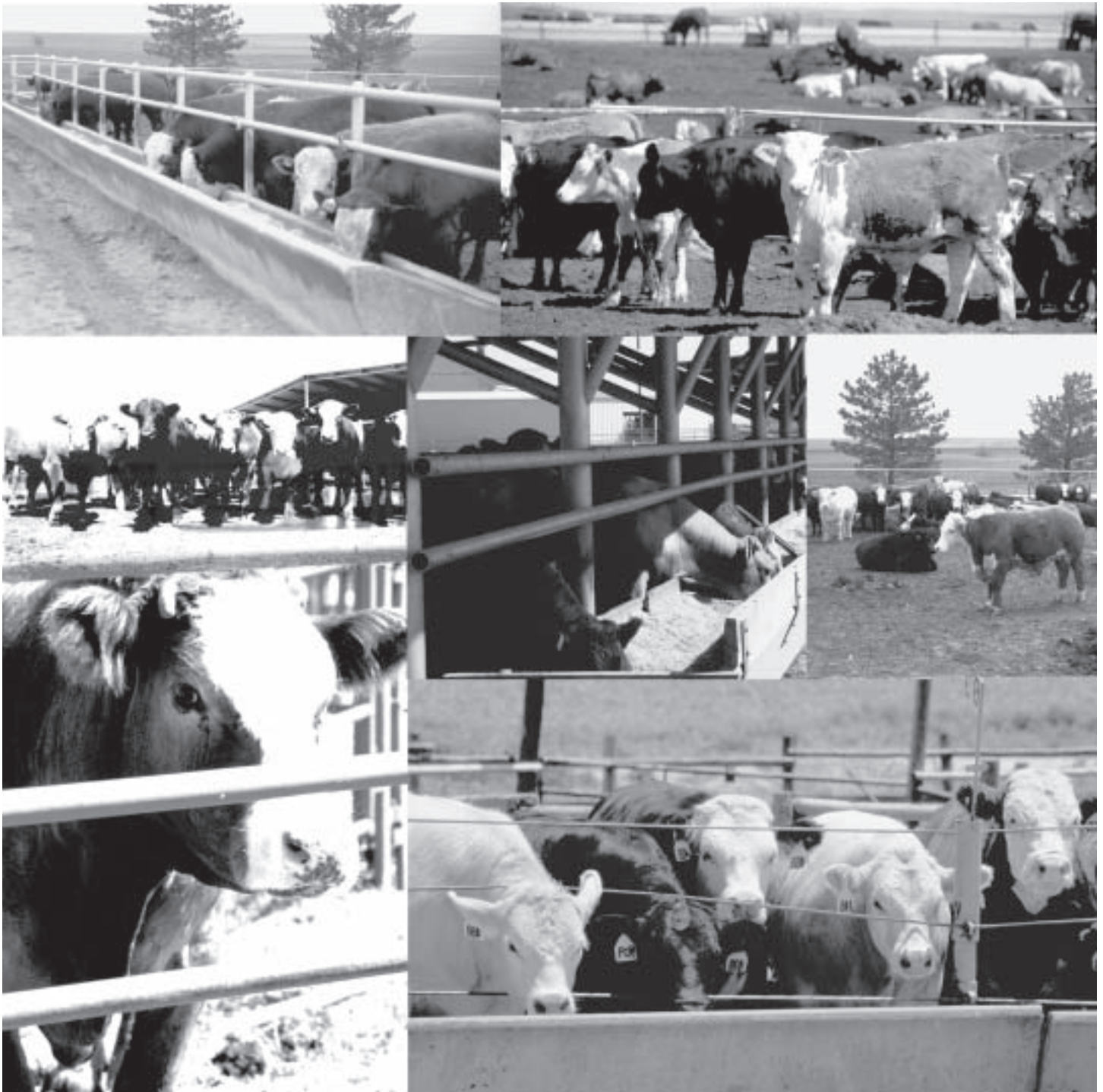


Seasonal Trends in Heifer Feeding Profits, Prices, and Performance



Seasonal Trends in Heifer Feeding Profits, Prices, and Performance

To use effective risk management strategies in their operations, cattle feeders should consider how several variables alter profits. Changes in fed and feeder cattle prices, corn prices, interest rates, feed conversion, and average daily gain affect feeding profitability. This publication illustrates the historical relationship between seasonal variation in heifer feeding profitability, cattle prices, corn prices, feeding cost of gain, and cattle performance for western Kansas feedlots. This publication is a companion to K-State Research and Extension Publication MF-2547 (Mark, Jones, and Mintert), which reports similar information for steer feeding. Results of this study indicate:

- Heifers placed on feed in midsummer were generally more profitable than heifers placed on feed at the same weight in winter. Profit variability was also lowest for heifers placed on feed during the summer. However, seasonal profit patterns varied by placement weight.
- Fed heifer prices peaked seasonally in late winter to early spring and were seasonally lowest during the summer. Light weight feeder heifer prices are typically highest in late winter and early spring and lowest in the fall. Prices for heavy weight feeder heifers peaked in early winter and declined by midspring.
- Corn prices in Kansas were generally lowest in September and October during harvest and increased seasonally through June.
- Pounds of feed required to produce a pound of gain were usually lowest for heifers placed on feed during late spring and early summer. Heifers placed in the summer also had the highest average daily gains.
- Feeding cost of gain was lower for heifers placed on feed during the first half of the year when compared to third and fourth quarter placements.

Introduction

Research at Kansas State University indicates that, over a 15-year period, average profits from feeding heifers in Kansas ranged from \$14.27 to -\$2.29 per head, depending on placement weight. The standard deviations of feeding profits were more than \$50 per head. This economic risk results primarily from changes in feeder and fed heifer prices, corn prices, interest rates, and animal performance (Mark, Schroeder, and Jones). To manage risks associated with feeding heifers, cattle feeders should anticipate how profitability is affected by these factors over long time periods, as well as how profits vary within a year. This bulletin can help cattle feeders manage risk by providing information on seasonal variation in heifer feeding profits, cattle prices, corn prices, cost of gain, average daily gain, and feed conversion.

Seasonal changes in feeder and fed heifer prices and corn prices, along with seasonal trends in average daily gain and feed conversion, cause seasonal variation in feeding cost of gain and profits. The seasonal trends in heifer feeding profits are caused, in large part, by seasonal variation in cattle and corn prices, and cattle performance. To analyze seasonal trends in heifer feeding profitability, performance (average daily gain and feed conversion), and cost of gain, feedlot closeout data from 4,217 pens of heifers placed on feed between January 1985 and August 1999 were collected from two western Kansas commercial feedyards. Information collected from the heifer closeouts includes placement date, placement weight, feeder purchase price, days on feed, feed conversion (as-fed basis), average daily gain, feeding cost per pound of gain, sale weight, and sale date.

The closeout data analyzed in this report are for heifers placed on feed at weights ranging from 500 to 899 pounds. Results are reported for four placement weight categories (500 to 599, 600 to 699, 700 to 799, and 800 to 899 pounds). Seasonal trends in performance and cost of gain for 800- to 899-pound heifer placements are omitted because insufficient

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Table 1. Averages and Standard Deviations of Selected Heifer Feeding Factors, January 1985 to August 1999

Variable	Placement Weight							
	500 to 599 lbs.		600 to 699 lbs.		700 to 799 lbs.		800 to 899 lbs.	
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.
Net Profit (\$/head)	12.82	67.95	14.27	54.71	5.64	55.75	-2.29	66.12
Fed Price (\$/cwt)	68.76	7.17	68.41	7.00	69.07	6.66	68.08	6.53
Feeder Price (\$/cwt)	73.57	12.40	71.84	10.98	72.02	10.10	70.00	9.50
Placement Weight (lbs.)	566	26	654	27	739	27	838	26
Days on Feed	164	25	133	18	120	16	111	16
Sale Weight (lbs.)	1,007	52	1,035	48	1,091	60	1,174	71
Feed Conversion (lbs. feed/lb. gain) ^a	8.58	0.85	8.62	0.93	8.93	0.99	9.41	1.07
Average Daily Gain (lbs./day)	2.65	0.36	2.84	0.33	2.90	0.35	3.00	0.44
Cost of Gain (\$/cwt)	53.10	8.76	52.39	7.89	54.79	8.50	58.13	10.26
Corn Price (\$/bu.)	2.51	0.59	2.47	0.52	2.50	0.53	2.57	0.60
Hay Price (\$/ton)	79.30	18.93	76.22	19.26	79.30	17.70	82.57	16.44
Number of Pens	521		1,953		1,368		375	

^a As-fed.

Source: Kansas State University

observations were available. Seasonal trends in fed and feeder heifer prices and corn prices are examined in this study using prices reported by Agricultural Marketing Service (AMS-USDA) and Kansas Agricultural Statistics for western Kansas from 1985 to 1999.

Feedlot closeout data were used to calculate profit per head for each pen of cattle. Gross revenue from the sale of the finished heifer, minus the cost of the feeder heifer and total cost of gain, equals profit per head. Total cost of gain includes feed costs, veterinary costs, processing, and yardage fees, as well as interest charges on both the feeder heifer's purchase price and one-half of all feeding costs. The feedlot closeouts did not include interest rates, and, in some cases, fed and feeder cattle prices. Therefore, interest charges were calculated using the monthly interest rate for feeder cattle loans reported by the Kansas City Federal Reserve Bank. When the feeder heifer price was missing for a pen of cattle, a price was computed from the Dodge City, Kansas, feeder cattle auction market summary (AMS-USDA) for the placement week, using a linear price slide across weights. Weekly average western Kansas direct fed heifer prices (live weight basis) (AMS-USDA) were substituted when slaughter heifer sale prices were unavailable.

Table 1 presents summary statistics for selected heifer prices, costs, and performance factors by placement weight category. These summary statistics illustrate differences across the four placement weight categories. The average number of days on feed decreased from 164 for 500- to 599-pound placements to 111 for 800- to 899-pound placements, 24 and 8 days, respectively, less than steers of the same weight. Heifer feed conversions increased as placement weight increased, ranging from 8.58 to 9.41 pounds of feed per pound of gain (as-fed). Higher feed conversions for heavier weight heifers are typical as feed efficiency generally slows as heifers approach their finished weight. Heifer average daily gains ranged from 2.65 pounds per day for 500- to 599-pound placements to 3.00 pounds per day as placement weight increased to 800- to 899-pounds. Correspondingly, average sale weight increased from 1,007 pounds for 500- to 599-pound placements to 1,174 pounds for 800- to 899-pound placements. Thus, heifers placed on feed at heavier weights tended to gain weight more rapidly and were slaughtered at heavier weights. However, heifers are, on average, less efficient than steers at converting a pound of feed to a pound of gain and have lower average daily gains and finished sale weights.

Average feeder heifer prices ranged from \$70.00 per hundredweight for 800- to 899-pound heifers to \$73.57 per hundredweight for 500- to 599-pound heifers. On average, prices for 500- to 599-pound heifers placed on feed in this study were \$1.73 per hundredweight higher than 600- to 699-pound heifer prices. However, based on yearly data and equal numbers of placements each month, the average price spread between 500- to 599-pound, and 600- to 699-pound feeder heifers at Dodge City, from 1985 to 1999 was \$2.40 per hundredweight. The price difference shown in Table 1 is smaller than the 1985-1999 average because about half of the 500- to 599-pound heifers in this study were placed on feed in late fall and early winter, when 500- to 599-pound feeder heifer prices were seasonally low. Relatively few light weight heifers were placed on feed in the spring, when prices were seasonally high, because most light weight cattle are placed on grass during the spring. Similarly, the price discount for 700- to 799-pound heifers relative to 600- to 699-pound heifers was about \$1.00 per hundredweight smaller than the annual spread observed in Dodge City, market prices.

Feeding cost of gain, which includes all costs except interest, ranged from \$52.39 per hundredweight for 600- to 699-pound heifer placements to \$58.13 per hundredweight for heavier weight heifer placements. Average feeding cost of gain for heifers was approximately 5 to 12 percent higher than for steers of similar placement weights. For example, feeding cost of gain for 700- to 799-pound heifer placements averaged \$54.79 per hundredweight, \$5.18 per hundredweight higher than for steers placed at the same weight. Feeding cost of gain was higher for heifers because their average daily gain was 8 to 11 percent lower, and feed conversion was 5 to 10 percent higher, when compared to steers at similar weights.

Heifer Feeding Profitability

Average net returns per head during the 1985 to 1999 time period ranged from a profit of \$14.27 per head for 600- to 699-pound placements to a loss of \$2.29 per head for 800- to 899-pound placements (Table 1). Standard deviations of net profit ranged from \$54.71 to \$67.95 per head, however, which indicates considerable variability in feeding profits

Figure 1. Monthly Average Heifer Feeding Profit for Heifers Placed on Feed at 700 to 799 Pounds.

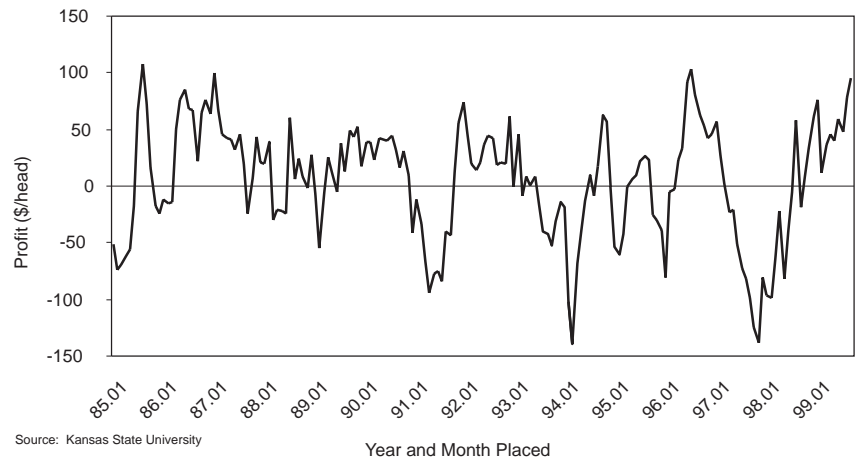


Figure 2. Average Annual Heifer Feeding Profit for Heifers Placed on Feed at 700 to 799 Pounds.

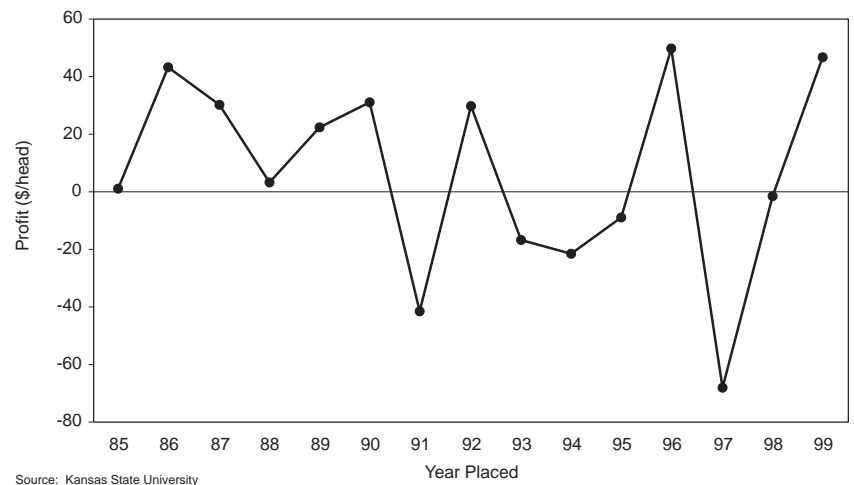


Figure 3. Seasonal Heifer Feeding Profit and Standard Deviations for 600 to 699-Pound Placements.

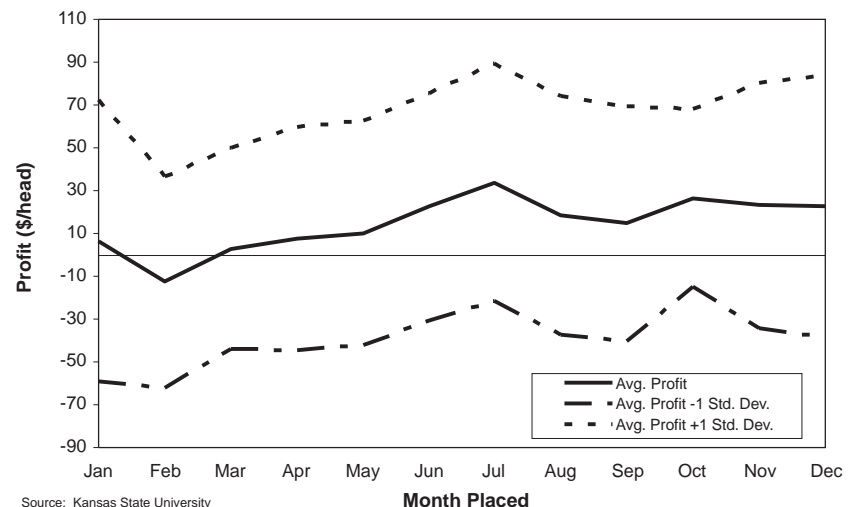


Figure 4. Seasonal Heifer Feeding Profit and Standard Deviations for 700- to 799-pound Placements.

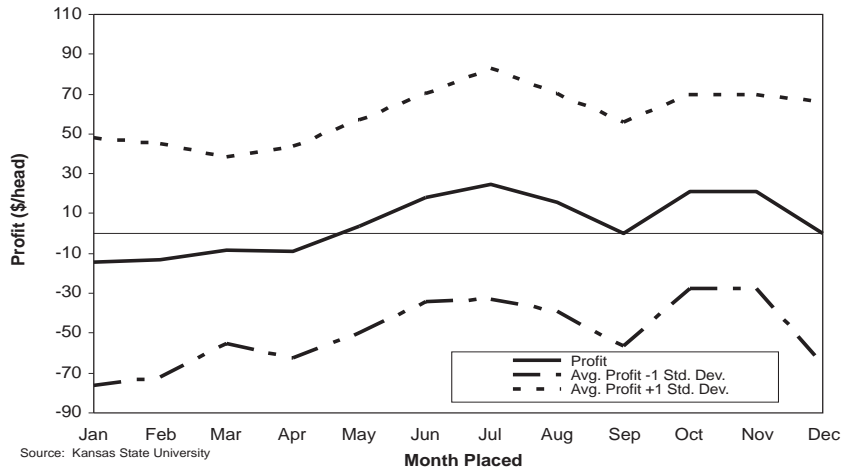
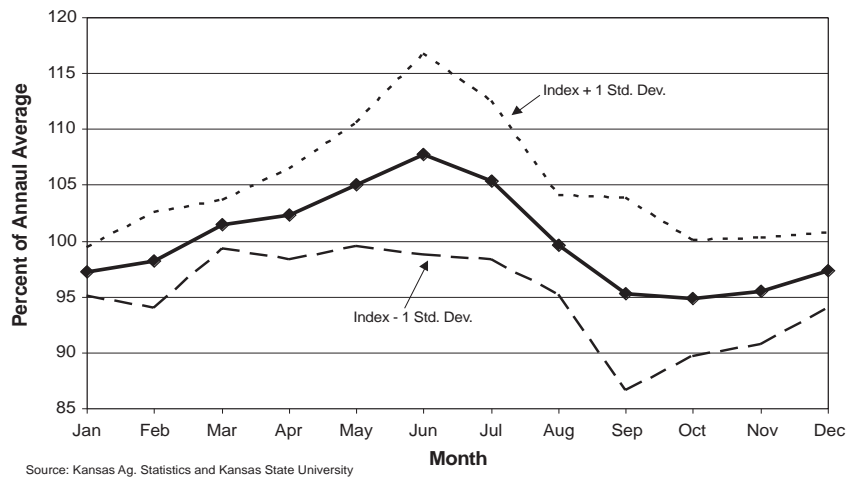


Figure 5. Kansas Corn Price Index, 1985 — 1999.



during these 15 years. Some of this variability can be observed by examining monthly and yearly average feeding profits during the 1985 to 1999 time period. Monthly average profits ranged from a high of \$107.17 per head for heifers placed at 700- to 799-pounds in August 1985 to a low of -\$140.35 for February 1994 placements (Figure 1). Figure 2 illustrates that annual average heifer feeding profits for 700- to 799-pound placements ranged from nearly \$50 per head in 1996 to -\$68.42 per head one year later. Figures 1 and 2 reveal that cattle feeding experiences extended periods of profits and losses.

Net returns to heifer feeding are subject to risks from fluctuating feeder and fed heifer prices, feed prices, cattle performance, and interest rates. Cattle feeders should consider how these risks could affect their budget

projections when placing cattle on feed. Higher feeder cattle purchase prices, feed prices, and interest rates, as well as poor cattle performance, all increase costs and, everything else held constant, reduce heifer feeding profitability. Lower profitability also may result from declines in fed heifer prices, all else held constant.

Seasonal Trends in Heifer Feeding Profitability

The seasonal patterns of heifer feeding profits (dollars per head) for 600- to 699-pound placements and 700- to 799-pound placements are illustrated in Figures 3 and 4, respectively (seasonal trends in profits, feeding costs, and performance for 500- to 599- and 800- to 899-pound heifer placements are not illustrated due to insufficient data). The standard deviations of heifer feeding profits provide a measure of profit variability for each month. The standard deviation lines above and below the month's average feeding profit define a range in which profits are likely to fall approximately 68 percent of the time.

Average profit levels for feeding 600- to 699-pound heifers were seasonally low for heifers placed on feed from January through March (Figure 3). Profits tended to increase for spring and early summer placements, reaching a peak in July. Profits for August and September placements were lower than for July placements, but increased again for fourth quarter placements. Profit variability was smallest for 600- to 699-pound heifers placed in February, March, and October, and largest for December and January placements.

The seasonal profit pattern for 700- to 799-pound heifer placements was similar to the pattern for 600- to 699-pound heifers (Figure 4). Average profits for 700- to 799-pound heifers were seasonally low (and mostly negative) for December through April placements. Profits increased seasonally for January through July placements and peaked at over \$25 per head for July placements. Profit variation for 700- to 799-pound placements was lowest during March, October, and November placements and highest for December through February placements.

Summary profitability and cattle performance data are reported in Tables 2, 3, and 4. The information in these tables can be used when formulating budget projections and as an

Table 2. Average Monthly Values of Heifer Feeding Factors for 500- to 599-pound Placements (January 1985 to August 1999)

Placement Month	Number of Pens (number)	Cost of Gain (\$/cwt)	Feed Conversion (lbs. feed/lbs. gain) ^a	Average Daily Gain (lbs./day)	Profit (\$/head)	Std. Dev. of Profit (\$/head)
January	51	51.65	8.30	2.77	12.36	75.84
February	47	51.81	8.26	2.84	-14.39	64.95
March	— ^b	—	—	—	—	—
April	—	—	—	—	—	—
May	—	—	—	—	—	—
June	—	—	—	—	—	—
July	—	—	—	—	—	—
August	49	51.56	8.80	2.60	20.70	40.89
September	50	54.28	9.05	2.42	8.72	60.54
October	53	53.51	9.02	2.39	30.55	53.98
November	63	55.71	8.92	2.43	10.12	77.06
December	51	51.78	8.39	2.66	18.78	74.61

^a As-fed.

^b Data limitations prevent reporting this month's average.

Source: Kansas State University

Table 3. Average Monthly Values of Heifer Feeding Factors for 600- to 699-pound Placements (January 1985 to August 1999)

Placement Month	Number of Pens (number)	Cost of Gain (\$/cwt)	Feed Conversion (lbs. feed/lbs. gain) ^a	Average Daily Gain (lbs./day)	Profit (\$/head)	Std. Dev. of Profit (\$/head)
January	144	52.78	8.44	2.82	6.66	65.58
February	165	51.36	8.41	2.86	-12.68	49.46
March	202	51.47	8.34	2.91	2.89	47.11
April	170	50.00	8.32	2.94	7.55	52.35
May	203	51.53	8.37	2.87	10.24	52.61
June	126	51.57	8.33	2.94	22.65	53.03
July	169	51.02	8.21	3.07	33.70	55.45
August	169	53.03	8.63	2.91	18.40	55.67
September	143	54.10	9.04	2.76	14.59	54.76
October	203	54.62	9.35	2.63	26.58	41.35
November	122	54.70	9.12	2.63	23.08	57.47
December	137	53.39	9.07	2.65	22.67	61.06

^a As-fed basis.

Source: Kansas State University

aid in considering when to place feeder heifers of various weights on feed. For example, when comparing potential placements of 600- to 699-pound heifers on feed in July versus December, the data in Table 3 indicates that feed conversion for July placements are, on average, about 10 percent lower than for December placements (8.21 pounds of feed per pound of gain for July placements versus 9.07 for December placements). In addition, average daily gain and cost of gain are about 16 percent higher and 5 percent lower, respectively, for July versus December placements weighing 600 to 699 pounds. This information can be incorpo-

rated directly into budgets used to project breakeven prices for cattle placed on feed at various times during the year.

Seasonality of Corn and Cattle Prices

The seasonal trends in profit variability are influenced by seasonal trends in economic factors that determine heifer feeding profitability. Figures 5 through 10 depict seasonal indices for Kansas corn prices, western Kansas fed heifer prices, and Dodge City feeder heifer prices, respectively, from January 1985 to December 1999. Prior to estimat-

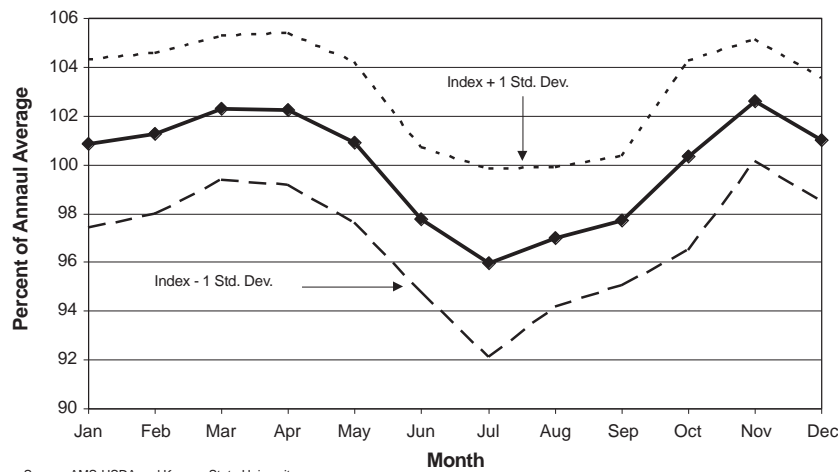
Table 4. Average Monthly Values of Heifer Feeding Factors for 700- to 799-pound Placements (January 1985 to August 1999)

Placement Month	Number of Pens (number)	Cost of Gain (\$/cwt)	Feed Conversion (lbs. feed/lbs. gain) ^a	Average Daily Gain (lbs./day)	Profit (\$/head)	Std. Dev. of Profit (\$/head)
January	84	55.48	9.10	2.78	-14.09	62.10
February	86	56.03	8.89	2.84	-13.35	58.51
March	135	54.86	8.70	2.89	-8.53	46.85
April	120	53.11	8.67	2.95	-9.19	53.34
May	182	53.94	8.75	2.89	3.74	53.56
June	85	53.51	8.46	3.02	18.31	52.35
July	118	52.65	8.51	3.07	24.95	57.85
August	149	54.24	8.75	3.03	15.83	54.63
September	122	55.07	9.17	2.88	-0.18	56.30
October	129	56.16	9.48	2.77	20.97	48.80
November	98	56.11	9.46	2.84	21.11	48.57
December	60	59.56	9.77	2.66	0.24	65.64

^a As-fed basis.

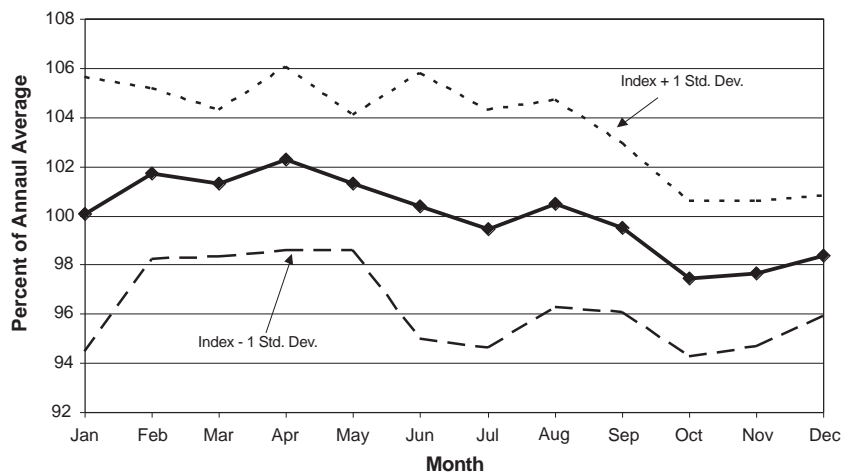
Source: Kansas State University

Figure 6. W. Kansas 1,000- to 1,200-pound Fed Heifer Price Index, 1985-1999



Source: AMS-USDA and Kansas State University

Figure 7. Dodge City 500- to 600-pound Feeder Heifer Price Index, 1985-1999



Source: AMS-USDA and Kansas State University

ing the seasonal indices, all trends were removed from the data. The price indices reveal how prices vary within a year (not across multiple years) around the annual average price for that year. Specifically, the index number indicates whether price in a given month is expected to be greater or less than the annual average for a particular year. For example, the corn price index in March is 101.45 (Figure 5), indicating that corn price in March is expected to be 1.45 percent higher than the annual average. To provide a measure of variability associated with each seasonal index, the graphs include plots of the index plus and minus one standard deviation. The range identified by the standard deviation lines indicates where the price index is expected to occur approximately 68 percent of the time.

The Kansas cash corn price seasonal index (Figure 5) indicates corn prices were seasonally lowest at harvest time (September and October) and strengthened throughout the storage season until the following June. From 1985 to 1999, Kansas cash corn prices averaged about 5 percent below the annual average during harvest and 8 percent higher than the annual average in June. Corn price variability was lowest in winter and spring.

Monthly average prices reported by AMS-USDA for the western Kansas direct trade for 1,000- to 1,200-pound slaughter heifers were used to construct the seasonal price index for fed heifers (Figure 6). Fed heifer prices were generally above the annual average price from

October through May, peaking at over 2 percent above the annual average in November, March, and April. Fed heifer prices were generally highest in the spring months as a result of lower beef production caused by seasonal decreases in both the number of fed cattle slaughtered and carcass weights. Fed heifer prices were generally below the annual average from June through September, reaching their seasonal low in July. Fed heifer prices generally increase from midsummer through about November. The seasonal pattern of fed heifer prices in western Kansas is nearly identical to the seasonal fed steer price pattern.

Feeder heifer seasonal price patterns vary, depending on weight. Figures 7 through 9 depict price indices for 500- to 600-pound, 600- to 700-pound, and 700- to 800-pound feeder heifers, respectively, based on prices observed in Dodge City, Kansas, from 1985 to 1999. Prices of light weight feeder heifers (500- to 600-pounds) followed a pronounced seasonal pattern (Figure 7). Prices for these heifers typically increased in late winter and early spring, peaking in April. Prices subsequently declined in the summer and fall and reached their seasonal low in October. The standard deviation of light weight feeder heifer prices tended to be smallest in late spring, when prices peaked seasonally, and became larger during the summer when relatively few light weight heifers were marketed. These seasonal price trends for 500- to 600-pound heifers reflect strong demand for light weight cattle suitable for spring grazing and a seasonally small supply of lightweight cattle in the spring. In contrast, demand for light weight heifers was lower, and supply was higher, in the fourth quarter of the year, explaining the seasonal low in light weight feeder heifer prices during late fall and early winter.

The seasonal price pattern was much different for heavy weight feeder heifers when compared to the light weight heifer price pattern. Prices for 600- to 700-pound feeder heifers peaked in February, reached their lows during April and May, recovered during the summer months, declined in the fall, and rose above the annual average by December (Figure 8). The seasonal price pattern for 700- to 800-pound heifers was similar to the 600- to 700-pound heifer seasonal price pattern.

Figure 8. Dodge City 600- to 700-pound Feeder Heifer Price Index, 1985-1999

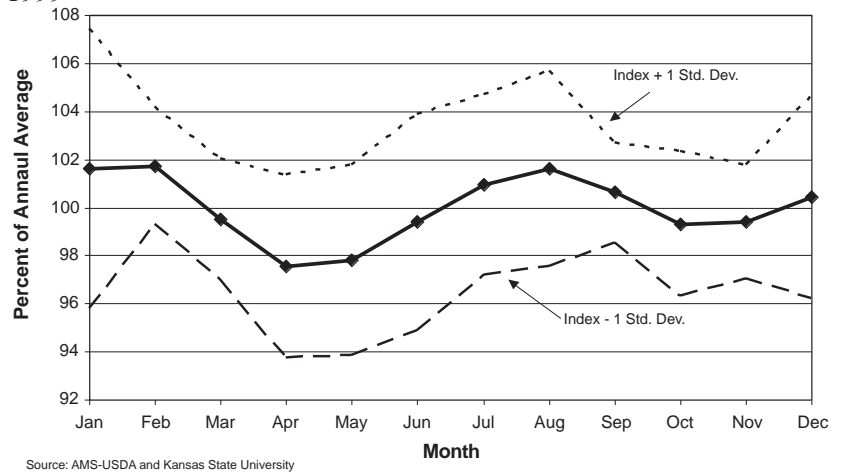
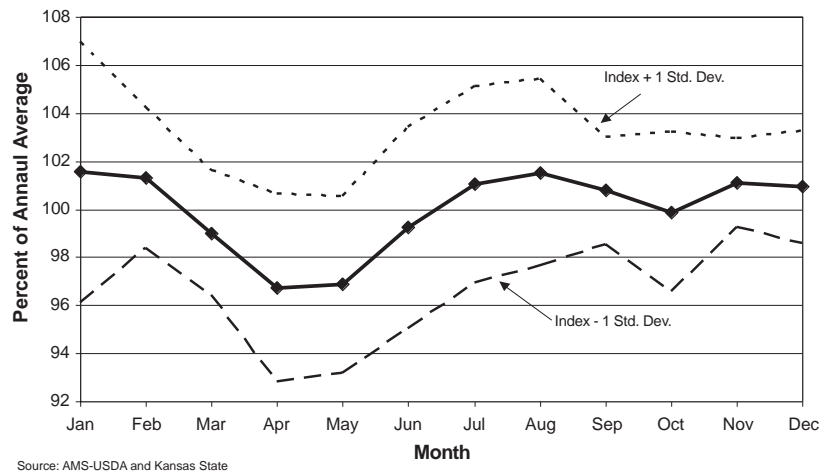


Figure 9. Dodge City 700- to 800-pound Feeder Heifer Price Index, 1985-1999

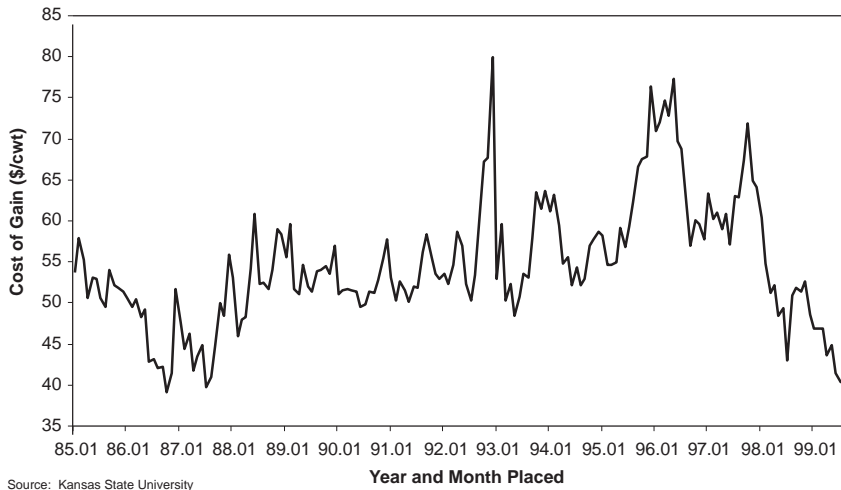


Prices generally peaked during the winter, fell sharply in the spring, and recovered in the summer (Figure 9). The variation in both 600- to 700-pound and 700- to 800-pound heifer prices was smallest in February and March and from September through December.

Cost of Gain and Performance Trends

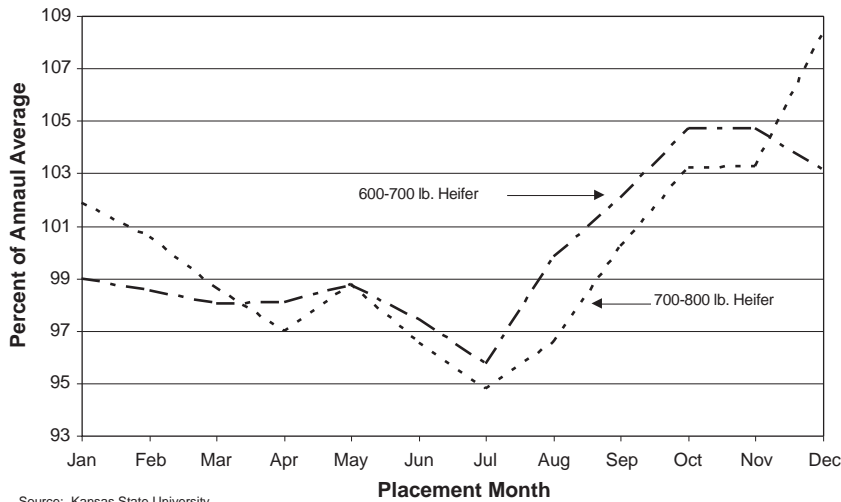
Feeding cost of gain, which does not include interest expenses, is widely used in the cattle feeding industry to compare the economic feeding performance of cattle. Feeding cost of gain reflects the effect of cattle feeding management and the heifers' genetic performance, but omits the effect of purchase management strategies because it does not include interest charges on the feeder heifer and feed costs.

Figure 10. Monthly Average Heifer Feeding Cost of Gain for Heifers Placed at 700 to 799-pounds.



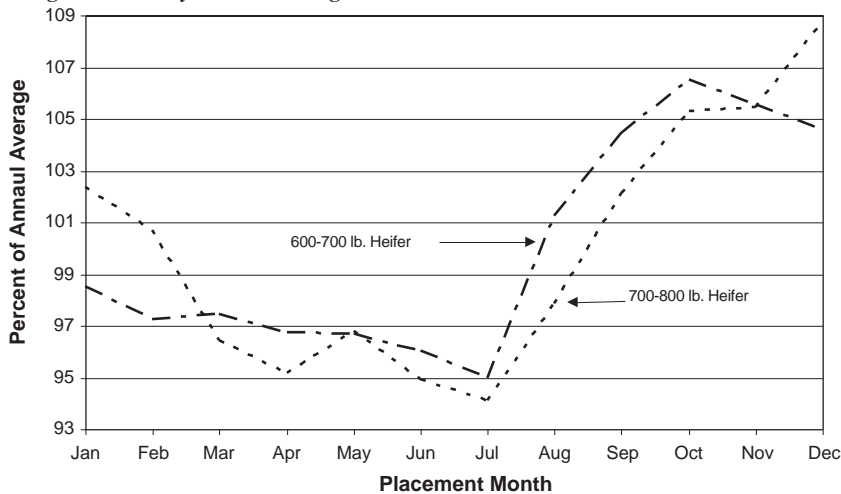
Source: Kansas State University

Figure 11. Seasonal Index of Heifer Feeding Cost of Gain by Placement Weight, January 1985 to August 1999



Source: Kansas State University

Figure 12. Seasonal Index of Heifer Feed Conversion by Placement Weight, January 1985 to August 1999



Source: Kansas State University

Feeding cost of gain is determined by feed grain prices, forage prices, and animal performance. Feed cost has the greatest effect on feeding cost of gain. Higher grain and forage prices increase total feed cost. Performance factors that affect feeding cost of gain include feed conversion, average daily gain, and death loss. Increases in feed conversion or death loss cause feeding cost of gain to increase, as do increases in health problems, which increase veterinary expenses and reduce performance. Figure 10 illustrates the monthly average heifer feeding cost of gain for 700- to 799-pound placements. Over the 15-year time period, feeding cost of gain was highest for heifers placed on feed in mid-1992 and 1996 and lowest for heifers placed on feed in late 1986 and 1998-1999. Although feeding cost of gain for cattle placed on feed in 1992 was adversely affected by poor weather conditions in late 1992 and early 1993, these time periods with high and low feeding cost of gain correspond to relatively high and low corn prices, respectively, again illustrating that feeding cost of gain's largest component is the price of feedstuffs. For example, the average Kansas corn price of \$4.24 per bushel in April 1996 translated to a feeding cost of gain of \$72.79 per hundredweight. Feeding cost of gain decreased to \$41.37 per hundredweight in June 1999 when average corn price was \$1.91 per bushel.

Feeding cost of gain varies seasonally and follows a somewhat different seasonal pattern for various heifer placement weights. Figure 11 illustrates the average monthly feeding cost of gain index by placement weight according to the month the heifers were placed on feed. As with the price indices, the trend in the cost of gain data was removed before calculating the seasonal index. This seasonal index is interpreted as before. For example, the monthly index value of 98.62 for 700- to 800-pound heifers placed on feed in March indicates that feeding cost of gain is typically 1.38 percent below the annual average for 700- to 800-pound heifers placed on feed in March.

Seasonality of feeding cost of gain provides useful information from a management perspective. Seasonally, feeding cost of gain is lower than the annual average for heifers placed from February through August and higher than the annual average for place-

ments from September through December. There are also differences in seasonal cost of gain across placement weight categories. For cattle placed from early winter through early spring, the seasonal feeding cost of gain is higher for 700- to 800-pound heifers (relative to its annual average) than for 600- to 700-pound heifers. The inverse is true for heifers placed on feed from May through October when 600- to 700-pound heifers tend to have higher costs of gain, relative to average costs, than 700- to 800-pound heifers.

Feeding cost of gain seasonality is influenced by several performance factors' seasonal patterns. Figure 12 illustrates the feed conversion seasonal indices for two heifer placement weight categories. Feed conversion (measured on an as-fed basis) is a measure of how many pounds of feed are required to produce a pound of gain. Higher (lower) feed conversions are associated with higher (lower) feeding costs of gain. Feed conversions follow seasonal patterns similar to that of feeding cost of gain. In general, heifers placed from March through July had the lowest average feed conversion (Figure 12).

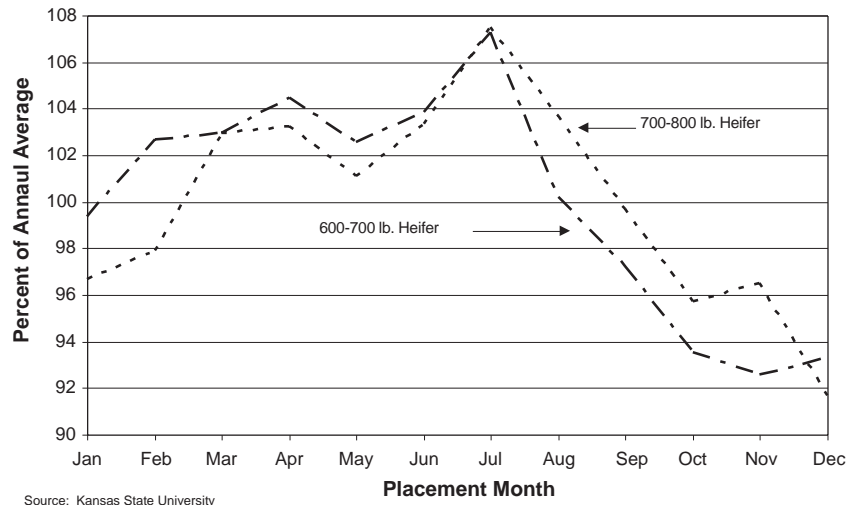
Heifers placed at 600 to 800 pounds had their lowest average daily gain when placed on feed during the fall (and on feed during the winter). Highest seasonal average daily gains were for July placements, but declined rapidly for heifers placed later in the year. Average daily gains increased for heifers placed from January to July (Figure 13).

Conclusions

This research bulletin illustrates the historical and seasonal trends in cattle performance and economic factors that influence heifer feeding profitability. Along with cash corn and cattle price data, pen level closeout data for heifers placed on feed from January 1985 to August 1999 at two western Kansas custom feedyards were analyzed in this study.

Results indicate heifers placed on feed during the late spring and early summer months tended to have the lowest feed conversions, resulting in seasonally low cost of gain for heifers placed on feed during the first half of the year. Higher feeding cost of gain for fall and winter placements resulted from higher feed conversions and lower average daily

Figure 13. Seasonal Index of Heifer Average Daily Gain by Placement Weight, Jan 1985 to Aug 1999



gains. These seasonal trends are similar for steers; however, heifer feed conversions were higher, and average daily gains lower, than for steers placed at similar weights, resulting in higher cost of gain for heifers than for steers.

Corn prices in Kansas were usually lowest during harvest time in September and October and increased seasonally throughout the storage period until June. Fed heifer prices tended to peak seasonally in late winter and early spring, with lowest prices generally occurring in the summer. Light weight feeder heifer prices were usually highest in the late winter and early spring, and lowest in the fall. Conversely, prices for heavy weight feeder heifers peaked in early winter and declined markedly by midspring.

Seasonal profit patterns varied by heifer placement weight, but generally heifers placed on feed in the winter were less profitable than those placed in midsummer at the same weight. Moreover, profit variability for heifers placed on feed during the summer was generally lower than for placements at other times of the year.

Cattle feeders can use the information in this report to increase their heifer feeding profits by developing improved projections for feeding cost of gain and breakeven prices for specific feedlot heifer placements. Cattle feeding management strategies can also be improved by using seasonal price and profit information.

Acknowledgments

The authors greatly appreciate the generosity of the two feedyard managers who provided the data that made this study possible.

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