Farm Business Notes

Packers in the Feedlot

Willis E. Anthony

The following quotation appeared in the publication of a prominent Minnesota livestock organization:

> *"Packer feeding of cattle . . . represents a serious and dangerous threat to livestock producers and feeders. It should be 'nipped in the bud' before livestock feeding goes the route of broiler production."*[1]

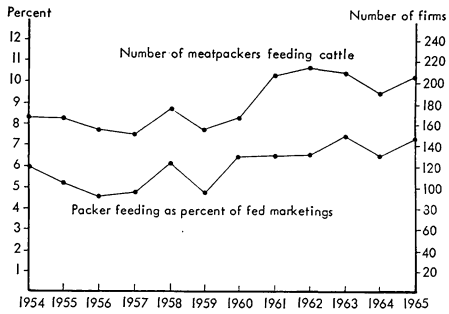
This opinion probably reflects the sentiment of many Minnesota cattle feeders. Moreover, it reflects an attitude toward the impact of vertical integration in other parts of agriculture.

This attitude is not so much a judgment regarding financial outcome of integration as it is a philosophy toward organization of farm production. Most farmers' comments indicate a fear of becoming "hired hands" of industry. Though preference and profitability are not independent, the prevailing concern probably is not so much with financial rewards as it is with independent operation as a way of life.

Vertical integration in cattle feeding has not followed the same path as it has with other farm enterprises. The integration has not been in the form of tightly specified production contracting, but in the form of cattle fed directly under the ownership and management of packing companies. Many cattle feeders are concerned about packer feeding because they dislike any possibility of becoming vertically integrated and, thereby, losing individual initiative. Feeders also are concerned about the possibility of losing a viable open market for fed cattle and about the spectre of financial loss due to depressed, capricious, or manipulated market prices.

Trends in Packer Feeding

A trend toward increased packer feeding has become evident over the past few years. Since 1954, the number of meatpackers feeding cattle has increased from 165 to 202, although only 151 packers reported feeding in 1957



Number of packers feeding cattle and packer feeding cattle as a percent of total fed cattle marketings, 1954-65.
Source: Packers and Stockyards Resumé, Packers and Stockyards Division, C&MS, USDA, Vol. IV, No. 11, Nov. 25, 1966.

(see the figure). Total numbers of cattle fed in the 39 major cattle feeding states more than doubled between 1954 and 1965. A large part of the increase has occurred in the 1960's.

An indication of the relative importance of packer feeding can be gained by viewing volume of packer feeding as a percentage of total marketings. The percentage of packer feeding has fluctuated considerably, as total fed cattle marketings have varied more than volume of packer feeding. But the percentage has increased. During the late 1950's, it fluctuated between 4.6 and 6.2 percent. During the 1960's, it has fluctuated between 6.4 and 7.4 percent.

From data reported to its Packers and Stockyards Administration, the U.S. Department of Agriculture (USDA) concludes that since 1960 packer feeding has involved about one-sixth of the commercial cattle slaughtering firms in the United States and more than 6 percent of the fed cattle marketings.[2]

Besides cattle that are reported fed by meatpacking firms, a sizable volume of cattle feeding is done separately by owners, directors, officers, employees, subsidiaries, and other affiliates of meatpackers. Undoubtedly, management of such interests is associated with meatpacking firms in varying degrees. In some cases, interests probably are so closely tied as to be indistinguishable from the meatpacking firm. In other cases, they probably represent just another investment by individuals with capital and thus may be wholly independent of the packing firm. In 1965, cattle fed by associated interest feeders accounted for 4.3 percent of fed cattle marketings (table 1). Hence, total feeding by packers plus associated interest feeders accounted for about 1 of every 10 fed animals marketed in 1965.

Where Do Packers Feed?

Packer feeding has accounted for a very small percentage of fed cattle marketings in Minnesota. In 1965, 18,600 head were fed by packers—representing 2.9 percent of fed marketings (table 1). This figure was only slightly larger than in 1961, when an estimated 2.5 percent of marketed cattle were fed by packers and associated interest feeders.

Some north-central states have more packer feeding than Minnesota. But, in 1965, a total of only 3.3 percent of the marketed fed cattle in 15 north-central states were packer fed. This figure included Kansas, in which 15 percent of the marketed fed cattle were packer fed.

Most packer feeding is done in the

[1] *The Central Livestock Co-operative Shipper*, Vol. 47, No. 1, Jan. 1967, p. 3.

[2] Aspelin, Arnold, and Gerald Engelman, *Packer Feeding of Cattle, Its Volume and Significance*, C&MS, USDA, Mkt. Res. Rpt. No. 776, Nov. 1966.

Table 1. Marketings of fed cattle, volume of packer feeding, and packer feeding as percent of fed marketings, United States, 1965

	Region					Total
	North-Central	West	South	North-east	Other	for U.S.*
	thousand head					
Fed marketings	10,142	5,372	1,955	116	265	17,850
Volume of packer feeding:						
Packers	264.5	680.6	284.0	0.4	61.9	1,291.4
Associated interests†	73.0	558.6	117.0	3.8	15.4	767.8
Total	337.5	1,239.2	401.0	4.2	77.3	2,059.2
Packer feeding as percent of fed marketings:	percent					
Packers	2.6	12.7	14.5	0.3	23.4	7.2
Associated interests	0.7	10.4	6.0	3.3	5.8	4.3
Total	3.3	23.1	20.5	3.6	29.2	11.5

* Total is for the 39 states accounting for most of the fed marketings in the United States.
† Includes feeding by owners, directors, officers, employees, nonreporting subsidiaries, and affiliates of packers.

Table 2. Cattle feeding activities of meatpacking groups, 1961-65*

Type of packer and year	Number of firms	1,000 head	Percent of total packer feeding
Ten major packers			
1961	8	294.5	34.0
1962	8	296.4	31.7
1963	9	377.6	34.8
1964	9	375.4	35.7
1965	8	308.6	25.1
Retail food chains			
1961	4	39.0	4.5
1962	2	75.5	2.7
1963	4	53.8	5.0
1964	3	36.2	3.4
1965	3	58.8	4.8
Other packers			
1961	191	532.0	61.5
1962	197	614.4	65.6
1963	189	652.4	60.2
1964	170	640.4	60.9
1965	184	862.1	70.1

* Does not include feeding by associated interest feeders.

Source: *Packers and Stockyards Resumé; Packers and Stockyards Division, C&MS, USDA, Vol. IV, No. 11, Nov. 25, 1966.*

large-scale feedlots of the South and West. The north-central states, which had nearly three-fifths of the fed cattle marketings in 1965, produced less than one-fifth of the packer fed cattle. In both the South and the West, more than one of every five fed animals slaughtered were fed by packers and associated interest feeders. Mississippi had the highest proportion of reported packer feeding—65 percent. Packers fed nearly 60 percent of Florida cattle. More than 20 percent of the fed cattle marketed in Montana, Colorado, New Mexico, Nevada, Washington, California, and Tennessee were packer fed. In Montana and Colorado, a large proportion of packer feeding was done by associated interest feeders.

Which Packers Are Feeding?

In 1965, 8 of the 10 major meatpackers fed cattle. They fed about one of every four packer fed animals (table 2). This number is roughly equal to their proportion of total cattle slaughter, indicating that they are feeding at about the same rate as other meatpackers. Their share in 1965 was down substantially from 1964—1 of the 10 stopped feeding cattle. In 1964, the 10 top meatpackers fed approximately one of every three packer fed animals.

Retail food chains feed a small proportion of cattle. During 1961-65, they accounted for less than 5 percent of packer feeding. There has been substantial fluctuation in feeding by chains. Numbers fed in 1965 were more than double the numbers fed in 1962. Between 1961 and 1965, between two and four chains were involved in feeding each year.

In recent years, more than 60 percent of packer feeding has been by the group of "other" packers. In 1965, this group did 70 percent of the packer feeding. These statistics coincide with the opinion of industry observers, who think that a substantial part of packer feeding is done by integrated, independent beef slaughterers. Some of these beef slaughterers have experienced cattle procurement problems and have invested in feedlots to insure supplies. Others are large feedlot owners who have invested in slaughtering plants to facilitate marketing from their feedlots. Undoubtedly, others are cattlemen who have simply seen fit to invest their capital and management talent in both feeding and meatpacking.

Why Do Packers Feed Cattle?

In general, packers feed cattle for three reasons: (1) to obtain growth and return on capital, (2) to secure the production economies of vertical integration, and (3) to facilitate procurement.

Since growth is a goal of most firms, expansion probably is the most comprehendable of all reasons for packer feeding. In some cases, a medium-sized packing firm finds it difficult to expand the size of its slaughter. If it is a large firm for the locality, cattle supply may be a problem or it may face marketing problems or an inadequate labor supply. Hence, the firm may choose to expand by investing in cattle feeding rather than, or in conjunction with, expanded beef slaughtering.

A large feedlot owner may face much the same growth problem as the beef slaughterer: a desire to expand compounded by severe expansion problems. In the case of the feedlot owner, the problem usually is an inadequate local demand for a very high volume of livestock or a relative shortage of additional feed or feeders. An owner may decide to invest in a packing plant rather than face the cattle marketing problems associated with an expanded feedlot.

As pointed out above, an integrated packer-feedlot operation reduces or eliminates uncertainty in cattle procurement for the plant and cattle marketing for the feedlot. Besides reducing uncertainty, marketing costs are reduced. Also, buying and other procurement costs are eliminated for the packing plant, and sales and marketing expenses are eliminated for the feedlot.

Other efficiencies also can be achieved through integration. Extreme variations in cattle marketings have plagued cost accountants and plant managers for years. One problem is that most packers have labor contracts that require a minimum number of employment hours per week. There are obvious cost advantages in scheduling slaughter to fully utilize labor throughout the week. These same advantages apply to the utilization of the plant, equipment, and meat coolers. Furthermore, the ability to schedule slaughter can result in cost savings throughout the year.

With an integrated unit, it is easier and cheaper to provide the feedlot with information on weight and quality. Thus, packer feeding probably results in better productivity control of cattle in the feedlot.

In another dimension, beef storage may give integrated feedlots a cost advantage. Although beef is not stored for long periods, carcass beef sometimes can be held temporarily in coolers at less cost than holding cattle in the feedlot. This possibility may allow slaughter at the point when the most efficient gains have been made.

Most meat buyers prefer (and are willing to pay for) a dependable, assured quality and type of fresh beef. This assurance is particularly critical in the hotel and restaurant trade, but it also is important in the retail trade.

Although beef quality usually can be judged "on the hoof," it can be an expensive way of assuring uniform carcass quality. For small packers who do not have the volume to enter many markets catering to different beef grades, this can be a vexing problem. An integrated or associated feedlot can supply a predictable volume of cattle that will produce predictably uniform carcasses. This assurance has the advantages of eliminating some costs associated with estimating carcass quality on the hoof and commanding a slight price premium in the dressed beef market. At the minimum, it reduces uncertainty of beef quality.

As suggested above, integration reduces cattle buying costs. But it also provides an alternative to entering the market to buy cattle. Almost every local cattle market is an oligopsony—that is, there are so few buyers that each buyer must be aware of the effect his buying decisions can have on price. This situation is true regardless of malicious or predatory intent and does not imply that buyers have such intent. It simply is a fact of the market place.

In most cases, the local oligopsony has rather tight boundaries. But when price differences between a local mar-

ket and other markets exceed transportation costs, cattle will be moved to or from other markets and local buyers must then compete with a substantially greater number of buyers.

In this market context, a local packer has difficulty expanding his slaughter volume through purchases. In the short-run, a relatively fixed number of cattle is available. When a local buyer decides to increase his slaughter, he may bid a higher price for cattle. Temporarily, he may get more cattle. But if the other buyers are to maintain their volume, they too must offer the higher price. With a constant number of cattle available, all local buyers probably wind up with the same market share as they started, but they all are paying a higher price. The only recourse that the packer who wants to increase his volume has is to offer a sufficiently high price to attract cattle from other markets or to await the uncertain possibility of an increase in local fed cattle production. Both can be costly alternatives which a small packer would reasonably select only if he expected persistently higher dressed beef prices, could secure scale economies through increased volume, or could tolerate lower per-head profits on slaughter. Obviously, the same logic applies in the situation of the packer who wants to maintain volume in the face of reduced fed beef production.

Within this line of reasoning, it is entirely rational and by no means malicious for an expansion-minded local beef packer to enter the feeding business. Even if it would cost him slightly more to feed cattle than it costs an established feedlot, it may provide the plant with cattle at a lower cost than if he attempted to bid up the price in the face of a relatively constant cattle supply. Furthermore, if the buyer offers the higher price on the market, he must pay the higher price for all cattle he buys. If he feeds cattle, even inefficiently, the cost of his current market purchases is not raised—only the cost of the marginal volume from the integrated feedlot is raised. The foregoing is not meant to suggest that the packer will be an inefficient feeder. It need not be.

The Impact of Packer Feeding

In short, the impact of packer feeding is uncertain, and there has been a limited amount of economic research devoted to the question.

The most recent and comprehensive empirical research was done by Aspelin and Engelman, of the USDA's Packers and Stockyards Administration.[3] They statistically analyzed prices at one terminal market during 1962. One packer who was a regular buyer on the terminal market also fed cattle. His feeding amounted to about 3 percent of the slaughter volume of packers located near the market. The researchers looked at price differences for choice steers between that terminal and other terminals. They concluded that each 100-head transfer from the feedlot to the plant lowered the weekly average choice steer price $.058 relative to other markets. Meanwhile, 100-head increments in market receipts lowered the price $.005 per hundredweight (cwt.) relative to other markets. They found that transfers from packer feedlots had a price depressing effect on the local market that was 10 times greater than an equal increase in number of head marketed through regular channels. On the basis of their study, they concluded that transfers of packer fed cattle to market are associated with price-depressing effects within the range of 25-50 cents on the weekly average price for choice steers.

This study has stirred considerable interest in the livestock industry. Its conclusions have been both approved and criticized. Since the research was concerned only with measuring local market effects of packer feeding, it shed no light on the question of whether packer feeding lowers the general price level for cattle. Further research is being undertaken.

A widespread opinion about packers who feed cattle is that they may use cattle from their feedlots to maliciously drive down market prices. No published research conclusively supports or refutes this opinion. The usual rationale is that packers transfer cattle from their own feedlots when the market price is "too high," thus eliminating demand from the market and thereby depressing price. But, since feed costs rise rapidly if cattle are carried beyond finish, the time of marketing (or transfer) from the feedlot is limited. Within these limits, a packer may have some discretionary flexibility in making transfers.

It also has been suggested that a packer could keep a relatively constant number of cattle on feed that would represent a small proportion of slaughter, but could use them to depress temporary price rises due to fluctuation in market receipts. The packer could then use these cattle as a reservoir from which he could draw when the stream from the market temporarily waned. However, this possibility is limited, since eventually cost per pound of gain increases to the point where further holding of cattle becomes costly.

The above is not meant to suggest that packer feeding has no undesirable characteristics. It has been suggested, for example, that excessive integration can sufficiently detract from market volume to injure the pricing process for nonintegrated producers. Unpredictable packer transfers may have a temporary unsettling effect on the cattle market. If a packer can depress the market price by his own feeding activities, cattle feeders may think they're not getting an even break from the pricing system. It also has been suggested that packer feeding portends an undesirable structure within U.S. agriculture.

These and other reasons may be used in argument for a public policy against packer feeding of cattle. And there is no sound reason why livestock producers cannot press for such a ban. However, all alternatives should be considered first. For example, more producer bargaining power, strengthened cooperative action, and more comprehensive market news may be alternatives to government prohibition of packer feeding. The question rests on the balance between possible gains in efficiency from packer feeding and possible damages to the pricing system by the exercise of excessive market leverage.

Prospects For Packer Feeding

Given the present incentives for packer feeding, the trend toward it is not likely to change unless it is prohibited by law. However, there are disadvantages involved that may deter an increase. As with most characteristics of agriculture, there is reason for separation. It is an understatement to say that there are profound complexities in managing a combined enterprise. An active market between the feedlot and the packing plant has been an efficient allocator of economic resources in each industry. And the market provides the advantage of flexibility not usually attainable with integration.

Many of the efficiencies of packer feeding could be attained by some form of contracting scheduled fed cattle delivery. Such a development, with proper safeguards for cattle feeders and buyers, could provide both groups with freedom from uncertainty without materially damaging the independence of either. If this arrangement were to develop, there probably would be a retarded trend of packer feeding. Under present conditions, there probably will not be a substantial change in the trend. ■

[3] Aspelin and Engelman, op. cit.

In Perspective

Returns From Feeding Long-Fed Calves

Truman R. Nodland

This article deals with the returns received by farmers from feeding long-fed calves during the last five feeding periods for which data are available.[1] Calves represent a large proportion of the total cattle on feed in Minnesota.

Data for this article were secured from the records of members of the Southeast and Southwest Minnesota Farm Management Associations. Since farmers in these associations tend to be above average in managerial ability and the number of feedlot records available is small, the data do not provide as definite information as we would like. However, they do provide an indication of the level of returns and the wide variation in returns received from year to year.

Data in the accompanying table show weight, price paid and price received for cattle, value produced, costs and return over feed, and return to labor and management.

Net value produced is the difference between the cost of feeders at the time of purchase and the amount received at time of sale divided by gain in weight. Value produced is influenced by two factors: (1) price spread between the price paid for feeders and the price received for fed cattle when sold on the original weight purchased and (2) value of weight gain in the feedlot. There was a negative price spread during four of the last five feeding periods; this situation is a normal one in calf purchasing. Variation in price spread is a major reason for the large year-to-year differences in net value produced.

Value of feed is the cost of purchased concentrates and market value of farm-raised grains and roughages. Costs other than feed include interest at current rates on the initial investment in cattle and a charge of $1.85 per hundredweight (cwt.) gain in weight for use of equipment and buildings and for miscellaneous cash costs. The charge for equipment and buildings is minimal and represents hand feeding methods; auger feeding and new buildings would result in a higher charge per cwt. gain in weight.

Two indicators of the relative profitability of feeding cattle are used. The first is return over feed cost. This factor is included because feed is the largest cost item, representing 70-80 percent of the total costs involved in cattle feeding. Furthermore, most feeds consumed by cattle can be sold readily. A second indicator of relative profitability is return to labor and management per head or per cwt. gain in weight. This factor represents an attempt to allocate all costs except labor and varies with the investment in equipment and buildings. When one considers the ready markets for feed, the cash costs involved in purchasing cattle, and the interest on investing in cattle, there remain few costs that can be postponed in the event of a drop in cattle prices during the feeding period.

Returns received during the past five feeding periods indicate some of the risks involved. During one feeding period, the average farmer barely covered his feed costs, and his average returns during the next season were small.

During the last five feeding periods, returns to labor and management were approximately $9.25 per head or $925 for 100 head. These data indicate that the average cattle feeder has secured a relatively low return for his labor, management, and risks during recent years. ■

Costs and returns from feeding long-fed calves, 1961-66

	1961-62	1962-63	1963-64	1964-65	1965-66
Number of lots	18	16	18	32	28
Number of head per lot	86	110	90	109	135
Weight per head, pounds:					
At purchase	406	411	404	415	420
At sale	940	993	972	954	976
Gain	534	582	568	539	556
Prices per cwt.:			dollars		
Paid	$27.49	$30.70	$26.33	$22.02	$24.80
Received	25.32	22.81	21.90	24.22	24.55
Price spread	—2.17	—7.89	—4.42	2.20	—0.25
Costs and returns per cwt. gain in weight:					
Net value produced	$23.88	$17.10	$19.69	$26.42	$24.83
Value of feed	16.86	15.92	15.96	18.17	20.09
Return over feed	7.02	1.18	3.73	8.25	4.74
Estimated costs other than feed and labor	3.22	3.75	3.36	2.81	2.91
Estimated return to labor and management	3.80	—2.57	0.37	5.44	1.83
Return to labor and management per head	$20.29	$—14.96	$2.10	$29.32	$10.17

[1] For a more complete discussion of returns received by farmers from feeding long-fed calves, long-fed yearlings, and short-fed yearlings, see University of Minnesota Department of Agricultural Economics Report No. 292, *Feeder Cattle Costs and Returns*, 1965-1966. July 1967.

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