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Marketing Alternatives for Northeastern Dairy Beef
and Feeder Calves

by

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Raising livestock has always been a difficult and arduous occupation. The financial risks are substantial and the long-term returns in so many instances are merely adequate, at best. When the cattle are raised in fringe producing areas, such as much of the Northeast, the complexities are magnified. Producers must use additional managerial expertise to partially offset their cost disadvantage compared to feeders operating in more grain-rich areas.

Despite these complexities there are some notable successes throughout the region. New York has a handful of 1,000+ head-a-year finishing operations with a state-wide total estimated 1980 production of 45,000 - 60,000 head of fat cattle (Comerford). Crop reporting service estimates for 1980 point to a beef breed cow herd over the entire nine-state region of 318,000 head, giving a potential calf crop of 280,000 at normal calving and mortality rates (USDA, Ag. Stat.) Some of these calves go out of the region for finishing, but the great bulk never enter commercial market channels and presumably stay on the farm or are traded privately to neighbors. Any Holsteins fed out for slaughter would have been in addition to these numbers.

In total this does not describe a very large industry, but clearly some producers have been able to overcome the production problems. More problematic for many has been marketing. In response to several surveys, New York producers in the fed beef sector have identified marketing as their principal operating problem. There are several components of that problem but it is most evident in the form of few marketing alternatives, and low prices and high costs for those which do exist. Essentially this is the result of selling beef type cattle in a system adapted to the very different needs of the dairy farmer. The effect is to further discourage the Northeastern fed beef sector. Furthermore, expansion of herds is likely to bring only a continuation of these problems unless viable alternatives can be identified and implemented.

The purpose of this paper is to identify alternative marketing systems which satisfy the needs of regional beef cattle producers, whether they are beef or dairy breeds, better than current systems, and to suggest ways in which these systems can be implemented. This is not intended to be a technical paper. Several graduate students working on this topic are examining in more detail the alternatives presented here. The objective of this paper is rather to present the problems and alternatives to the current marketing system in a way which promotes the identification of practical solutions.

To limit somewhat the scope of this paper only the first and last steps in the marketing system - dairyman to calf weaner, and feeder to packer - will be considered and sales only to existing packer buyers will be discussed. The rationale for these limits to the paper are discussed below. Emphasis here is on systems suitable for New York and northern Pennsylvania, although, when information is available, New England is included. Southern Pennsylvania and contiguous areas are excluded because of the relatively strong market which already exists there for fed beef.

In the following section the current marketing problems of many Northeastern producers are documented. This is followed by a discussion of available buyers, an analysis of the desirability of selected marketing alternatives, a description of how to implement the alternatives, and a summary of the whole paper.

Marketing Problems in the Northeast

The marketing problems can be summarized succinctly as low prices, high cost, limited alternatives and variable quality. Of these, perhaps low price is the most visible and discouraging and will be discussed first. Low prices were the marketing problem mentioned most often in a 1978 survey of New York beef breed producers.

Regional Prices

Actual auction market prices for New York slaughter cattle are compared to weekly price ranges for the Lancaster, Pennsylvania area public markets in table 1. Lancaster is the best established Northeastern slaughter cattle market with 143,302 head sold there in 1978, making it by far the largest market in the region (Livestock and Meat Sit.). Comparisons are made for 20 randomly selected weeks in 1978-80. For 19 of these 20 weeks the New York price was lower, and the difference is significant when the sign test is applied at the five-percent level to the low, mid and high points of the respective ranges. This difference is even more significant as the Lancaster cattle are grouped into yield grades 2-4 while in New York the prices are reported for grades 2-3 only. Typically, yield grade 4 animals are discounted although this may not be as true for the Lancaster market which provides a substantial number of animals for kosher slaughter. As a further test, the actual prices paid for 53 New York steers, sampled from prices collected during a special survey in June 1978, were compared to the midpoint prices in Lancaster, Omaha or Joliet for the same grade on the same day (Federal-State News Service). The midpoint of the price range was used and intended to represent the midpoint of the quality range of choice steers of the designated yield grades (Tomek, p. 437). Applying the sign test to these same-day observations, the New York prices were found to be higher in only 16 cases which is not a significant difference at the five-percent level. Thus New York steer prices again appear to be lower than those at public markets in other areas.

There is no evidence that the lower New York prices result from any price or bid rigging schemes among buyers. The problem appear to be high buying costs per head in areas of sparse production which are passed through to sellers in the form of lower prices.

Table 1: Comparison of Daily New York and Weekly Lancaster Area Public Market Prices for Choice Steers for Randomly Selected Weeks in 1978-1980.

Date	New York Price	Lancaster Area Price
	---dollars per cwt---	
<u>1978</u> 5-12	52.00-53.50 ²	54.50-58.00
7-28	49.00-54.00 ⁴	53.00-56.50
11-17	50.00-53.25 ²	55.00-57.25
12-29	52.00-55.75 ¹	57.00-59.00
<u>1979</u> 4-20	71.25-74.50 ²	74.00-77.25
8-17	61.25-64.25 ²	61.85-67.75
11-02	63.00-66.00 ⁴	66.00-68.50
12-07	62.50-64.50 ¹	68.50-70.00
<u>1980</u> 1-11	64.00-68.75 ²	66.75-70.75
1-25	62.00-64.75 ⁴	67.50-70.00
2-8	67.76-68.75 ⁴	67.00-69.50
3-28	63.00-68.00 ³	66.00-67.00
4-14	61.00-62.50 ³	64.50-66.00
5-2	59.00-65.25 ¹	62.50-65.75
6-6	60.00-61.75 ²	64.25-66.25
7-11	65.00-67.50 ²	66.75-71.00
8-29	65.75-68.50 ²	74.50-76.50
9-5	66.00-68.00 ²	74.50-77.00
9-12	67.50-68.75 ¹	74.00-76.25
11-30	62.75-67.50 ⁴	68.25-71.25

¹Includes Little Falls, Pavilion, West Edmenton and West Lowville markets.

²Includes Canandaigua, DeKalb Junction, Vernon, and Washington County markets.

³Includes Bath, Sennett and Vernon markets.

⁴Includes Caledonia, Cobleskill, Gouverneur and Norwich markets.

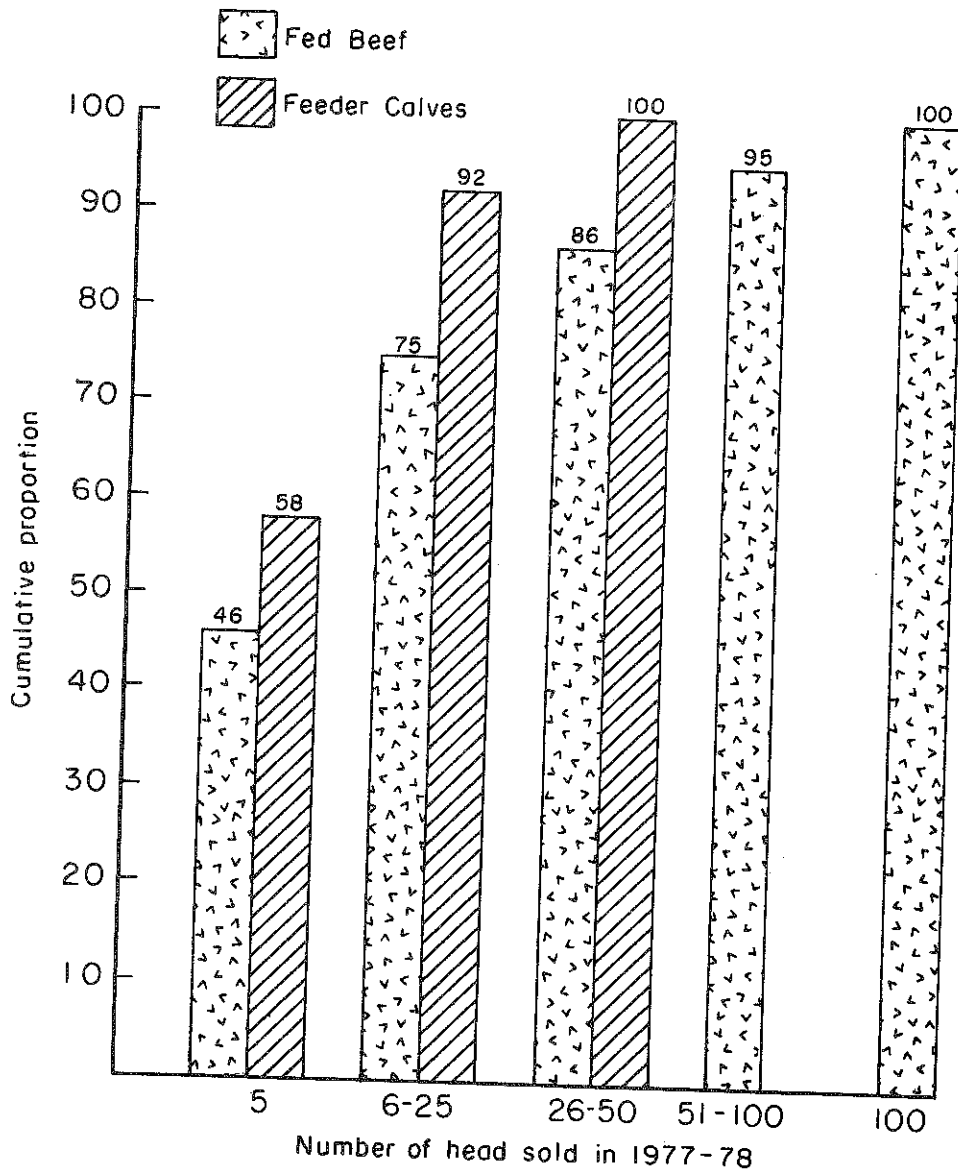
Source: Federal-State Livestock Market News Service, various dates.

Marketing Alternatives and Costs

Throughout the region, sales through auction and terminal markets predominate. In 1976, 76.5 percent of the regional steers and heifers were purchased by packers through these outlets compared to a national average that year of 21.5 percent (P&SA). Public market sales as a principal outlet are relatively costly and reflect the small size of most operators and the limited density which mandates public market sales. In 1972 the sellers direct costs per head of selling at an auction market were estimated to be \$3.12 while direct sales at the farm were estimated to cost the seller essentially nothing (Johnson, pp. 18-19). The cost difference today in New York is greater with current commission fees running about \$10.00 per head. Adding trucking brings the marketing cost of producers to about \$18 a head, plus any shrink loss. Costs are apparently even higher throughout much of New England (Andrews et al).

Direct marketing to packers, a less costly method where distance and density permit, is limited to the very small who apparently sell to very local packers and the largest who potentially can sell to any of the larger packers in the region. The reason for the limited use of direct selling can be seen from Figure 1, an approximate cumulative size distribution of New York fed beef and feeder calf producers. These data were compiled from a mail survey which had many of the incomplete address list and nonrespondent bias problems of many surveys of this kind. The problems are, however, likely greatest for the large number of small producers and if there is a bias on the results it is probably in the underreporting of the small farms. A full three-quarters of the New York feeders market less than 26 head a year while 92 percent of the cow-calf operators sell less than this number of calves a year. For these groups assembling truck-sized lots is not feasible. Similarly, in New Hampshire in 1973 three-quarters of the producers sold an average of five slaughter cattle and four calves a year (Andrews et al., p. 3). Even at the

FIGURE 1. SIZE DISTRIBUTION OF NEW YORK FED BEEF AND FEEDER CALF PRODUCERS IN 1978



SOURCE : PRODUCER SURVEY

upper end of the size range in New York few operators producing more than one lot a year are large enough to assemble full loads from their own herds.

Access to many marketing alternatives depends heavily on being able to assemble a truckload of cattle for shipment. Most packers surveyed replied that they would not consider most alternatives unless there was reasonable assurance of being able to load a truck. Requirements for fed animals range from 5 to 40 head depending on truck size. But even at the lower end which represents a 2 1/2 ton straight-chassis truck the numbers exceed those available to many regional producers.

Low market prices plus high marketing costs throughout much of the area explain the prevalence of direct consumer or "freezer beef" sales by fed beef producers. Freezer beef accounts for around one-third of the fat cattle sales in New York (Lesser, 1979). This proportion is probably much smaller in Pennsylvania with its larger scale feeders, larger public markets and over 300 federally inspected packing plants, and the proportion is higher through much of New England (in excess of 50 percent) with its relatively few federally inspected plants (Stinson, Allen and Christensen; Andrews et al.). Freezer beef sales have the advantage for local producers of being very small-scale operations. In New York, producers marketing five or fewer head have carried on successful freezer beef operations for many years. And for this group the fewer the number of producers in their area the easier it is to find a local buyer.

The use of this noncommercial channel is, however, limited to smaller operations. According to a recent survey in New York, feeders marketing less than 20 head a year sell freezer beef almost exclusively. Those above 50 head sell very few as freezer beef, noting that the time requirements are too great. Therefore this marketing alternative, while very important overall

for the regional fed beef sector, has distinct limitations and additional alternatives are required for larger operations.

Quality

Quality unevenness is a significant regional problem and one which is both a cause and result of the current marketing problems. Unevenness in quality shows up as small and "dark cutting" carcasses in the back cooler of local packers. It appears as underfinished animals in local auctions. During a special survey of 17 New York auction markets in June 1978, for example, 581, or more than half of the slaughter fed cattle sold weighed less than 750 pounds. There are several explanations for this, including the smaller framed breeds which predominate in the area and the necessity to liquidate some herds as the low point in the cattle cycle neared, but it is also strongly suggestive of an abundance of underfinished cattle.

Not all producers, of course, will maximize profits by selling only choice cattle, but they should be making an informed decision. According to many of the New York Extension Service agents, many producers are not able to distinguish properly finished cattle. Thus they can be interpreting the price signal from the auction markets as a general low-priced situation rather than an individual quality problem. Such an error in interpretation can easily be made as few producers (according to our surveys) accompany their cattle to market.

Quality improvement therefore appears to be trapped in a loop. Variable quality discourages packers from purchasing regional cattle. When they do, there appears to be a tendency to price most local cattle lower to protect margins. Producers for their part apparently do not always recognize the quality premiums built into the system and see limited incentives to improve

quality. A pricing system is needed which more clearly relays quality premiums back to producers.

Calf Market

Most Holstein bob calves are marketed through local auctions within a few days of birth. In June 1978 for example only 25 percent of the calves sold through the auction ring in New York markets weighed more than 110 pounds. Handling and exposure to disease place considerable stress on these calves, many of whom have not received colostrum. In total the death loss of calves in New York in 1980 was 12 percent (NY Crop Rep. Serv.).

Average death losses do not express the total costs of this system. Some specialized calf weaners experience losses of 40 percent or greater when disease breaks out. Most have high medication costs for the surviving calves. In fact, knowledge of animal health practices appears to be a principal barrier to enter specialized calf raising.

An alternative system which limited the movement to very young calves would substantially reduce the costs and risks of calf raising. This could be accomplished by either holding the calves longer on the dairy farm or by transporting them shorter distances in smaller numbers.

Market Outlets

Packer Buyers

Current outlets for beef-type animals are easy to identify; they are the 417 federally inspected packing plants in the Northeastern states presently using these animals. If the smaller plants with capacities below 20 head an hour are omitted as working to a strictly local market, the remaining 11 plants with an aggregate rated kill of 775,000 head an hour are obvious potential markets for these cattle. Many of these plants, while currently specializing in

cull cows, could make an easy technical transition to graded animals with the installation of a shrouding station. In practice, however, retraining the crew and finding outlets for a different product can be formidable barriers to conversion. Thus the true potential market is somewhat smaller.

Actual capacities of existing fed beef packers are still being determined. For simplicity discussion is limited to five larger plants with combined capacities of nearly 500,000 head a year. Of these, two are in Pennsylvania, one in New Jersey and two in upstate New York. One-half million head corresponds to 175 percent of the total number of beef breed steers and heifers produced in the Northeast in 1980.

These packers are buying most of their cattle from out of the region, including particularly Joliet and markets in Virginia and Florida. The proportion of local cattle used is highest in the fall and declines to near zero in the early spring. Only one of these firms is known to buy on a regular basis from the local auctions in New York and northern Pennsylvania. The others restrict their purchases of Northeastern cattle to Lancaster markets and a few direct purchases from the largest feeders. In total less than one percent of their requirements come from New York. Going out of the region costs these packers \$4.00 per cwt. for transport costs and tissue shrink losses.

These packers then provide an existing potential market for roughly 300,000 head annually, which is the volume of out-of-region cattle killed here. It is the supplying of the requirements of these and other existing packers toward which the fat cattle marketing systems discussed here should be directed. In the more distant future additional packing plant capacity may be required. Presently there appears to be no need, although the economic potential of additional larger plants is under study

by the Animal Products Group, AMS, USDA. This conclusion may, however, not be valid for New England which is far removed from the larger fat cattle buyers. In a recent study, Stinson, Allen and Christensen concluded that additional capacity was not economically feasible at that time, but the situation may change in the future.

Existing larger packers have all expressed an interest in Northeastern cattle and are willing to accept dairy beef at prices reflective of their lower yield compared to beef breeds.

Intermediate Markets

Depending on the vertical structure of production there can be from as many as three intermediate markets down to none. At this point in the analysis four vertical production systems appear most likely:

- 1) dairymen through to slaughter weights,
- 2) dairymen feeder calf weight to finisher,
- 3) dairymen to feeder weight to growout phase to finisher, and
- 4) dairymen to specialized calf weaner to growout to feeder to packer

Until further analysis is done to determine the economic viability of the individual operations and their likely location and size, it is difficult to identify the appropriate marketing systems. A very important issue at this time, however, is whether the bob dairy calves will be retained on the farm for at least a week or whether they will continue to be sold within a few days of birth.

If calves are held on the farm for at least several weeks this will substantially reduce the death risk of specialized weaners. The prospects for dairy producers doing this do not look promising. For example, in mid-May in New York there was at a maximum a 28 cent a pound premium for selling calves over 150 pounds compared to those under 110 pounds (AMS). Yet the

bulk of calves as previously noted are still being shipped at lighter weights. In fact, contract calf buyers report that even much more substantial premiums have not been sufficient to encourage many dairymen to hold their calves longer. Thus the market for bob calves appears to depend on specialized weaners and it is this market which will be discussed below.

To summarize the market outlet situation; the current challenge for finished beef is to be able to deliver it to existing packers at lower total marketing costs. Additional capacity could be required at some time, but for the foreseeable future, existing operations appear to be adequate. At production levels preceeding the final finishing, a particularly significant issue is the development of a specialized calf weaning industry unless dairymen can be encouraged to retain calves on the farm for longer periods.

Marketing Alternatives: Slaughter Cattle

A large and rich literature exists covering marketing alternatives for livestock. This literature will not be specifically reviewed here. In fact, much of this material is directed to the major producing areas and considers alternatives which are not relevant to many parts of the Northeast. As an example, country buying stations are being phased out in many parts of the country as obsolete while in the Northeast they could provide an important alternative channel for many producers.

Herein will be presented an evaluation of a number of alternatives in order of increasing complexity. Marketing through local auction markets will be treated as the default system and used as a basis of comparison. According to our surveys the great bulk of the small and medium sized (e.g., up to 50 head a year) producers in New York use local auction markets for commercial disposal of their animals. The use of these and terminal markets also predominates in Pennsylvania, New Jersey, Delaware and Maryland (P&SA).

Local auction markets are seen as having three basic limitations; (1) high costs for sellers and buyers, (2) low prices and (3) inadequate relaying of quality incentives to producers. Alternative systems will therefore be analyzed according to their suitability for; (1) reducing marketing costs and thereby contributing to higher prices, and (2) providing clearer price signals to producers. It is important then for an alternative marketing system to incorporate an improved price signaling arrangement. This will not replace the need for individualized instruction on identifying grades by agents and others. Rather, it should support it.

Cattle Pooling

The concept of a cattle pool is a simple one. Rather than dispersing a small number of cattle to a large number of markets, several markets are designated as pool locations and producers are asked to ship their animals to these sales which are held as part of the regularly scheduled sale. To avoid problems associated with grading and commingling, the animals are sold individually.

There are several advantages to this simple system. It can help to bring together enough head to attract more buyers. Yet it remains simple with no long-term financial or marketing commitments from producers. In fact a similar system for marketing hogs in New York has been in operation for a number of years and is credited with helping to maintain a small but viable industry.

Limitations of the system are that it remains relatively costly for producers, although packer buyers can experience some volume-related cost savings. Information on quality premiums and discounts will not necessarily improve.

Cattle Pool with Commingling

The pool concept remains the same except cattle from different producers are sorted into uniform lots. This process saves buyers' time as 10 to 50 head can be bought in the same time it takes to buy one when sold individually. Buyers have been found to pay more for uniform lots (Haas, p. 28) although it is not known if the premium reflects a partial return to producers of their savings or is a bonus for the assurance of getting an adequate number of particular grades of cattle.

Sellers benefit from the premium, if any, and commission fees may be lowered as selling time for the market is reduced. However, a grader who selects the lots must be paid as must the extra handlers who assist in sorting and penning the cattle. Only a relatively few of the existing area markets have sufficient pen space to permit commingling.

Commingling rather than improving information on quality premiums can reduce it as producers have a tendency to feel that theirs are the best cattle in the group and the remaining lower grade animals are bringing down the average price. To be successful, a commingling system must use a grader whose judgment and impartiality are recognized by everyone.

Country Buying Stations

Country buying stations are typically run by a packer buyer and operate as adjunct assembly and pricing points. They are appropriate for areas in which numbers are insufficient for direct buying at the farm but where density is great enough to assemble lots. Thus a producer with a truck could drive a small load to the station, negotiate a price, unload and return to the farm, all within a few hours.

Packers benefit from this system by having partially preferential access to local supplies. This access, however, comes at an additional cost which is borne by the buyer. An additional problem is that the variety of sizes and grades which are shipped in could exceed the requirements of a particular packer. At an auction market on the other hand there is typically a large enough variation in the buyers present that almost any animal sent to market can find a buyer. Thus there seems to be little incentive for a packer to establish buying stations at this time.

A variation would be for the sellers to organize and support a station, and to request a range of buyers with sales made through personal treaty. Such a system comes close to duplicating the functions of a terminal market. Indeed, the most likely place to hold such a market is at an existing auction market on a nonsale day. There could be some cost benefits to a producer-operated sale as it might be free from many Packers and Stockyards Administration regulations, but the benefits would seem small. Quality premium information could be improved in that the producers would negotiate prices directly with a series of buyers. Buyers are never reluctant to describe the flaws of sellers' cattle!

Grade and Yield Selling

Grade-and-yield selling entails pricing the animal on the after-slaughter carcass grade rather than on buyer's estimate of the grade of live cattle. Grade and yield pricing is relatively recent and only partially successful with 22 percent of the national steer and heifer crop being sold this way, but only four percent in the nine Northeastern states in 1976 (P&SA). Nevertheless grade and yield selling provides some distinct advantages as well as disadvantages for regional producers.

A key advantage is that a trained buyer need not be present at the exchange. This eliminates a major buying cost. Buyers are often the highest paid individuals in a packing plant as a difference of one percent in the estimated and true dressing percentage can be the difference between profit and loss. By eliminating the need for a buyer at the exchange the producer should have access to a greater number of packers. Prices can be negotiated over the telephone since inspection is not required before purchase. Information on quality premiums would be good as it is included in the price negotiation process and producers receive information on the grade performance of their cattle. Pooling of loads by producers to gain transportation economies is still possible and would not affect the price of any producer's cattle as happens with commingling.

The disadvantages of grade-and-yield selling are also formidable. Producers bear the full risks of off-grade cattle. Potential losses are great in cases of "dark cutters" and condemnations. As a result producers who are uncertain about the performance of their cattle over time should not try selling in this way. This unfortunately includes many of the smaller producers.

A second and equally important issue is that of trust. The producers must be assured that they are being paid for their cattle. Misrepresentation and apprehension come rather easily since the packer must move the identification tag from the ear and attach it to the carcass.

Electronic Trading

Electronic trading has been receiving considerable public attention in the past several years. It is seen as a means of extending the geographic scope of a market without the penalty of high travel costs. Hence electronic trading has the potential of increasing the number of buyers and sellers and

through that the pricing efficiency and quality of price information from the system. Much of the recent interest has been directed toward relatively sophisticated systems for marketing high volume products such as processing cotton and carcass meat (Davis, Henderson). These systems, however, appear to be too costly to apply to the live cattle market in the Northeast.

Nevertheless an argument can be made that some form of electronic trading is as necessary for small volume products or fringe areas as for the high volume, high production density products. In fact, for low volume products the need for electronic exchange may be even greater as the per unit cost of inspection and negotiation is, by definition, high. With large volumes on the other hand there may not be much additional efficiency to be gained through electronic trading, at least efficiency as perceived by the traders if not by economists. This perspective is the opposite of the justification typically applied to analyzing markets for suitability for electronic trading.

The Virginia Telo-o-Auction is an example of how the concept of electronic trading can be realized at relatively low cost. In 1972 the per head total direct cost of using the Telo-o-Auction was estimated to be \$0.73 compared to \$4.12 for auctions (Johnson, pp. 18, 25). Since this system uses standard telephone hookups connected in conference-call format there is no initial equipment investment for establishing or joining the system. It may then have significant potential in the Northeast.

Further analysis, however, suggests this potential is limited because of two practical factors. First, the system demands that the animals can be adequately described in terms of weight, breed, sex, estimated grade, etc. (Davis). With the high variability in Northeastern herds both within and among herds such descriptions would be less meaningful and packers could be understandably uncertain about buying sight unseen. But, independent of the

packers' response, it is necessary to assemble and grade the animals in preparation for the auction. With scattered production these costs are the principal ones of any marketing system so that the total savings from electronic trading in this area would not be as great as Johnson estimates.

Contract Feeding

Contract or custom feeding for packers has been growing in the past several years. The top ten packers increased the number of head fed by or for them by 45 percent from 1968 through 1976 (P&SA). Several studies have identified the improvement in scheduling and operating efficiency as a principal justification for this growth (Snyder and Chandler). But as Professor Brunk has commented, more significant may be the need for participants to hedge the dramatic price swings seen in recent years. Price changes over a few days have been great enough to turn a tidy profit into a significant loss for the producer or packer. Few Northeastern feeders, however, are significantly large to hedge directly with the live cattle contracts at 40,000 pounds. Packers, however, are often large enough to use the futures markets and through contracting can extend the risk-shifting benefits of hedging to the producer. Forward selling can have the same effect but will not be treated separately here.

Price risk is important for the smaller Northeastern producer also. In fact it may be relatively more important if these producers are less sophisticated marketers and lack the financial resources to withstand short-term losses. Unfortunately, Northeastern packers for their part are relatively small and many would have a difficult time using the futures market to manage risk. Thus while contract feeding provides a guaranteed margin and outlet for producers, it does so by shifting much of the risk to packers. Unless packers can hedge, most will be, as Miller and Raikes have shown, unwilling to contract.

Transportation Services

Transportation services do not themselves provide a distinct marketing alternative. A key to the success of many of the alternatives discussed above is nevertheless the provision of adequate livestock trucking services at reasonable cost. Perhaps there is a need for an improvement in transportation services as a means of improving the entire marketing system. This need could be particularly acute in the Northeast where few producers are large enough to justify owning their own truck.

The region has the benefit of having a large fleet of independent truckers and dealers. In New York in 1977 there were according to the State records about 140 licensed dealers and a substantial but unknown number of truckers. New England in 1973 had 490 licensed dealers and truckers (Andrews et al.). Most of these operators are associated with the dairy industry and perform a variety of services including exchanging animals, raising heifers, extending credit, etc. (Marion).

In an earlier study records of truckers serving 7 New York State auctions were examined (Lesser 1980). In that study rates were found to be set largely on a flat rate rather than on a distance basis. Moreover, rates have not risen as fast as variable costs in recent years. Overall it appeared truckers were offering favorable rates compared to their costs except that multihead discounts are rarely offered. This is more of a problem for feeders who are more likely to ship multiple head loads than for dairy producers. Shipping problems that arise are often partially the responsibility of the producer for failing to have adequate loading facilities.

Thus for New York at least there appears to be little need for alternative trucking arrangements. Rates in New Hampshire, however, appear to be substantially higher: \$13 for cattle and \$4 for calves in 1973 compared to

\$8 and \$3 in New York in 1980 (Andrews et al., p. 14). Thus service levels and rate structures in New Hampshire may require further analysis.

Marketing Alternatives: Calves

The only system to be considered at this time is that for purchasing bob calves from the dairyman. Presently our sources tell us that most of these calves are sold through local auctions at considerable expense and risk of disease. Alternatives to this system would ideally encourage two changes - retaining the calf on the farm longer, and reducing handling stress and costs. Identifying an appropriate system to accomplish these goals is nevertheless difficult.

A number of issues including facilities and time availability are involved in maintaining the calf on the farm longer. Despite this the uses of calf hutches and labor from younger family members or neighbors could overcome or compensate for these difficulties. More difficult appears to be the problem of death risk. The average loss of 12 percent substantially reduces the incentive for dairymen to add 50 pounds to their calves at \$1.08 per pound in 1981 (AMS).

This situation in some regards parallels that which existed during the early days of the broiler industry when large die-offs threatened to halt continued growth. In part to relieve this situation, growers sought the involvement of integrators (Marion and Arthur). The heavy veal industry has in part followed this same practice, probably for much the same reasons.

Integrators can accommodate greater risk partly by holding greater reserves and partly by balancing the risk across a large number of operations. In a bob calf operation it is unclear who besides the packer would have enough horizontal control to accommodate the risk. And why would the packer wish to become involved in calf weaning?

At the same time, the feeder will need a number of calves closely matched in size, age and conformation. Only the very largest dairy farms could supply these from their own herds. For others some assembly across a number of farms would be required. At this time auction markets perform this assembly role but at high cost and high stress to the calves.

What seems to be needed then is a large number of small calf weaners who are located at or near the dairy farm. Among these operations is required a means of spreading death loss risk. Perhaps a calf weaners' association would be the appropriate agent. Such an association could also help to schedule production, disseminate information on rearing and medication practices, certify the preconditioning of its members' calves and arrange for marketing.

How To Proceed

When attempting to establish viable marketing alternatives it is essential to take into close consideration the attitudes of producers and packers. There appears to be sufficient concern among producers with the existing marketing options that many express a willingness to try a number of alternatives. At least this is true of those in New York State. How willing they are in practice must of course still be determined. Many packers for their part recognize the advantage of stimulating regional production and seem ready to support an alternative if that is what is required to get it established. For packers the principal requirement of an alternative system is the assembly of a larger number of good and choice cattle in one location. Several suggested 200 to 250 head as being an appropriate number. Whether the assembly is done at a regularly scheduled auction market or at a special sale is not as significant as the physical assembly of a larger number of head.

Even with these assurances it is prudent to proceed slowly and to expect limited commitment from individuals or groups. Fortunately for fed beef marketing it is possible to do this through the establishment of a pool. The pool could operate monthly at an existing market with only the informal commitment from area producers that they will attempt to market their cattle through the pool rather than through other auction markets or on other dates. Required from packers is a commitment to attend and to buy cattle even if they are unlikely to assemble a full load.

Acting on this concept a meeting of feeders was called recently by a regional livestock specialist in central New York. This group was very familiar with the limitations of the current marketing system and recognized the potential benefits of a pool. Even those having a stable marketing agreement with a local packer saw the existence of a good alternative market as the basis for enhancing their negotiating power with the buyer. The group proceeded to survey area producers to determine if a sufficient number of cattle are available and have established a tentative start date in September.

Should the pool concept be successful, the next step would be to commingle the cattle into lots of from five to 20 head. According to one livestock grading specialist sorting can be done with the same 200 head required for the pool.

The pools should be intended to be largely self-terminating. Part of the concept is to better educate producers and bring them into direct contact with packer buyers. A desired outcome is for the more proficient, better located or larger feeders to switch to direct sales to packers.

In the longer term there are real advantages to moving to grade and yield sales through a producer organization. A representative could negotiate a pricing formula on a short- or long-term basis. Marketing would

then be limited to the physical assembly and transport of the animals, possibly with the use of an auction market facility as an assembly point. This association may wish to strive for an agreement with packers which would permit unannounced inspections of the carcass tagging system.

An alternative marketing system for calves is more complex as there appears to be no means of establishing it gradually. Perhaps the best opportunity would be to confederate with an existing association such as a marketing cooperative, producer association or dairymen's cooperative. Further suggestions in this area are solicited and welcome.

Summary and Conclusions

The lack of viable commercial markets for many small and medium sized Northeastern feeders and calf producers is a significant deterrent to an expansion of this sector. The markets which do exist, particularly auction markets, typically are high cost, returning to the producer lower prices net of marketing costs than a more efficient system would. Uneven quality of local fed animals is a possible further effect and cause of the inefficient marketing system. The suggested marketing changes are all directed to better serving the needs of existing larger regional packers by replacing with local cattle some of the approximately 300,000 head of cattle imported for slaughter. While the need for additional slaughter capacity may arise there does not appear to be a current shortage of capacity.

Area feeders and packers recognize the need for streamlining the system and, according to surveys, many are interested in testing several alternatives. Of the alternatives discussed, the one which seems to have the best short-term potential is the establishment of cattle pools in several locations. Such pools assemble slaughter cattle in several regularly scheduled auction

markets rather than having them dispersed over numerous markets and dates. At a recent meeting of New York feeders this concept received strong support and a survey is underway to determine if a sufficient number of cattle are available to provide the minimum of 200 head desired by packers.

More involved alternatives which appear to have potential should the initial pooling concept take hold are pooling with commingling, and grade and yield selling. At any point in the development of these alternatives, producers are expected to make contact with packers and move to direct selling of at least some of their cattle. Direct selling, assuming that an equitable exchange price is established, has the advantages of improving coordination and communication while keeping costs low.

Other marketing alternatives such as electronic exchange and custom feeding appear less viable, at least in the short-term while producers remain small and quality varies. Further research is underway to determine the validity of these judgments.

The only market below the finisher-packer exchange considered here is that for bob calves. This market is characterized by sales of days-old calves through auction markets. An improved system would allow these calves to remain at or near the farm until weaning. To accomplish these objectives either substantial monetary objectives must be built into the current system or methods must be devised to pool death loss risk over a group of weaners. A producer group could serve this function, but the exact operation and development of the organization has not been developed.

REFERENCES

- Andrews, R. A., G. Yunker, J. P. Darulis and G. F. Frick. "Marketing Agricultural Products in New Hampshire: The Structure of the Livestock Marketing System.: Univ. New Hamp., Ag. Exp. St., Res Rpt. 39, August 1974.
- Brunk, M. E. Dept. Ag. Econ., Cornell Univ., personal communication.
- Comerford, P. J. New York Livestock Grading Specialist, personal communication.
- Davis, D. "TELCOT From Commercialization to Industry Wide Implementation." In T. L. Sportleader (Ed.), proceedings: National Symposium on Electronic Marketing of Agricultural Commodities. Texas Ag. Exp. St., MP-1463, 1980.
- Federal-State Livestock Market New Service, New York State Dept. Ag. and Markets, various dates.
- Haas, J. T. "Veal Calf Pooling." USDA, Farmer Cooperative Service, Mkt. Res. Rpt. 615, August 1963.
- Johnson, R. D. "An Economic Evaluation of Alternative Marketing Methods for Fed Cattle." Univ. Nebraska, Ag. Exp. St., SB520, June 1972.
- Lesser, W. "Marketing Fat Cattle and Feeder Calves in New York." Cornell Univ. Dept. Ag. Econ., A.E. Res. 80-34, December 1980.
- Lesser, W. "Marketing Freezer Beef in New York State." Cornell Univ., Dept. Ag. Econ., A.E. Res. 79-12, May 1979.
- Marion, D. R. "Livestock Marketing in New York State, 1953; Part III: Livestock Dealer Operations." Cornell Univ. Dept. Ag. Econ., A.E. 1022, Feb. 1956.
- Marion, B. W. and H. B. Arthur. Dynamic Factors in Vertical Commodity Systems: A Case Study of the Brioler System, Ohio Ag. Res. and Dev. Center, RB1065, November 1973.

- Miller, K. S. and R. Raikes. "A Risk-Processing Analysis of Cattle Procurement by Beef Packers." NC-117, WP-16, May 1978.
- New York Crop Reporting Service, "New York Crop and Livestock Report." Albany New York, No. 6-81, April 1981.
- Stinson, R. L., P. G. Allen and R. L. Christensen. The Economic Feasibility of Constructing Additional Livestock Slaughter Facilities in Massachusetts, Mass. Ag. Exp. St., RB660, December 1978.
- Snyder, J. C. and W. Candler. "A Normative Analysis of the Value of Quality, Regularity and Volume in Hog Marketing." Indiana Ag. Exp. St., Bull. SB12, August 1973.
- Tomek, W. G. "Price Behavior on a Declining Terminal Market." Am. J. Agr. Econ., 62(1980): 434-44.
- USDA, Agricultural Statistics, 1980. Washington, D.C.
- USDA, CRS. "Livestock and Meat Situation." Supplement No. 522, 1978.
- USDA, Packers and Stockyards Administration, Resume, December 1977.