FUTURE ALTERNATIVES FOR SOUTH TEXAS CATTLE FEEDING-BEEF MARKETING SYSTEMS*

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Introduction

Cattle feeders from the South Texas region expressed concern for the future of their industry to the Director of the Texas Agricultural Experiment Station during the summer of 1982. Subsequent discussions with individual scientists and Texas Cattle Feeders Association staff resulted in establishment of a research survey team to offer possible alternatives to present beef production-marketing systems.

The South Texas cattle feeding-marketing system has evolved into a unique position. Compared to the cattle feeding industry in the Texas Panhandle. South Texas cattle feeding is characterized by samaller feedlots that feed mostly lightweight heifers. These heifers are often those calves not suited for breeding herds or not desirable for development to heavier weights. The feedlots in South Texas tend to have less extensive feed milling capabilities and they must compete for feed grains closer to export markets, which traditionally increases the price of grains. The South Texas fed-cattle market partially replaced the slaughter calf market because a less seasonal and more uniform supply of beef could be offered to processors, distributors and consumers. Some socio-economic factors, among others, were also thought to be linked to the success of feeding lightweight heifers in South Texas.

The immediate concern of South Texas cattle feeders centered on their ability to compete on the wholesale and retail beef markets, especially since other segments of the industry may have been more successful in adapting to alternative distribution techniques.

Objectives of This Study Were:

I. To establish the current profile of the South Texas cattle feeding-marketing systems.

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II. To determine if wholesale-retail demand for carcass beef from lightweight heifers has changed or will change.
III. To identify appropriate alternatives to establish a more competitive South Texas cattle feeding-marketing system.

Procedure

Survey documents used in acquiring the necessary input data for this study are given in the Appendix (Page 67~80). Each survey was managed differently which is explained below. In all cases, survey data were compiled into a form appropriate for purposes of interpretation. Most survey data were obtained during August and September, 1982.

Feedlot and Cattle Performance-Rations-Feedlot Management

The interfirm comparison program (INDEX), managed by the Texas Cattle Feeders Association, was utilized to solicit data from 23 feedlots located South and East of San Angelo. Most feedlots contacted were in the San Antonio trade area. These data forms (Appendix Table A) were mailed with instructions to each feedlot and returned to the Texas Cattle Feeders Association and then transferred to Texas A&M University for analyses of cattle performance. These data were compared to similar INDEX cattle performance data from the Texas Fanhandle region.

Additional feedlot survey data were obtained by mail to establish type and origin of cattle fed, cattle nurchasing and selling techniques, source and type of feed ingredients fed and other related management procedures (Appendix Table B). The same 27 feedlots were contacted for input date as previously indicated.

Meat Packer Survey

On-site visits and telephone calls were used to obtain survey data from 14 slaughter plants identified in the South Texas trade area (Appendix Table C) to determine managerial and operational characteristics of this phase of the beef industry. Operations at Abilene, Dallas and Houston were included in addition to traditional South Texas locations.

Retail Beef Industry Survey

Previous and present purchasing habits by service wholesalers and retailers were considered important in determining meat purchasing trends and estimating the future demand for lightweight heifer beef.

Twenty-three wholesale and retail buyers, representing 1,121 supermarkets, were interviewed by telephone or personal visit about the type of beef they purchase today versus two years ago. The firms interviewed operated supermarkets in Dallas, the "Hill Country", the Texas Gulf Coast and the Rio Grande Valley. Major trade areas of their supermarkets included Houston, Dallas, Beaumont-Port Arthur, Austin, San Antonio, Corpus Christi, Brown-

sville, McAllen and Laredo. Table 1, shows the number of supermarkets owned or serviced by the chains, independents and regional wholesalers surveyed for this study.

TABLE 1 SURVEY SAMPLE OF SUPERMARKET CHAINS. INDEPENDENTS AND REGIONAL WHOLESALERS FOR BEEF PURCHASING PATTERNS, SEPTEMBER 1982.

Item	Chains	Independents	Wholesalers[a]	Total
Number interviewed	13	7	3	23
Supermarkets owned or supplied	578	28	495	1,121

[a] Wholesalers supplied beef to independent food stores and some small chains. Some of these food stores made other arrangements for calf or lightweight heifer beef.

A brief questionnaire (Appendix Table D) was prepared and an attempt was made to contact the retailers that accounted for most of the sales in the trade areas of Port Arthur, Beaumont, Houston, Corpus Christi and San Antonio. All of the chains and a sampling of the independents were contacted. Three regional service wholesalers were contacted that supplied beef to independents and cooperative chains. A Dallas chain was also contacted because it was known to handle lightweight heifer beef. Only one of the regional wholesalers supplied lightweight heifer beef to its customers; the other two offered boxed heavy beef. In the case of the two not offering such beef, they explained that some of their customers purchased calf and lightweight heifer beef on their own. Because of the short time involved, only a judgment sampling procedure, rather than a probability sample, was used.

Results and Discussion

Steer performance was generally less desirable in South Texas than in the Texas Panhandle (Table 2, Figure 1). An exception was daily gain for South Texas steers fed whole shelled corn. This small sample (3 feedlots) was characterized by steers with heavier initial weights, 21 fewer days on-feed resulting in 38 pounds less net gain than Panhandle steers. Cost of gain favored Panhandle steers by $5 to $10 per hundredweight of gain. In contrast to steers, South Texas heifer cost of gain was less than Panhandle heifers. Feed and health costs were both highest in SouthtTexas. Apparently, the favorable South Texas heifer cost of gain resulted from feeding heifers with a lower maintenance requirement since initial and final weight were cosiderably less than for heifers fed in the Panhandle. Monthly variation in cost of gain was greater for steers and heifers fed in South Texas compared to the Panhandle. Many factors, including the relatively small South Texas sample, could influence this outcome. Over-

all, the South Texas cattle feeding industry has remained competitive on cost of liveweight gain by feeding higher-cost feeds to lighter-weight cattle, especially the lightweight heifer.

Feeding and Marketing Practices, 1980-81 Survey

A sample survey of feedlots was conducted in the summer of 1981 by the Dapartment of Agricultural Economics to develop basic data concerning feedlot management practices and data to estimate cost and economics to size. The 1980–81 survey showed 82.6 percent of cattle fed in South Texas were heifers compared to 46.5 percent for the State of Texas (Table 3). A larger percentage of small-frame cattle (19.3) were fed in South Texas than in any other region of the State. In addition, a smaller proportion of No. 1 muscled feeders were fed than in other regions. Monthly distribution of placements of feeders was quite uniform being between seven and nine percent for each month during the twelve months ending June 30, 1981.

Cattle placed on feed were mostly heifers between 300–500 pounds (65 percent compared to 25.2 for the State) and Brahman crosses (61 percent compared to 34.4 for the state). These heifers were fed 120 to 149 days (70 percent) and 62.6 percent were marketed at liveweights of 600–800 pounds. Heifers marketed at 800–1000 pounds accounted for 19 percent of the cattle, whereas, for Texas this group was 30.5 percent of the total cattle marketed. U.S.D.A. Good grade accounted for 56 percent of total fed beef marketed in South Texas while this category, was only 20.6 percent for the State.

FIGURE 1 MONTHLY COST OF GAIN COMPARISONS

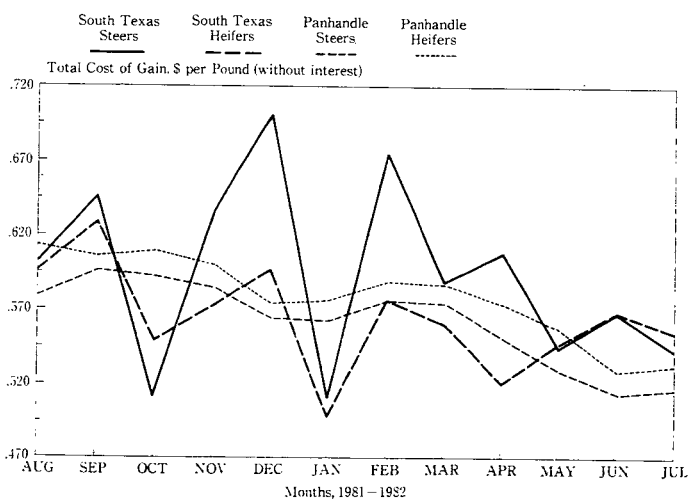

TABLE 2 COMPARISON OF STEER AND HEIFER PERFORMANCE, 1981–82[a]

Cattle closed out	Panhandle	South Texas		
		Whole Shelled Corn	vs.	Other Grain Processing
STEERS				
Average in weight, *lb*	686	692		612
Average out weight, *lb*	1,095	1,063		1,031
Average days on feed	146.00	125.00		158.00
Average daily gain, *lb*	2.80	3.09		2.64
Conversion as fed	8.99	8.49		8.63
Conversion 100% dry matter	7.02	7.49		7.41
Health expense/hd, $	6.38	11.27		8.44
Average death loss, %	.99	.91		1.47
Feed cost of gain, $/*lb*	.4876	.5534		.5876
Total cost of gain, $/*lb* (without interest)	.5657	.6616		.6158
HEIFERS				
Average in weight, *lb*	591	449		472
Average out weight, *lb*	936	730		800
Average days on feed	138.98	122.58		144.22
Average daily gain, *lb*	2.47	2.31		2.29
Conversion as fed	9.17	6.11		8.17
Conversion 100% dry matter	7.34	5.39		7.02
Health expense/hd, $	6.62	9.32		8.91
Average death loss, %	1.69	2.15		1.88
Feed cost of gain, $/*lb*	.5074	.4643		.5533
Total cost of gain, $/*lb* (without interest)	.5854	.5213		.5790
RATIONS FED[b]				
Cost-top ration, $/ton	103.78	135.53		116.90
Cost-top ration, 100% dry matter, $/ton	131.93	153.60		136.09
NEM-top ration, 100% dry matter	94.61	92.12		101.35
NEP-top ration, 100% dry matter	59.85	57.51		64.92
NEM-cost/megcal, 100% dry matter, $	.0697	.0871		.0679
NEP-cost/megcal, 100% dry matter, $	.1102	.1396		.1060

[a]Over 30 Panhandle feedlots reporting per month while only 9 South Texas feedlots are represented, of which 3 fed whole shelled corn and 6 fed grain processed by other means.

[b]Ration net energy value for South Texas (other processing) appear unrealistically high.

TABLE 3 COMPARISON OF SOUTH TEXAS (GULF COAST AND RIO GRANDE PLAINS) CATTLE FEEDING AND MARKETING PRACTICES TO THE STATE AVERAGE, 7-1-80 TO 6-30-81[a]

Item	SOUTH TEXAS	TOTAL TEXAS
	(percent of total cattle fed)	
Kind of cattle place on feed		
English and English Crosses	27.2	50.8
Brahman and Brahman Crosses	61.0	34.4
Weight of heifers placed on feed		
Under 400 pounds	39.8	9.5
400-499 pounds	34.1	14.7
500–599 pounds	6.9	13.8
Small-frame feeder cattle	19.3	6.3
Heifers placed on feed	82.6	46.5
Heifers fed less than 120 days	5.7	5.0
Heifers fed 120–149 days	70.1	29.3
Heifers fed 150 days or more	6.8	12.0
Death loss of cattle on feed	2.1	1.5
Weight of heifers marketed		
600–699 pounds	21.2	3.6
700–799 pounds	41.4	9.6
800–899 pounds	14.1	10.5
900–999 pounds	5.1	20.1
Grade of fed heifers marketed		
USDA Choice	21.7	24.5
USDA Good	55.9	20.5
	(Dollars)	
Total feeding cost per pound of gain	0.56	0.60
Feed cost per pound of gain	0.4031	0.4360
Fixed cost per pound of gain	0.0379	0.0333

[a]Source: Thomas, Peter, R.A. Dietrich and D. E. Farris, unpublished manuscript. Dept. of Agri. Econo. TAMUS.

[b]These estimates differ from those in Table 2 probably because they are a year earlier and because they include more small feedlots and more lightweight cattle. All data sets do not add to 100% since some observations were not included.

Cost of gain intSouth Texas averaged 56 dollars per cwt for all cattle fed, whereas, it was 60 dollars for the State average. The higher cost for the state average may be influenced be heavier cattle and higher average grade (Table 3). Data in Table 3 is a random sample with a higher proportion of hightweight feeder cattle than may actually exist. The 1981–82 INDEX data (previously discussed) support this state-wide trend observed the previous year. A comparison of custom feeding charges indicated a total charge for feed and management six percent higher in South Texas than in the Panhandle-Plains area in 1981. Ration ingredients varied but grain costs were consistent with ration cost. Sorghum grain was the leading feedstuff in South Texas and averaged $6.47 per cwt, whereas, corn was the leading feed ingredient in the Panhandle-Plains at a cost of

$6.68 per cwt. This relatively higher feed cost in South Texas along with discounts for feeder heifers is the cost bias for South Texas specializing in lhight-weight heifers rather than heavy-weight steers. Their incentive is to economize on grain and utilize more of the lower cost input-feeder heifers of the middle and lower grades.

The 1981-82 Mail Survey

Fourteen South Texas feedlot operators completed a questionnaire in September, 1982. The profile of these feedlot operations from July 1, 1981 to June 30, 1982 shows them feeding 60 percent Brahman and Brahman crosses, 18 percent English and English crosses and ten percent Santa Gertrudis and Santa Gertrudis crosses (Table 4). In line with the survey, these feeders were 81 percent heifers, ten percent steers and eight percent bulls. Feeders stated they preferred pen sizes averaging 163 head, and ranging from 100 to 250 head. Eight percent bulls being fed were reported in the 1981–82 survey, whereas, none were reported in the 1980–81 survey. Part of this is a difference in feedlots reporting (Table 5). Most of the feeder cattle fed in South Texas originated in areas of Texas south of the Texas Panhandle. The main source of out-of-state feeder cattle was 27.5 percent of the English and English crosses which came from Louisiana east to Florida. This area also provided 12 percent of the Brah-

TABLE 4 BREEDS OF FEEDER CATTLE FED IN SOUTH TEXAS

Breed of Cattle	Sample survey 1980–81	Mail survey 1981–82
	·····Percent·····	
English Breeds and English Crosses	27.2	18.1
Brahman and Brahman Crosses	61.0	59.6
Exotic European Crosses	7.4	7.1
Santa Gertrudis and Crosses	3.6	10.4
Others	0.8	10.4
Total	100.0	100.0

TABLE 5 PLACEMENTS BY SEX OF CATTLE

Class	Sample Survey 1980–81	Mail Survey 1981–82
	·····Percent·····	
Steers	17.4	10.4
Heifers	82.6	81.4
Bulls	—	8.2
Total	100.0	100.0

TABLE 6 AVERAGE VOLUME AND AVERAGE COST OF FEED INGREDIENTS FOR SOUTH TEXAS FEEDLOTS USING THE SPECIFIED FEED, 1981–82[a]

Item	No. of Feedlots Reporting	Volume (1000 *lb*)	Cost $/cwt.
Grain sorghum	6	23,368	5.26
Wheat	1	11,000	6.00
Corn	6	15,430	5.78
Pre-mix feed	3	1,971	12.70
Protein supplements	7	2,282	12.45
Mineral supplements	1	1,000	8.75
Vitamin supplements	1	1,600	8.50
Molasses	9	1,595	3.50
Citrus pulp	2	8,600	4.45

[a]Average per feedlot reporting.

TABLE 7 LOCATION OF PACKERS BUYING SOUTH TEXAS FED SLAUGHTER CATTLE

City or Area	1980–81	1981–82
	..... Average Percent Per Feedlot	
Corpus Christi	42.6	41.9
San Antonio	10.8	12.7
Small Plants (7)	7.6	5.9
Laredo	10.8	10.8
Rio Grande Valley Packers	12.2	10.9
Mexico	2.2	2.2
San Angelo	4.4	2.8
Texas Panhandle	0.5	3.5
Shreveport	3.1	2.3
Unreported	5.8	7.0
Total	100.0	100.0

[a]Thirteen feedlots reporting.

man and Brahman crosses.

The average cost of milo was $5.26 per cwt., wheat was $6.00 and corn was $5.78 (Table 6). Cost of feeder cattle loans averaged 16.5 percent while the cost of feed loans averaged 16.9 percent.

One-term feedlot capacity averaged 13,857 with a range of 3,000 to 60,000 head. Average size of feedlot is skewed upward since seven of the feedlots had a one-time capacity of less than 10,000 head and six had less than 20,000 head. Total cattle placed on feed averaged 17,871 in 1981–82 and 17,371 per lot in 1980–81.

Ninety-four percent of the cattle were sold direct from the feedlot on a live-weight basis. Feedlots reported selling about 85% of their cattle to South Texas packers with most of the remainder sold to Texas Panhandle, Shreveport, Louisiana or Mexican packers (Table 7).

Feedlot Facilities

The firms reporting, generally had the size and type of lots required for

efficient cattle feeding. All firms reported having fence line bunks, nine reported batch-type milling, one had a continuous flow mill, and three had a mixer truck. Eight had a hay grinder or buster, and seven had steam flakers, one a micronizer, two had rollers and six had whole-grain mixing equipment. Additional data from this survey are presented in Appendix tables E to K.

These 1980–81–82 surveys indicate several trends of interest relative to cattle and feedlot management. Losses were common among cattle feeders nationwide in 1981, but feeders of Choice grade and heavier cattle generally had good profits most of the nine months prior to September, 1982. Lighter weights and lower grades had unusual discounts compared to heavier weights and to Choice cattle in the summer of 1982. This was a clear signal of the relative shortage of heavier weight and USDA Choice beef. While these differences exist, it is clear that South Texas feeders may profit from carrying their heifers to heavier weights. With lower-cost grain in prospect for the next year, there will be a strong incentive to increase the length of time on grain feed in as much as this is biologically possible. This may not be a viable alternative for the bulk of the cattle (80% heifers of which 60% are Brahman-type) fed in South Texas. This incentive will likely hold for cattle feeders throughout the U.S.; therefore, the general level of fed beef prices will likely be down and the differential between lightweight heifers and heifers of heavier weights should decline relative to the first nine months of 1982.

Despite the grain and cattle market fluctuations, the trend toward more boxed beef should reward feeding heifers to heavier average weights in South Texas. Packers would then likely use the top end of their cattle for boxed beef and deliver the remainder in carcass form. Sorting cattle, based upon potential outcome, may be a means of accomplishing this goal.

Meat Packer Survey

In an effort to determine the demand and end-use of lightweight heifers, a survey was made of all of the packers in the state of Texas that killed substantial quantities of these heifers. Of the 14 packers contacted, 12 responded and provided information about their utilization of lighweight heifers. A summarization of the responses and comments made by the packers is provided in Appendix Table E. This material is self-explanatory or descriptive in nature and does not warrant further discussion; however, there are several broad areas of interest to cattle feeders that should be addressed in this section to better demonstrate the problems that have arisen in the lightweight heifer market during the last several years.

The single factor for the apparent lessened demand for lightweight heifers mentioned most often by the packers was the fact that boxed beef had taken away a portion of the market that had originally been for lightweight heifers. The advantages of boxed beef over carcass beef for the

retailer is that is is much easier to handle, less-skilled meat cutters can be utilized, it allows the retailer flexibility in purchasing selected primal or subprimal cuts that may be better "movers" in their particular store, and the maintenance of product quality can be better accomplished with the use of boxed beef rather than carcass beef. Because of these advantages, several retailers have adopted boxed beef in their stores and have greatly decreased their demand for lightweight heifer beef. Unfortunately for those who feed lightweight heifers, as the shift is being made from carcass beef to boxed beef, the lightweight heifer is being replaced with steers or heifers that produce substantially heavier carcasses.

Another apparent trend in what meat packers are doing differently is that several packers have changed the type of the cattle they are slaughtering. Some packers have decreased their utilization of lightweight heifers and are now slaughtering cattle of heavier weights. In addition, several packers have increased their throughput and are slaughtering more cattle than in the past. The move to heavier beef is being made because many costs associated with the salughter of an animal (facilities, equipment, labor, etc.) are considered to be constant and thus when the weight of an animal is included in the equation, the cost to slaughter, fabricate, box, etc., will be less, per pound, for cattle that produce 700-pound carcasses than for cattle that produce 400-pound carcasses. This should not be taken to mean that there will not be a demand by packers for lightweight heifers but that the slaughter and fabrication costs will likely always favor the production of heavier carcasses in their slaughter operations.

Of particular interest in this survey was the apparent sharp increase in the purchase of lightweight heifer carcasses from the major, large-scale boxed beef packers by traditional users of lightweight heifers (packers, retailers, distributors, etc.). These carcasses are actually being produced by the cattle feeding industry in the Panhandle region; these cattle are the lightest weight heifers in a lot and, when slaughtered, they may not fit the general weight requirements necessary for the boxed beef trade. Most large packers who box beef have a minimum carcass weight requirement for their program of 550 pounds. Therefore, when large lots of heifers are fed and slaughtered, there usually will be several head that do not fit the minimum weight requirement for the packer. In the course of several days, there will be a significant accumulation of such carcasses; if so, carload lot quantities are placed on the market at significant price reductions when compared to the break-even costs associated with the procurement and slaughter of live heifers from South Texas. One packer stated that "I can purchase a carload of carcasses of the exact weight, quality and yield grade, free of bruises, fat-pulls, dark-cutters, condemnations, etc., and the problems associated with unacceptable quality and yield grades." This statement, above all, summarizes the feeling that many packers have toward the apparent advantages of purchasing lightweight carcasses from

major beef packers.

In conclusion, several factors have influenced the apparent lessened demand for lightweight heifers in South Texas. Probably the biggest factor associated with the decreased demand for lightweight heifer carcasses is the significant impact that boxed beef is having on the kind of beef that retailers are utilizing in their operations. Secondly, as many packers who have traditionally slaughtered a large proportion of lightweight heifers have changed their operations to increase production and throughout, the majority of the increase in production is accomplished with heavier weight steers and heifers. This shift to heavier cattle is especially evident in packing plants that have adopted fabrication and boxing operations because the economic advantage of boxing beef is predicated upon fabricating heavyweight carcasses. Finally, a small but significant source of lightweight heifer beef is now that of the large boxed-beef packing plants that, because of their capacity, assemble carload lot quantities of lightweight heifer carcasses and place these on the market at very competitive prices compared to those charged by South Texas Packers.

Retail Beef Industry Survey Results

Among the twenty-three firms contacted, those handling lightweight heifer beef included four chains, two independents and a regional wholesaler. Table 8 shows that only 30.4 percent of the firms surveyed handle lightweight heifer beef. The supermarkets owned or served by the firms handling such beef made up 34.7 percent of those represented in the survey. All stores owned by a firm would not necessarily handle lightweight heifer beef, however.

Several firms indicated they had formerly handled lightweight heifer beef, but did not anticipate moving back to it. Forty-one percent of the firms representing fifty percent of the stores either already handled or agreed they would use lightweight heifer beef it it were lower priced. The other firms representing the remaining fifty percent of the stores did not see any likely conditions under which they would be interested.

Comments concerning lightweight beef ranged from those pleased with their program to those that objected to "lack of consistent quality" and to "poor trim" on boxed beef from such cattle. One meat merchandiser observed that in the lower-income areas where lightweight heifers work best, there is a problem of moving loins and ribs.

Most firms, but not all, were using boxed beef delivered to retail stores. There was a general concern about reducing labor cost in the retail meat department and most firms in the higher wage rate areas felt boxed beef helped reduce labor costs.

On those currently using lightweight heifer beef, two firms expected their volume to decline in the next two years relative to that at present.

In the Houston area, retailers were using a high proportion of heavy-

TABLE 8 NUMBER AND PERCENT OF FIRMS AND SUPERMARKETS HANDLING LIGHTWEIGHT HEIFER BEEF WITH POSSIBLE FUTURE TRENDS

Item	Chains	Independents	Wholesaler	Total
Current situation (1982)				
Firms handling lightweight heifer beef (LWHB)	4	2	1	7
Number of supermarkets served or owned by firms handling LWHB	159	5	225	389
Percent of firms handling LWHB	31.0	28.6	33.3	30.4
Percent of supermarkets handling LWHB	27.5	17.9	45.4	34.7
Future Prospects firms that would use LWHB if lower priced	6	2	1	9
Number of supermarkets served or owned by firms	358	5	225	558
Percent of firms that would handle if lower priced	50.0	28.6	33.3	40.9
Percent of supermarkets served or owned by firms	56.1	17.9	45.4	50.2

weight beef in boxed form and stated that high retail store wage rates were a major reason. On the other hand, the two local chains using lightweight heifer beef used it only in carcass form. The four firms using lightweight heifer beef in the Corpur Christi-San Antonio area did buy some in boxed form, but mainly received carcasses. The Dallas chain purchased predominantly lightweight steers; all as boxed beef.

Several commented that by the time lightweight heifers were boxed, much of the cost advantage was lost. Two estimates of lightweight heifers boxed vs no-roll boxed, was 4 cents/*lb* in favor of lightweight hiefers, due to the relative lower price of lightweight heifer carcasses. One firm paid slightly more for boxed lightweight steer beef than for boxed Choice steers or heifers but had a slight retail cost advantage due to higher cut-out. One local chain provided the following cost/price information (Table 9).

With the above cost/price relationships, the firm's beef sales were 25 percent Choice heavy beef and 75 percent lightweight heifer beef. Two developments should be noted. Several retailers pointed out that "Texas calf" has been able to compete price-wise because of the unusual margin

TABLE 9 COST AND RETAIL PRICE FOR HIEFER CARCASSES DELIVERED TO RETAIL STORES SEPTEMBER, 1982

Grade	Carcass Weight,*lb*	Carcass Price	Carcass Yield	Retail Counter		
				Cost	Price	Margin
		\$/*lb.*	(%)	(\$/retail *lb*)		(%)
USDA Choice YG 2,3	600	1.07	67%	1.60	2.28	30
USDA Good YG 2	400–500	1.04	70%	1.49	1.99	25
USDA Good YG 2	350–400	1.06	72%	1.47	2.02	27

that existed for feeder cattle and stocker calves during most of the past year. "Texas calf" (200-350 #carcasses) has been a good buy with a substantial discount compared to heavy beef. It was sold in most of the low-income stores in the Houston-Beaumont area. Two, retailers in middle- and lower-income areas have used lower priced cuts of heavy beef(boxed) such as brisket and chuck to increase meat department sales. These have been attractive price-wise relative to use of whole-carcass, lightweight heifer beef where the loins and ribs move more slowly.

Comments on Beef Retail Surveys

There are so many types of operations in beef slaughter and retailing that it is hard to generalize, but the following statements appear to be consistent with the findings of the study.

1. Demand for beef is conditioned somewhat by background and tradition, but, generally in the highest income areas, retailers sell Choice and even a little Prime quality beef. In the lowest income areas, calf is more often sold along with "no roll" heavy beef or Choice heavy beef. Despite some differences in usality and tenderness, lightweight heifer beef is definitely positioned in the market between calftand heavy "no roll" beef. In the past year, the cost to the retailer and the price to the consumer in beef and calf. Most of the time, these differences have been small. Retailers are reluctant to change their program unless differences are large enough to result in a clear price difference to consumers.
2. Boxed beef provides more merchandising flexibility and lower labor cost in retail stores with high wage rates. The economic contrast is so close, however, that some firms claim they profit from the higher margin available on carcass beef being processed at the retail level. The general trend seems clear . . . boxed beef will continue to grow in market share and the advantage for boxed beef favors use of heavier carcasses.

   With abundant supplies of grain, it appears that heavyweight beef

will take a larger share of the Texas market, with lightweight heifer beef and calf slaughter gaining only when grain becomes more expensive.

From the standpoint of the short-term, it would appear advisable for South Texas cattle feeders to increase the average sluaghter weight perhaps 50 to 100 pounds and the in-weights of feeder cattle where possible. The top end of these heifers could then be used more effectively as boxed beef, whereas, the remainder would fit the programs where buyers prefer to buy carcasses. This adjustment is not without problems because it will increase production cost, but the recent price trend throughout the U.S. is to pay a higher price for heavier beef of comparable grade and yield. The relative profitability of different weights and grades of beef changes with the relative supplies in each category, and in the final analysis the profitability of feeding lightweight heifers in South Texas boils down to whether all the conditions allow South Texas feedlots to outbid Texas Panhandle feedlots for these same weight feeder heifers.

3. Whether it would be advantageous to attempt to promote a more distinct identification for lightweight heifer beef is not clear. This is a consideration that requires more study. There is sufficient uncertainty concerning the number and location of packers, as well as the market share for such beef that feeders, packers and retailers need to develop closer communication on a long-term program. Retailers are always interested in a more uniform product with clear quality assurance. A program that would certify minimum days on feed and adherence to a set of fatness standards would aid retail buyers and merchandisers in using lightweight hiefer beef.
4. Four chains, one in San Antonio, one in Dallas, one in Houston, and one in Beaumont-Port Arthur had lightweight beef programs that appeared to be working well for them that perhaps best illustrate the typical merchandising program for lightweight heifer beef. Two of these combined lightweight heifer beef with a Choice heavy beef program and two used "no roll" heavy beef. Each of the chains operated mostly in the middle to lower-income areas, and their lightweight beef customers were mainly blue-collar families who were price-conscious in shopping and selected lightweight heifer beef because of its leanness, as compared to Choice, and because the price per serving was lower.

   Two of the chinas received lightweight heifer beef in carcass form at the retail store and two received it in boxed form. Two indicated they were handling more lightweight heifer beef now than two years ago while two were handling less. Combined, these

four chains had 133 supermarkets and lightweight heifer beef accounted for 25 percent to 75 percent of their beef volume. Their combined experience was very close to that of a regional wholesaler serving 225 independents from McAllen to the Texas "Hill Country."

Over all it becomes apparent that cattle feeders must develop a closer liaison with packers and retail beef buyers to insure that the type of beef produced supplies their needs. This could possibly be accomplished through forward contracts containing reasonable quality and weight specifications with a devised formula pricing scheme tied to Panhandle Choice steers. This would provide feedlot managers with better information on the frame size, breed, sex, age and weight of feeder cattle to purchase for various contracts. Price risk would still occur, but the risk of producing a type of beef trending to lesser demand would be reduced.

Suggested Alternatives

Feeding lightweight heifers in the South Texas trade area was very competitive on feed conversion and competitive on cost of gain compared with feeding larger heifers in the Texas Panhandle. Yet, widespread industry concern was expressed regarding the future competitiveness of lightweight heifer feeding in South Texas.

Suggested alternatives that emerged from this industry survey were:

1. Feed heifers to heavier slaughter weights due to prospects (1983) of cheaper feed and demand for carcasses that will fit into boxed beef trade
   a) Purchase heavier feeder heifers
   b) Sort cattle by outcome potential (critical to identify heifers with ability to gain)
   c) Attempt to grow those heifers with more outcome potential for short intervals (30–50 days) before finishing
   d) Purchase and feed some steers suitable for boxed beef trade to spread risk
   e) Emphasize improved feeding efficiency of all cattle
2. Promote lightweight, grain-finished heifer beef. Key on uniformity leanness and value (cost per serving) in merchandising.
   a) Target on mid- to low-income groups
   b) Consider market association to work with or without packer, wholesaler or retailer (custom processing)
   c) Organize export trade to Mexico (key on tourist markets and plan beyond the current financial crises).
3. Anticipate higher feeder cattle prices due to lower feed grain prices for the next year.
   a) Explore the potential for backgrounding and backgrounding

contracts with Panhandle feeders.

4. Forward contracting for specific carcass grade and weight could assist with market outlets and reduce risk of producing a carcass of lower demand. The price may be set by a pre-arranged formula tied to Texas Panhandle Choice steers.

While each of these alternatives is considered to hold promise, the industry must recognize that lightweight feeder heifers will continue to be available and that they will continue to contribute to the U.S. beef supply in some manner. It may well be that continued emphasis upon efficient production of lightweight heifers in South Texas, combined with innovative marketing, is the preferred alternative. The large discounts for lighter carcasses in 1982 was not confined to South Texas. This appears to be a temporary market distortion that low-priced corn will likely change.

REFERENCES

Dietrich, R.A., "Interregional Competition In the Cattle Feeding Economy," *Texas Agricultural Progress,* Vol. 18, No. 3, 1972.

Dietrich, R.A., and J.R.Martin, and P.W.Ljungdahl, "Custom Feeding Clients Using Texas Feedlots Operational Characteristics, Management Practices, and Feeding Strategies," *The Texas Agricultural Experiment Station,* B-1148, Oct. 1974.

Dietrich, R.A., "The Texas Retail Meat Industry—Structure, Operartional Characteristics, and Competitive Practices," *The Texas Agricultural Experiment Station,* B-1160, Oct. 1975.

Dietrich, R.A., "The Texas Wholesale Meat Distribution Industry—Structure, Operational Characteristics and Competitive Practices," *The Texas Agricultural Experiment Station,* B-1163, Mar. 1976.

Dietrich, R.A., "The Texas Meat Packing Inudstry—Structure, Operational Characteristics and Competitive Practices," B-1164, Mar. 1976.

Clary, G.M. and R.A. Dietrich, and D.E. Farris, "Meat Marketing Operations in Dallas-Ft Worth, Houston, and Lubbock," *The Texas Agricultural Experiment Station,* B-1497, 1981.

Farris D.E., "Estimates of Realized Margins for Meat and Beef for Large Retail Food Chains," *Departmental Information Report,* SP-2, Oct. 1974.

Faiirs D.E. and R.A. Dietrich, "Opportunities in Cattle Marketing," *Departmental Information Report,* TAMU, SP-1, Jun. 1975.

Farris D.E. and E.E. Davis, and J.A. Hopkin, "The U.S. Beef Situation 1978–80," *The Texas Agricultural Experiment Station,* SP-2, May 1968.

Nicol K.J., and E.O. Heady, "The Cattle Feeding Industry in Transition," *CARD Report No.* 42, ISU, Aug. 1971.

Riethmayer M.R. and R.A. Dietrich, "Analysis of Direct Selling Methods Empolyed by Texas Panhandle Feedlots," *The Texas Agricultural Experiment Station.* MP-1069, Dec. 1972.

APPENDIX TABLE A FEEDLOT SURVEY DOCUMENT

Feedyard	1981				1982		
	August	September	October	November	December	January	through July
STEERS CLOSED-OUT							
Steers sold-number							
Total head days							
Purchase weight, lb							
Sale weight, lb							
Pounds feed fed							
Feed charge only, $							
Total feeding chgs, $							
Cattle sales, $							
Health Charges, $							
No. of deads							
HEIFERS CLOSED-OUT							
Heifers sold-number							
Total head days							
Purchase weight, lb							
Sale weight, lb							
Pounds feed fed							
Feed charge only, $							
Total feeding chgs, $							
Cattle sales $							
Health charges, $							
No. of deads							
RATION							
Cost/ton of top ration							
Moisture level							
NEm (Megcal as fed)							
NEp (Megcal as fed)							

APPENDIX TABLE B SOUTH TEXAS FEEDLOT QUESTIONNAIRE TEXAS A & M UNIVERSITY

Information is requested on a voluntary basis. All information will be combined and only group data will be reported to insure individual information will not be divulged. Call D.E. Farris 713/845–5221 or E.E. Davis 713/845–4351 if you have any questions.

I. Identification

A. Location of feedlot _____
Country

B. Principal business of owner: Feeder ___, Rancher ___, Meat Packer ___, Feed Co. ___, Retailer ___, General Farming ___, Other ___.

C. One time cpacity of feedlot: _____

D. Total number cattel placed on feed 7/1/81 to 6/30/82: _____
Total number cattle marketed 7/1/81 to 6/30/82: _____

II. Breed, source, quality and weight of cattle placed on feed, 7/1/81 to 7/1/82:

	English breeds* and English Crosses	Brahman and Brahman Crosses	Dairy and Dairy Crosses	Limousin Simmental Charolais and Crosses	Santa Gertrudis and Crosses	Mexican Cattle	Other	Total
	.....	.....	.....	Percent	.....	.....	.....	
A. Placements by breed:	____	____	____	____	____	____	____	100%
B. Geographic Origin, (7/1/81–6/30/82)	(Percent)							
1. Texas Panhandle	____	____	____	____	____	____	____	
2. Other-Texas	____	____	____	____	____	____	____	
3. Okla. - N. Mex.	____	____	____	____	____	____	____	
4. Mo.-Ark.-Col.-Ks	____	____	____	____	____	____	____	
5. Miss-Ala-La.:G.-Fla.	____	____	____	____	____	____	____	
6. Mexico	____	____	____	____	____	____	____	

* Herefords, Angus, Shorthorns.

7. Other _____ _____ _____ _____ _____ _____ _____
   Total 100% 100% 100% 100% 100% 100% 100%

C. Placements by sex of cattle, 7/1/81–6/30/82:
Steers _____%, Heifers _____%, Bulls _____%.

D. Grades of placement, 7/1/81-6/30/82:

	Steers	Heifers
1. LF #1	_____%	_____%
2. LF #2	_____%	_____%
3. LF #3	_____%	_____%
4. MF #1	_____%	_____%
5. MF #2	_____%	_____%
6. MF #3	_____%	_____%
7. SF #1	_____%	_____%
8. SF #2	_____%	_____%
9. SF #3	_____%	_____%
Total	100%	100%

E. Weight ranges of placements, 7/1/81–6/30/82.

	Steers	Heifers
1. Under 300	_____%	_____%
2. 300–399	_____%	_____%
3. 400–499	_____%	_____%
4. 500–599	_____%	_____%
5. 600–699	_____%	_____%
6. 700–799	_____%	_____%
7. 800 and over	_____%	_____%
Total	%100%	Z00%

F. What kind of feeder do you prefer:
1. Sex _____
2. Weight _____
3. Age (months) _____
4. Breed type _____
5. No. in lot _____
6. General conformation. (This may include comments on bone, fleshiness, framesize) _____

III. Feeding practices:

A. Length of time on feed:

	Steers	Heifers
1. Under 60 days	_____%	_____%
2. 60–89 days	_____%	_____%
3. 90–119 days	_____%	_____%
4. 120–149 days	_____%	_____%
5. 150–179 days	_____%	_____%
6. 180 days & over	_____%	_____%

B. Ownership of cattle on feed:

1. Feedlot	_____%
2. Members of feedlot Corp.	_____%
3. Not feedlot owned of financed	_____%
total	100%

IV. Grades and weights of cattle sold, 7/1/81–6/30/82:

A. Grades of cattle sold:

	Steers	Heifers
1. Prime	_____%	_____%
2. Choice	_____%	_____%
3. Good	_____%	_____%
4. Standard	_____%	_____%
5. Commercial	_____%	_____%
Total	100%	100%

B. Weight ranges of cattle sold:

	Steers	Heifers
1. Under 500	_____%	_____%
2. 500–599	_____%	_____%

3. 600–699	_____%	_____%
4. 700–799	_____%	_____%
5. 800–899	_____%	_____%
6. 900–999	_____%	_____%
7. 1,000–1,099	_____%	_____%
8. 1,100-and over	_____%	_____%
Total	100%	100%

V. Selling arrangement, sales outlet and type of buyer, 7/1/81–6/30/82:

A. Type of selling arrangement:

1. Direct-liveweight	_____%
2. Grade & carcass weight	_____%
3. Rail or carcass weight	_____%
4. Public market	_____%
5. Packet consignment	_____%
6. Other	_____%
Total	100%

B. Sales outlets for heifers fly location and volume (including Mexico). Indicate if mainly FOB feedlot (Yes or No).

7/1/80–6/30/81			7/1/81–6/30/82		
Town and State	Volume %	FOB Feedlot (Yes or No)	Town and State	Volume %	FOB Feedlot (Yes or No)
Other			Other		
	100%			100%	

C. Delivery and selling terms:

1. Days finished cattle sold prior to shimpment:
   0–10 days _____%, 11–20 days _____%, 21–30 days _____%, 30 days or more _____%.
2. What special arrangements, if any, did packers make for cattle purchased from feedlot but not delivered to slaughter plants within 10 days of sale. _____
3. What were the shrinkage assessments for sales on the basis of:
   Live feedlot weights _____% Hot carcass weights _____%
   Live slaughter plant weights ____% Cold carcass weights ____%

VI. Feed utilization, source and purchase arrangement:

A. Volume and average cost of feed during 7/1/81–6/30/82.

Type of feed	Volume of feed (ton, cwt. or *lb*)	Average cost/ton, cwt. or *lb* (dollars)

Grain & concentrates:

Grain sorghum	_____	_____
Barley	_____	_____
Wheat	_____	_____
Corn	_____	_____
Pre-mix feed	_____	_____
Feed additives	_____	_____
Protein supplements	_____	_____
Mineral supplements	_____	_____
Vitamin supplements	_____	_____
Molasses	_____	_____
Other concentrates	_____	_____
Such as citrus pulp	_____	_____
Roughage:	_____	_____
Silage	_____	_____
Green chop	_____	_____
Beet pulp	_____	_____
Ammoniated rice hulls	_____	_____
Alfalfa hay	_____	_____
Alfalfa cubes	_____	_____
Other	_____	_____

B. Source of feed, 7/1/81–6/30/82.

		Source of Purchased Feed				
		Texas			Out of State	
Concentrates:	Purchase	Less than 200 miles	200–500 miles	Over 500miles		
Grain sorghum	%	%	%	%	%	100%
Corn	_____	_____	_____	_____	_____	100%
Barley	_____	_____	_____	_____	_____	100%
Wheat	_____	_____	_____	_____	_____	100%
Mill feeds	_____	_____	_____	_____	_____	100%
Citrus Pulp	_____	_____	_____	_____	_____	100%
Other concentrates	_____	_____	_____	_____	_____	100%
Roughage:						
Silage	_____	_____	_____	_____	_____	100%
Green chop	_____	_____	_____	_____	_____	100%
Beet pulp	_____	_____	_____	_____	_____	100%
Cotton seed hulls	_____	_____	_____	_____	_____	100%
Rice hulls (ammounited)	_____	_____	_____	_____	_____	100%
Alfalfa:						
Hay	_____	_____	_____	_____	_____	100%
Cubed	_____	_____	_____	_____	_____	100%
Other	_____	_____	_____	_____	_____	100%

C. Feed purchase arrangement:

Concentrates (excluding supplements)		Roughage:	
1. Own production	_____%	1. Own production	_____%

2. Open market (cash)	_____%	2. Open market (cash)	_____%
3. Contract [a]	_____%	3. Contract[a]	_____%
4. Other	_____%	4. Other	_____%
total	_____%	total	_____%
	100%		100%

VII. Indicate

A. Type of milling facility (check those that apply)

☐ Batch ☐ Continuous flow ☐ Mixer truck
☐ Hay grinder or buster
☐ Steam flaker ☐ micronizer ☐ roller ☐ whole grain
☐ Other
(indicate)

B. Method of feeding (Check those that apply)

☐ Fence line bunk ☐ self feeder ☐ fence line bunk and self feeders

VIII. Employees fly type, 7/1/81–6/30/82

	Number	If less than full time, show ratio
A. General Manager		
B. Yard manager		
C. Asst. Yard foreman		
D. Mill foreman		
E. Mill workers		
F. Feeder		
G. Cowfloys		
H. Maintenance		
I. Office manager		
J. Office personnel		
K. Consultant		
L. Other		

IX. Interest rates for period 7–1–81 to 6–30–82:

A. Average interest rate paid on feeder cattle loans _____%
B. Average interest rate paid on feed loans _____%

PLEASE RETURN TO DR. D.E. FARRIS, DEPT. OF AGRI: ECON: TEXAS A&M UNIVERSITY COLLEGE STATION, TX. 77843.

APPENDIX TABLE C MEAT PACKER SURVEY WITH RESPONSES[a]

QUESTIONS/RESPONSES

1. In your opinion what is the future of the lightweight heifer market?
   (A) "Yearling type cattle would most likely provide the flexibility that a small plant needs. There is a market for lightweight heifers at the current time, but it is decreasing. Consider unit cost. Match a low total unit cost."
   (B) "People are going to eat. Traditionally, for economic and ethnic reasons, the area serviced has utilized lightweight, lean beef. It will continue to do so. Unit cost."
   (C) "Market will come back. Some chains will come back because of economy (unit cost). If industry could develop breaking system, it would strengthen the marketability of lightweight cattle."
   (D) "Has been on the down-turn in this area. As people go to boxed beef, it cuts into lightweight heifer business."
   (E) "For clientele in the Houston area, the lightweight heifers offer reduced unit cost and a leaner product (especially for the Blacks and Spanish)."
   (F) "Fading."
   (G) "Kind of meat that is needed due to ethnic group and the economy in South Texas. Lost several killers over the past year. Unit cost and leanness."
   (H) "Increase in number to be slaughtered. Smaller unit cost at the store level. Leaner meats are in greater demand: the consumer is not as concerned about grading as in the past."
   (I) "Terrible and getting worse!"
   (J) "Will be less lucrative as time goes fly. With less numbers of independents, the need for lightweight beef will be less."
   (K) "For specialized market, it looks good. Feel it will get stronger. Re-build because of low unit cost."
   (L) "Stay at the current level for their operation, but not expanding for other packers."

2. What effect has the boxed beef supply had on the marketing of lightweight heifer beef carcasses?
   (A) "Definitely has had an impact. Every week lose a store to boxed beef—availability of quality workers. Not only retailers that in the past used lightweight beef, but also retailers that typically used heavyweight carcasses have switched to boxed beef."
   (B) "Definitely has impacted the carcass market. However, its impact was not only on lightweight carcasses, but heavyweight carcasses as well."
   (C) "Has killed it, narrowed it down to the Southwest. Midwest is heavy beef of veal."
   (D) Definitely has had an impact. Boxed beef in this area has eroded the lightweight heifer market."

[1] Agreement to purchase concentrates or roughage 30 days or more in advance.

[a] Respondents A throufih L represented <1, 1.7, 8.5, 3.8, 11.0, 11.9, 8.5, 5.5, 12.7, 8.3, 5.9 and 21.2%, respectively, of the total kill of the 12 plants surveyed.

(E) "Has had an impact, several chains have converted their program to boxed beef—both the lightweight as well as heavy with the most influence on the heavy. Lightweight or baby beef has held up rather well."
(F) "Negative relationship".
(G) "Not a competetive item as in comparing apples and oranges."
(H) "None."
(I) "Boxed beef has had a tremendous impact on the use of lightweight beef heifers. Many people who had previously used light heifer carcasses are now using boxed beef."
(J) "Tremendous impact!"
(K) "It hurt them (lightweight heifers) for approximatively 2 years because major chain went into the market. In the Beaumont area (consumer) and because of economics, the influence of boxed beef has leveled off. Supermarkets are starting to provide Choice."
(L) "Tremendous! Reduced the demand for lightweight heifer carcasses."

3. Would you consider custom killing and/or custom fabricating carcasses of lightweight heifers? Other alternatives?
(A) "Definitely yes! Most important thing is to produce a shapely lean beef—cannot sell 3's. Need to get numbers lined out."
(B) "Yes!"
(C) "Would consider it as an alternative."
(D) "Yes, very interested."
(E) "Yes, would be interested in custom killing."
(F) "No!"
(G) "Might do some custom killing."
(H) "Yes, would consider it. A more steady supply needs to be developed. Industry must do a better job marketing of their product. A major problem has resulted from a reduction in demand for beef in general."
(I) "No!"
(J) "Probably."
(K) "Hadn't thought about it, but would discuss the idea."
(L) "Yes. We are doing some now with certain food companies."

4. Would you be willing to the enter into a contract or partnership with cattle producers or a feedlot for the purpose of further developing your supply and marketing potential of lightweight heifers?
(A) "A little hesitant, but would be willing to discuss it with feeders. If the cattle feeders want to have a varied market, they must support the small packer. Feeders need the little packer to keep the big boys honest."
(B) "No. Primarily in a partnership now, with themselves."
(C) "Would discuss the concept."
(D) "Would have to do some real deep thinking."
(E) "Not interested in this concept."
(F) "No!"
(G) "No way, not interested."
(H) "Not able to comment on this questions." (Did not have the authority to do so.)
(I) "No!"
(J) "Probably."

(K) "Yes, would consider it. Need stronger communicative system."
(L) "Would be especially interested if we could buy on the rail."

5. Have you seen any change in the supermarket buying specifications for carcass beef over the past year to year and a half (i.e., weight, type, sex, grade)?
   (A) "Less importance on grades. Shift to leaner beef."
   (B) "Certain chains have moved to heavier beef. Some have become more aware of leanness."
   (C) "Shift to boxed beef. Also shift to leaner beef."
   (D) "Moved toward boxed beef. Want leaner cattle and less emphasis on grading."
   (E) "Shifted to leaner beef, less strength in grading."
   (F) "Yes, they want bigger and leaner beef. No appreciable change in sex wanted."
   (G) "No major change in the demand. Staying with what we have. Do not want to compete with IBP."
   (H) "Buying less graded beef and leaner beef in general. No change in weight specifications.
   (I) "Heavier carcasses, leaner carcasses."
   (J) "Heavier and leaner."
   (K) "Tendency toward leanness. Killing cattle that are leaner."
   (L) "No! Not for our operation. Our clientele still prefer 400–500 lb carcasses."
6. Would it be cost effective to break and/or fabricate lightweight heifer carcasses in your operation? Why?
   (A) "Yes-most definitely."
   (B) "Testing such a concept at the present time."
   (C) "Yes! Increase in demand for the lighter unit cost product. Question is whether or not it could be done on a cost effective basis."
   (D) "Not cost effective. Not a market established."
   (E) "Should be feasilbe; increase turnover flexibility. Margin between boxed product should be greater than swinging beef."
   (F) "No! Simply will not pay."
   (G) "Putting some in the box. One customer. Good for primal cuts. Having this done on the outside. Not in the conventional sense of boxed beef."
   (H) "No! Cannot move loins, other middle meats. Cannot fabricate at a cost effective rate at the volume the plant has the capacity to supply."
   (I) "Doing some but it is marginal about the cost effectiveness."
   (J) "No! Must be used in store door delivery."
   (K) "People have tried it and failed. The consistency is not there. The shelf-life is not there. Fixed cost to production ratio. Merchants not happy."
   (L) "Not at the present time."
7. Has there been a shift in demand for lightweight heifer beef at the retail level? If so what would you attribute the shift to (change in type of market, availability, boxed beef, economics)?
   (A) "Yes! toward boxed beef. Labor availability of qualified skilled meat cutters has decreased."
   (B) "The reduced availability of skilled labor and the forced use of boxed beef has caused some shifts. However, it appears to have stabilized."

(C) "Influx of boxed beef, availability of labor, less boning at the retail level and more boneless cuts."
(D) "Loss of skilled labor and increased labor cost have caused many retailers to shift. Not so much a consumer change."
(E) "The demand has remained stable."
(F) "Yes, changing to boxed beef; hence, bigger cattle."
(G) "Gone a little heavier, a little more quality. Leanness still there, yield grades 1 and 2 60%, 3's 35% and 1's less than 5%."
(H) "Not a great deal, especially in the San Antonio area and San Angelo area."
(I) "Yes! Several factors responsible but primarily boxed beef, HEB changing (very important!)."
(J) "Yes. Economics plus boxed beef. HEB decision was very instrumental."
(K) "Forced shift because of boxed beef, not change in consumer demand."
(L) "Yes. Boxed beef and economics."

8. How would you change the type of live cattle you are now purchasing (heavy, fatter, trimmer, quality (etc.)?
(A) "Leaner, apparent increase in consumer demand for lean beef."
(B) "Improve uniformity and consistency."
(C) "Leaner."
(D) "Fairly satisfied. Leaner."
(E) "Currently, the availability of lightweight heifers is very plentiful, so we get what we want."
(F) "Higher quality, heavier."
(G) "140 day, good dressing 57–59."
(H) "More quality and less fat."
(I) "Heavier and leaner."
(J) "Heavier, leaner animals (fed bulls especially)."
(K) "Make them leaner but pretty much happy with what they have at the present time."
(L) "No change needed. Every time heavier cattle are utilized, supermarkets complain."

9. What are the relative cost differences of delivering carcass beef vs. that of boxed beef?
(A) "Couldn't estimate."
(B) "Could not make an estimate."
(C) "Not able to say."
(D) "Not able to indicate. No data base."
(E) "Cannot compare."
(F) "Cheaper to deliver boxed beef but not to produce it.
(G) "Carcass would be delivered cheaper. Can't really compare."
(H) "Not able to determine cost differences."
(I) "Less expensive to transport and deliver boxed beef (no figures available)."
(J) "Ease of handling, less time and effort in loading or unloading, etc."
(K) "Doesn't appear feasible. Does not have resource to estimate relative difference."
(L) "No exact figures given but definite advantage for boxed beef."

APPENDIX TABLE D RETAIL QUESTIONNAIRE: SOUTH TEXAS BEEF

Information requested on a voluntary basis. Individual information will reamain confidential.

Company _____ Location _____

Contact person _____ Phone _____

1. What grade and type of beef do you handle?

	(%)		(%)	Carcass
Prime	_____	Steer	_____	_____
Choice	_____	Heifer (mostly choice)	_____	_____
Good	_____	Light heifer	_____	_____
No roll	_____	Other	_____	_____
Standard	_____			
Utility	_____			

2. Type of grading or brand used at retail on block beef.
   a. U.S. graded _____
   b. Private brand _____
   c. Grade and brand _____
   d. Not graded or branded _____

3. What form of beef do you purchase (or deliver)?

At the warehouse?	%	At the retail store?	%
a. Carcass	_____	a. Carcass	_____
b. Quarters	_____	b. Quarters	_____
c. Primals	_____	c. Primals	_____
d. Sub-primals	_____	d. Sub-primals	_____
e. Retail cuts	_____	e. Retail cuts	_____
f. Boneless boxed	_____	f. Boneless boxed	_____

4. Percent of current total block beef purchased at store level as light heifer beef?
   Two years ago? _____ Today? _____ Two years from now? _____
   If zero, go to question 13.

5. Current cost of light heifer carcass beef vs. boxed "no roll" beef delivered to retail store? _____

6. a. Current price of light heifer beef in the retail counter vs. heavier "no roll" or choice beef? _____
   b. Relative 1982 volume sold of light heifer beef vs. "no roll" _____ vs. choice _____
   c. Would you expect these to increase _____ or decrease _____ in the next year? Explain _____

7. What is your estimate of the cost of boxing 400–550 pound carcasses vs. 550–700 pound carcasses? _____

8. What are the problems with light heifer boxed beef besides cost?

9. a. Have you changed your beef buying specifications in the last year?

   b. The year before?

10. General area and type of customer served by your company.

11. What area was the principal supplier of beef two years ago?

    Today?

12. What are your future expectations concerning purchasing and merchandising light fed heifer beef vs. other types?

13. If price is the major consideration in marketing, what difference must you have to enter the light fed heifer market?

14. Other comments about your general experience with light heifer beef.

APPENDIX TABLE E FEEDER GRADE OF PLACEMENTS, SOUTH TEXAS FEEDLOTS, 1981–82[a]

Feeder Grade	Steers	Heifers
	Percent	
Large frame		
#1	16.9	15.0
#2	28.1	22.5
#3	10.6	5.4
Medium frame		
#1	21.1	30.8
#2	18.9	16.3
#3	1.3	1.7
Small frame		
#1	3.1	6.7
#2	0	.8
#3	0	.8
Total	100.0	100.0

[a] Average per feedlot.

APPENDIX TABLE F WEIGHT RANGES OF PLACEMENTS, SOUTH TEXAS FEEDLOTS, 1981–82[a]

Weight Range	Steers	Heifers
	Percent	
Under 300	0.00	1.00
300–399	9.40	20.77
400–499	16.00	49.46
500–599	41.00	21.85
600–699	31.40	6.38
700–799	0.20	0.54
800 and over	2.00	0.00
Total	100.00	100.00

[a] Average per feedlot.

APPENDIX TABLE G LENGTH OF TIME ON FEED, SOUTH TEXAS FEEDLOTS, 1981–82[a]

No. of Days	Steers	Heifers
	....Percent....	
Under 60 days	0.0	0.y6
60–89 days	0.00	0.71
90–119 days	12.22	37.00
120–149 days	50.56	56.07
150–179 days	16.11	5.14
180–179 days	16.11	5.14
180 days and over	21.11	0.71
Total	100.00	100.00

[a] Average per feedlot.

APPENDIX TABLE H WEIGHT RANGES OF CATTLE SOLD, SOUTH TEXAS FEEDLOTS, 1981–82[a]

Weights	Steers	Heifers
Under 500#	0.00	0.00
500–599	0.00	0.38
600–699	0.63	11.15
700–799	0.63	42.31
800–899	4.00	37.30
900–999	19.12	8.46
1,000–1,099	56.88	0.38
1,100 and over	18.75	0.00
Total	100.0	100.0

[a] Average per feeldot.

APPENDIX TABLE I GRADES OF CATTLE SOLD, SOUTH TEXAS FEEDLOTS, 1981–82[a]

U.S.D.A. Grade	Steers	Heifers
	....Percent....	
Prime	0.2	2.1
Choice	35.0	32.3
Good	62.5	59.4
Standard	1.8	5.6
Commercial	0.5	0.8
Total	100.0	100.0

[a] Average per feedlot.

APPENDIX TABLE J FEED PURCHASE ARRANGEMENTS, SOUTH TEXAS FEEDLOTS, 1981–82[a]

Method	Concentrates (excl. supplements)	Roughage
Own Production	2.86	35.71
Open Market	66.07	40.71
Contract	31.07	23.57
Total	100.00	100.00

[a] Average per feedlot.

APPENDIX TABLE K AVERAGE VOLUME AND AVERAGE COST OF ROUGHAGE FOR SOUTH TEXAS FEEDLOTS USING THE SPECIFIED ITEM, 1981–82[a]

Item	No. of Feedlots Reporting	Volume (tons)	Cost $/cwt.
Silage	1	6,000	25
Alfalfa Cubes	3	1,517	117
Cottonseed Hulls	2	4,025	40
Grass Hay (ground)	1	4,125	90

[a] Average per feedlot reporting.