His duties are to see that cars are available when needed and to be on hand on shipping days to receive, weigh, mark, and load the hogs. He must determine the commission firm to which the hogs will be shipped and whenever possible accompany the hogs to market. He will keep careful record of all transactions and keep in constant touch with market prices and conditions.

How Cooperative Shipping Operates. Members of the Association keep the manager posted as to the number of hogs they are feeding and the approximate time when they will be ready for shipment. Often a certain day in the week is set aside for loading. If as the day approaches, there are sufficient numbers of hogs in sight to load one or more cars, the farmers are notified. The manager orders the car and has all in readiness. The hogs are delivered to the manager, who weighs and marks them. He also issues a receipt showing the name of the owner and the number, class, weight, and mark of the hogs. The marks are usually made by putting narrow stripes of paint across the back or by clipping a numeral or other distinguishing mark in the hair. A manifest or record of all the shipments is then made out and summarized on a card prepared for the purpose.

The car should be bedded, preferably with sand which has been wet down, in the summer, and with straw in the winter. A light, dry feed should be given just before loading. Abnormal or over-feeding at this time will likely cause digestive disturbances that will result in a considerable shrinkage.

The manager usually accompanies the car to market, where the handling is practically the same as explained elsewhere in this bulletin. Each individual lot will be weighed separately and if there are animals of separate classes in a single shipment the hogs of each class will be weighed by themselves. Sometimes the manager classifies the hogs at points of shipment and no marks are put on the hogs, expenses and proceeds being prorated on the basis of weight and number only.

The commission firm makes returns to the manager, giving details of the sales, and the manager in turn pro-rates the shrinkage, expenses, and proceeds among the owners of the hogs. An itemized statement is made by the manager for each owner, showing the home and market weights, the price per pound, and the total amount received for his hogs, the home and market expenses, and the net returns. This is accompanied with a check for the amount.

If the members of an association can agree upon and raise a single breed of hogs, their shipments will be more uniform and make a better showing on the market.

Hogs can be shipped with other stock, as mixed cars, and many associations handle all kinds of live stock. Where this is done partitions must be built between the different kinds of animals.

Fees and Expenses. An annual membership fee of 50c or \$1.00 is necessary to cover incidental office expenses. This is usually deducted from the first shipment made each year.

The manager may be paid a definite sum on each car (often \$10.00) or given a small fee on each hundred weight of hogs shipped.

A fee of 2 or 3 cents on each hundred pounds is levied for a sinking fund to meet small losses that may occur such as the death of a hog en route to market and to cover insurance.

Practical Results. Direct savings of \$75 to \$150 a car load are indicated in reports from various associations in operation in our State. From one county 80 cars were shipped; from another 20 cars; and in

T. C. BENSON, President

W. T. MATLOCK, Vice President

J. W. CREATH, Secy and Treas.



LIVE STOCK COMMISSION MERCHANTS
PHONE WOODLAWN 2409

NORTH PORTLAND, OREGON April 13-17

SOLD FOR W. A. Ayers, of Bonoma Grange.

SHIPPED FROM Eugene, Oregon.

PURCHASER	CATTLE	HOGS	SHEEP	WEIGHT	SHRINKAGE			PRICE	AMOUNT	TOTAL
					LOWS	STAGS	LES			
Union Meat Co.		3		620				14.85	92.07	Geo. Smith
"	"	1		310				13.75	42.62	E. Zumwalt
"	"	1		210				13.75	28.82	D.H. Stam
"	"	4		870				14.85	129.19	O. E. Rebmén
"	"	6		870				14.75	128.32	W. Forrester
"	"	1		330		180		14.25	35.62	D. F. Jackson
"	"	2		390				14.85	57.91	" "
"	"	7		1210				14.85	179.68	W. Boava
"	"	3		550				14.85	81.67	W. G. Rieck
"	"	1 Cow		860				7.75	66.65	Frank Deming
"	"	1		280				13.75	38.50	A. Erickson.
"	"	2		570				14.85	84.64	R. Fox.
"	"	1		280				14.85	48.58	T. E. White
"	"	8		1550				14.85	230.17	F. B. Buckner
"	"	1 Cow		1000				7.00	70.00	R. Willoughby
"	"	14		2700				14.85	400.95	V. Grousbach
"	"	5		960				14.85	124.56	G. Grousbach
"	"	1		370				13.75	50.87	C. W. Curry
"	"	14		2220				14.85	329.67	" "
"	"	1		150				13.00	19.50	" "
"	"	3		610				14.85	90.58	E. A. Morrill
"	"	1		470				13.75	64.62	G. H. Gregg
"	"	1		230				14.85	34.15	" "
"	"	2		340				14.75	50.15	L. R. Roosman
"	"	1		370				13.75	50.87	" "
"	"	6		870				14.85	129.19	A. J. Smith
"	"	5		890				14.85	132.16	E. H. Ross
"	"	1		530				13.75	72.87	J. T. Walls
									\$2875.63	
CAR HOE:	NETS	AT	FREIGHT						\$40.15	
			FEED ON ROAD							
			TARIFFAGE						\$ 8.00	
			HAY						60	
			WHEAT						\$16.05	
			INSURANCE						.10	
			BRAND INSPECTION							
			COMMISSION						\$11.20	\$476.10
									\$2799.53	
									NET PROCEEDS	
									CASH	
									DRAFTS	
									DEPOSITED	
									S. & O. E.	

WE ALWAYS USE CARE, BUT IF ANYTHING IS INCORRECT OR NOT PLAIN WRITE US

Fig. 13. FACSIMILE OF SCALES REPORT ON COOPERATIVE SHIPMENT.

these instances it is estimated that an average of \$100 a car or a total of \$10,000 additional was received as a direct result of cooperative shipping.

The saving to the farmers is not all represented in the increased prices received by those who ship through the association, for buyers or shippers operating in territory covered by an association, or adjacent thereto, operate on a closer margin than formerly and pay the farmer a higher price than where other conditions prevail. As one manager puts it, "The full benefits of cooperative shipping are not revealed in a comparison of prices paid by a local buyer and what the association is able to realize, but in a comparison between what the association gets for the stock and what the buyer would pay if the association was not in existence."

The associations are regulatory in their effect on prices, and for this reason alone should be continued. Further benefits that follow cooperative shipping are the increased interest shown in classes, grades, quality, and prices of live stock. Every member of the association is kept in touch with market conditions through the manager. The association spreads reliable information regarding breeding, feeding, and handling swine. The association also may engage in other cooperative enterprises, such as buying farm and household supplies or selling farm products other than live stock.

In considering the advisability of organizing a shipping association in any locality existing conditions should be taken into consideration.

In many communities shippers are operating on a close margin and where this is true cooperative shipping would prove of little benefit as far as prices received are concerned.

APPENDIX II.

PRECAUTIONS IN SHIPPING HOGS

In driving hogs on foot to market or to the shipping point go slowly and in hot weather make the drive in the cool of the day. During the winter when the roads are frozen or slippery there is danger of the hogs becoming lame or even more seriously injured. Never whip, beat, or kick the hogs. Every stroke of this kind leaves a bruise in the flesh under the skin that must be trimmed out when the animal is dressed. Buyers discriminate against shipments of hogs showing welts or bruises.

Feeding. It is the practice of experienced shippers to feed lightly on dry grain for the twelve hours before shipping, giving what water the animals want to drink. It is a mistake to over feed just before shipping. Digestive disturbances are almost sure to result, especially in hot weather. The shrinkage en route will also be greater and the animals will not make so good a "fill" on arrival.

Preparation of Car. The car should be thoroughly cleaned and the bottom covered with sand to the depth of two or three inches. This work is supposed to be done by the railroad company before placing the car for loading. The sand should be wet down before the hogs are loaded. In cold climates straw is sometimes used instead of sand for bedding.

A standard stock car is 36 ft. 6 in. long, and if single deck, will hold about one hundred hogs of an average weight of 200 pounds.

Loading. Be careful in driving the hogs onto the car, and do not overload. Freight is cheaper than dead hogs, and overloading means crowding, which in turn often causes death through animals getting

down and unable to regain their feet. After the car is loaded it is well to remain with the hogs while the car is switched to the train. The hogs will be less frightened and will more readily become accustomed to their new surroundings.

En Route to Market. The railroad company is responsible for necessary feeding and watering, but it is advisable for the shipper to accompany the car and see that all goes well with his stock.

ACKNOWLEDGMENTS

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