



Focus on Feedlots is a monthly publication that summarizes feedlot performance and closeout data from the nine cooperating commercial cattle feeding operations in Kansas listed on page 7. The annual review summarizes monthly reports from 2015, 2016, and 2017 that document annual and seasonal trends in cattle performance, cost of gain, and commodity prices (corn and alfalfa). Monthly reports can be found online at *Focus on Feedlots* (www.asi.k-state.edu/about/newsletters/focus-on-feedlots/).

Annual Closeout Summary: Steers¹

Year	Total Head	In Weight ²	Final Weight	Days on Feed	Avg. Daily Gain	Feed/Gain (Dry Basis)	% Death Loss	Cost of Gain/Cwt
2017	358,092	796 (752-861)	1,387 (1,332-1,429)	164 (142-174)	3.57 (3.21-3.81)	6.11 (5.94-6.34)	1.52 (1.16-2.43)	\$74.34 (71.83-77.60)
2016	319,710	824 (789-850)	1,421 (1,388-1,445)	159 (150-169)	3.66 (3.45-3.83)	6.04 (5.88-6.23)	1.36 (1.03-1.72)	\$77.32 (69.74-81.87)
2015	277,107	815 (784-848)	1,416 (1,367-1,472)	165 (153-173)	3.56 (3.34-3.79)	6.14 (5.91-6.38)	1.50 (1.09-1.80)	\$85.16 (81.07-89.45)

¹ Closeout figures are the means of individual monthly averages and include feed, yardage, processing, medication, death loss and usually sold FOB the feedlot with a 4% pencil shrink. Interest charges normally are not included.

² In weight = reported average initial weight of cattle marketed in the reporting month.

In 2017, participating feedlots marketed 358,092 steers, approximately 39,000 more steers than were marketed in 2016. In weights were slightly lower in 2017, averaging 796 lbs. Final weights of steers were notably lower, averaging 1,387 lbs compared to 1,421 lbs and 1,416 lbs in 2015 and 2016 respectively. Steers were on feed approximately 164 days, an

increase of 5 days from 2016. Average daily gain and feed conversion were similar across years. However, death loss did increase slightly to 1.52% relative to the 1.36% previously reported in 2016. Reported total cost of gain averaged \$74.34/ cwt in 2017, which was \$2.98/cwt lower than 2016 and \$10.82/cwt lower than 2015.

Annual Closeout Summary: Heifers¹

Year	Total Head	In Weight ²	Final Weight	Days on Feed	Avg. Daily Gain	Feed/Gain (Dry Basis)	% Death Loss	Cost of Gain/Cwt
2017	275,542	729 (696-760)	1,252 (1,202-1,292)	160 (149-171)	3.23 (3.00-3.49)	6.37 (6.13-6.53)	1.64 (1.34-1.93)	\$78.10 (75.40-80.64)
2016	267,083	762 (719-797)	1,282 (1,234-1,324)	154 (142-169)	3.32 (3.19-3.60)	6.28 (6.06-6.39)	1.46 (1.01-2.21)	\$81.27 (72.17-84.76)
2015	281,097	736 (690-779)	1,266 (1,241-1,303)	165 (156-189)	3.14 (2.96-3.33)	6.40 (6.25-6.63)	1.62 (1.15-2.09)	\$90.02 (86.00-93.10)

¹ Closeout figures are the means of individual monthly averages and include feed, yardage, processing, medication, death loss and usually sold FOB the feedlot with a 4% pencil shrink. Interest charges normally are not included.

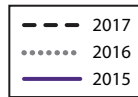
² In weight = reported average initial weight of cattle marketed in the reporting month.

The number of heifers marketed increased in 2017, with approximately 8,400 more heifers being marketed in 2017 than 2016. Heifer in weights were lower, averaging 729 lbs in 2017. Final weights of heifers were on average 30 lbs lower in 2017 at 1,252 lbs, compared to 1,268 lbs in 2016 and 1,266 lbs in 2014. Heifer days on feed increased to 160 days, an increase of 6 days relative to the

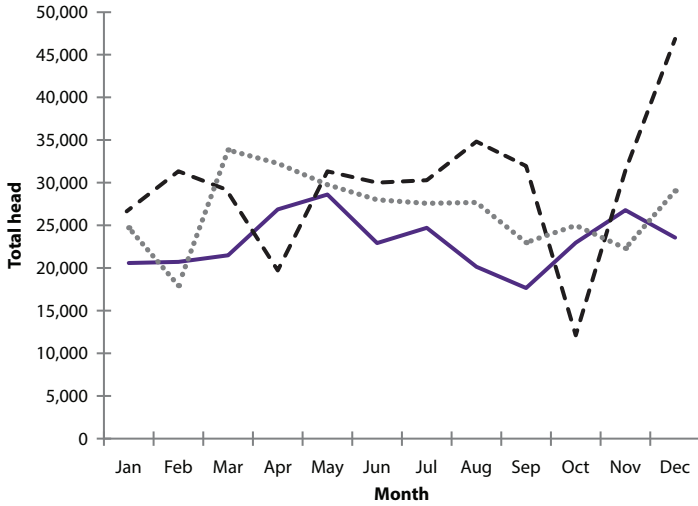
154 days reported in 2016. Heifer average daily gain and feed conversion was similar across years. Death loss increased to 1.64% relative to 1.46% in 2016, but it was similar to the 1.62% reported in 2015. Total cost of gain for heifers was \$3.17/cwt lower in 2017 than in 2016. Heifer cost of gain was \$3.76/cwt, greater on average than that of steers, \$74.34/cwt versus \$78.10/cwt.

Annual Charts

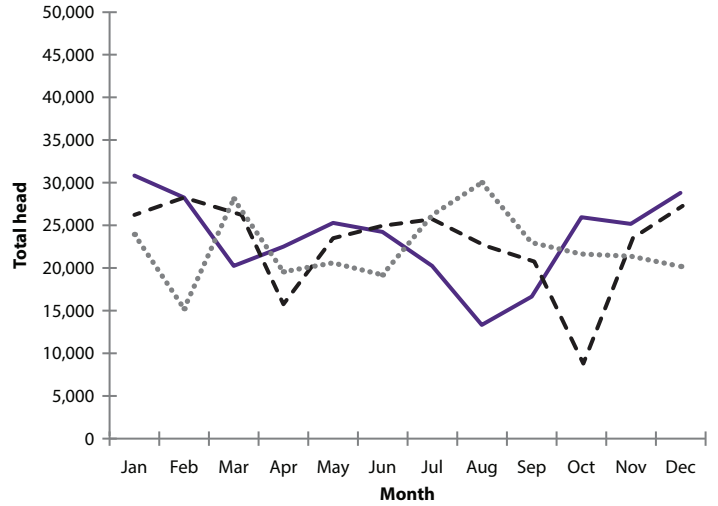
The reported monthly values obtained for feedlot performance, cost of gain, and commodity prices for 2015, 2016, and 2017 are illustrated in the following figures.



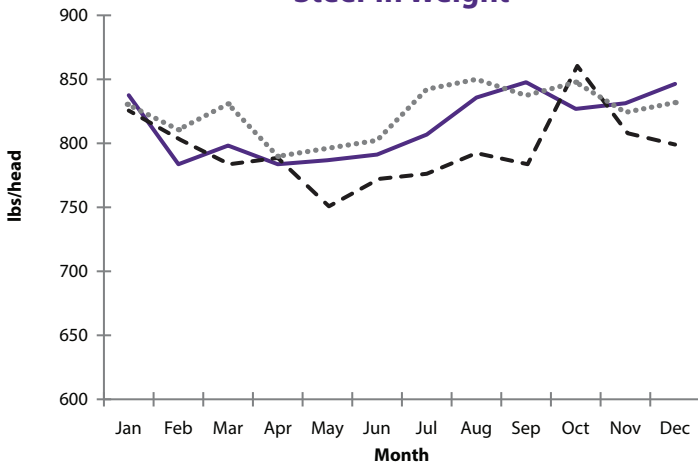
Steers Marketed



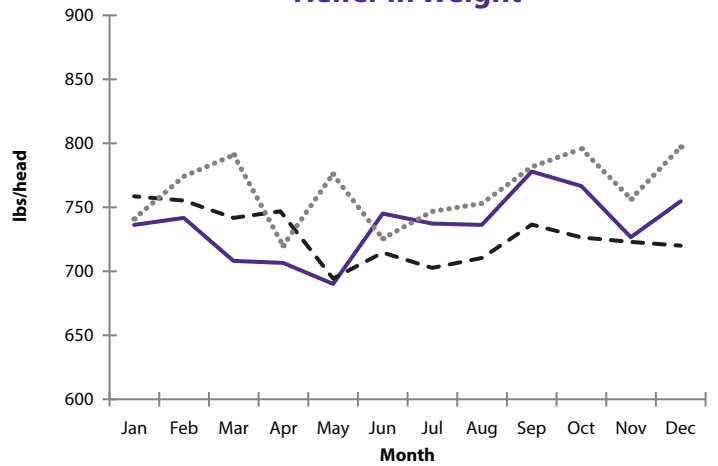
Heifers Marketed



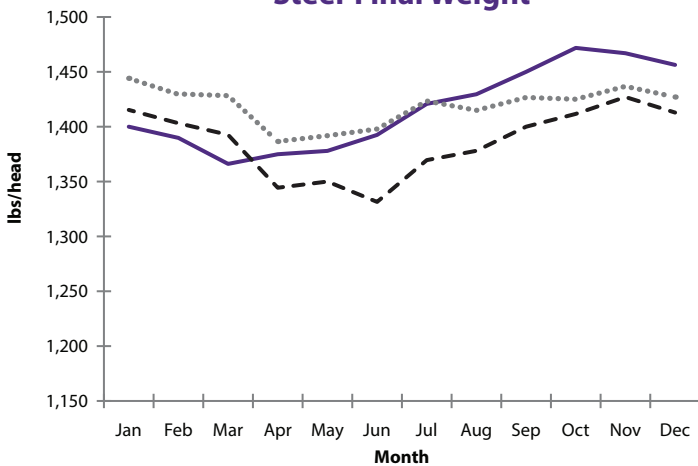
Steer In Weight



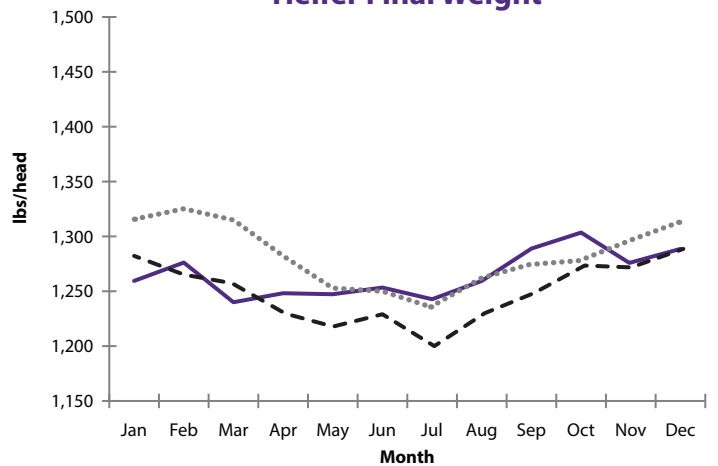
Heifer In Weight



Steer Final Weight

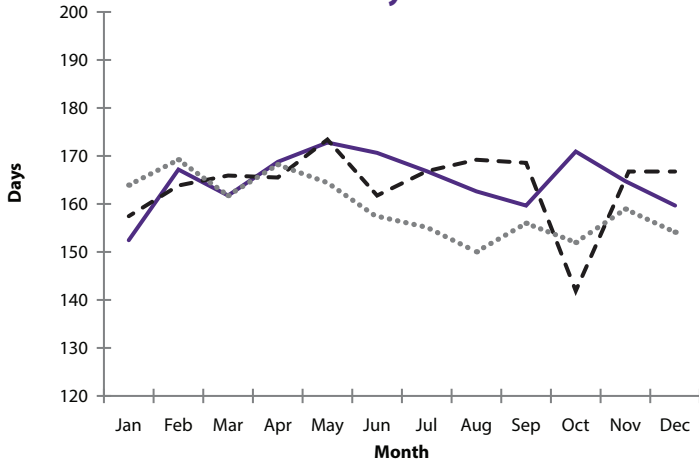


Heifer Final Weight

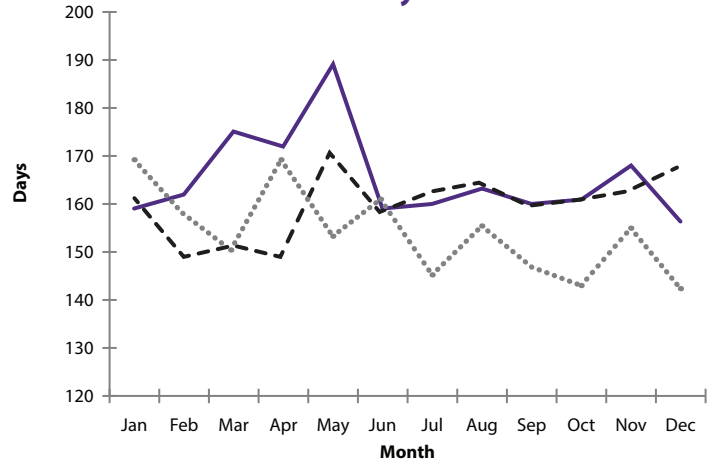




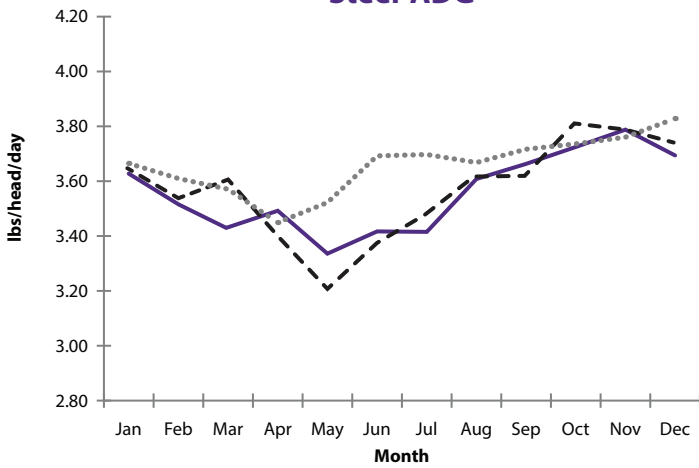
Steer Days on Feed



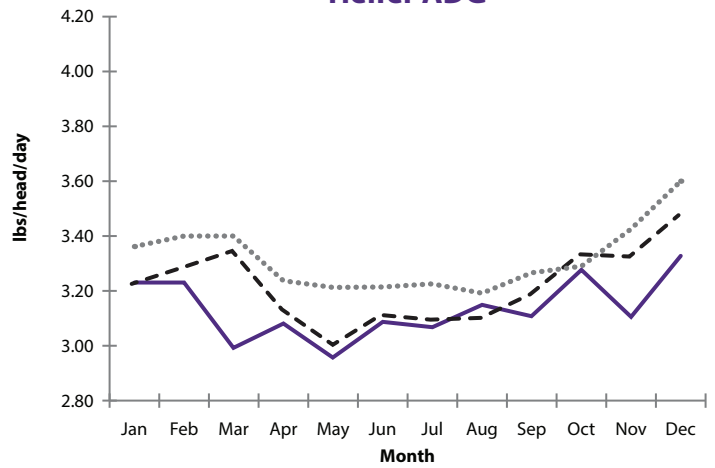
Heifer Days on Feed



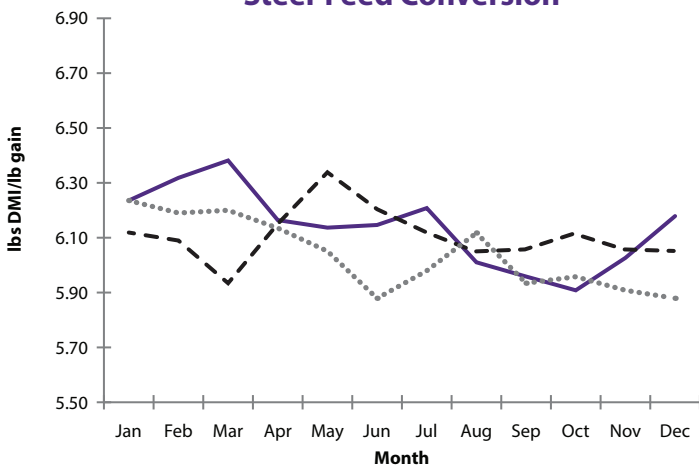
Steer ADG



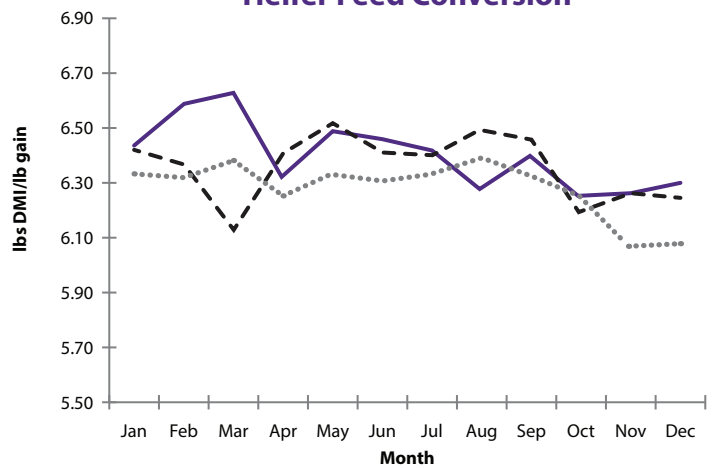
Heifer ADG



Steer Feed Conversion

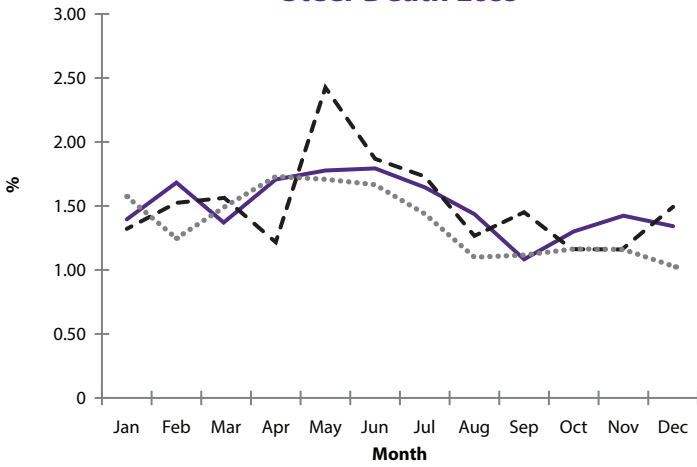


Heifer Feed Conversion

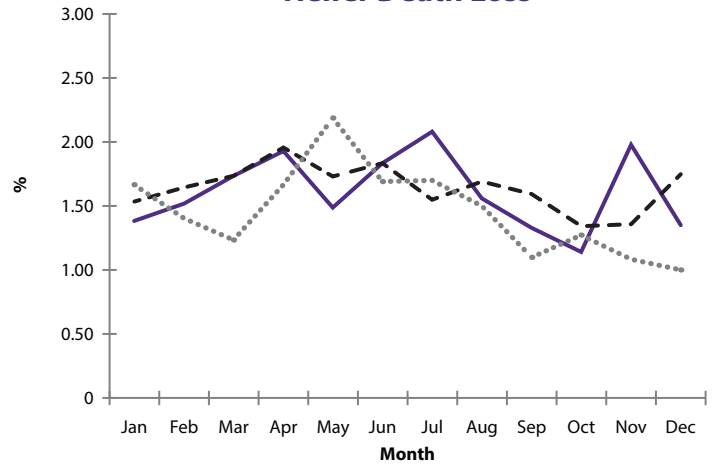




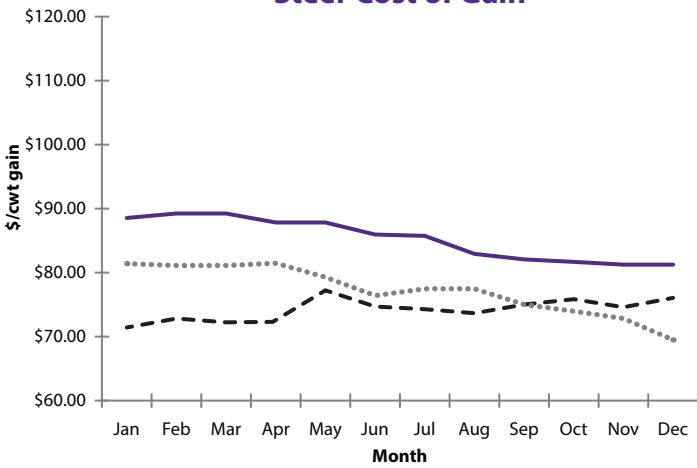
Steer Death Loss



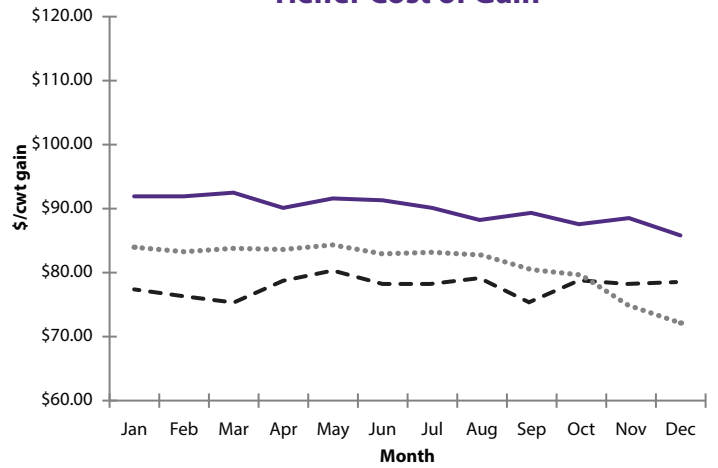
Heifer Death Loss



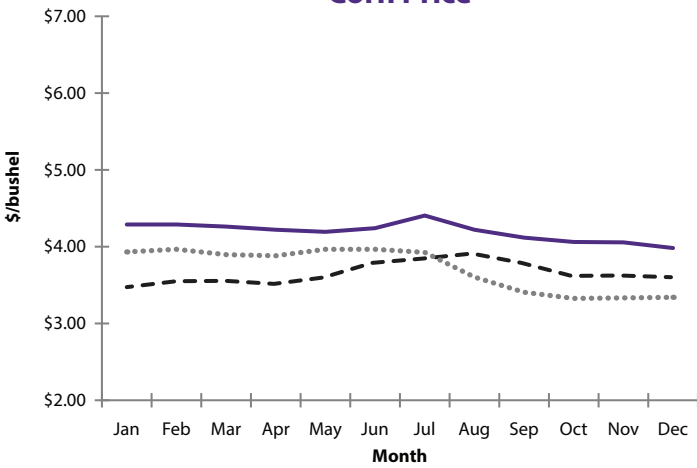
Steer Cost of Gain



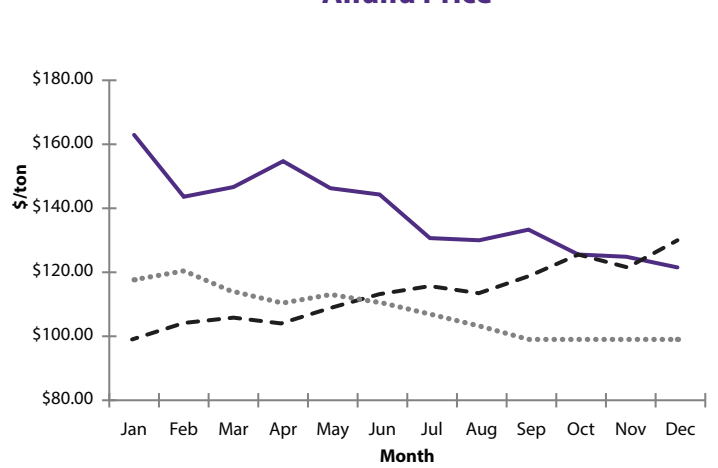
Heifer Cost of Gain



Corn Price

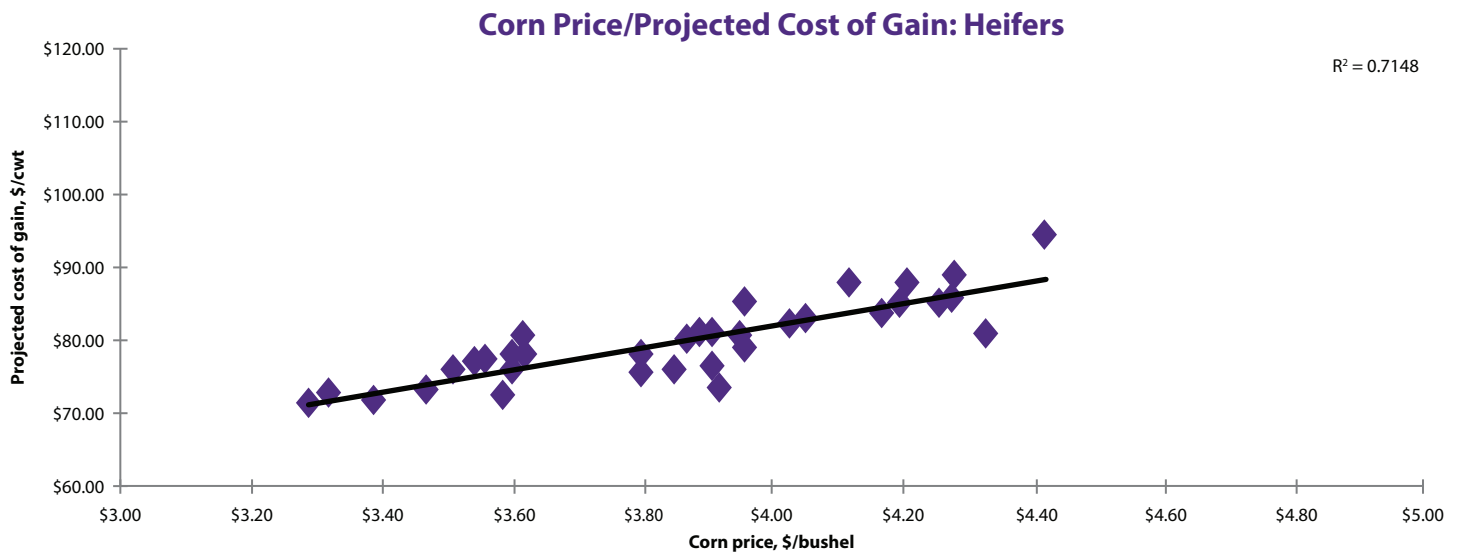
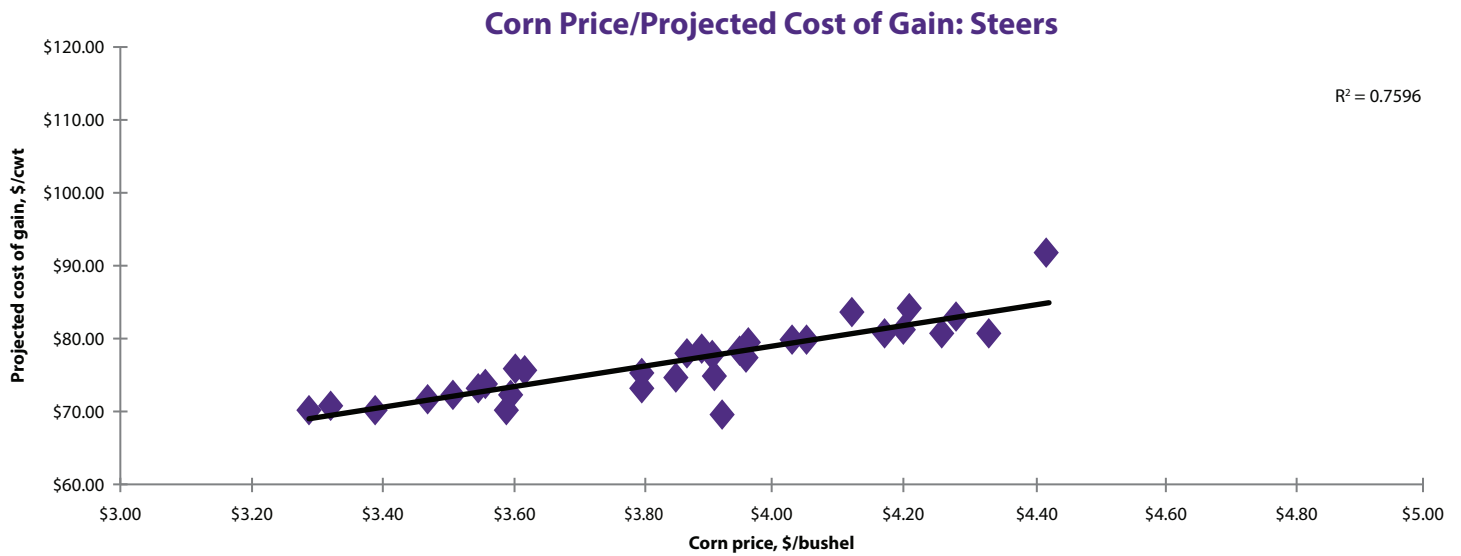


Alfalfa Price



Projected Cost of Gain

The relationship between reported corn price and projected cost of gain for steers and heifers for 2015, 2016, and 2017 is shown in the following graphs.



This relationship is expressed by the following formulas:

$$\text{Projected Steer Cost of Gain (\$/cwt)} = \$22.32 + (\$14.09 \times \text{Corn Price}).$$

$$\text{Projected Heifer Cost of Gain (\$/cwt)} = \$21.16 + (\$15.21 \times \text{Corn Price}).$$

This relationship may be used to forecast the projected cost of gain if corn price is known. For example,

when corn is \$3.50/bushel, cost of gain for steers equals \$71.64/cwt ($\$22.32 + \$14.09 \times \3.50). Based on this formula, cost of gain will increase \$14.09/cwt for every \$1.00 per bushel increase in the price of corn. The incremental cost of gain for heifers is slightly higher (\$15.21 vs. \$14.09) for every \$1.00 per bushel increase in the price of corn. The table below lists the projected cost of gain at various corn prices from \$2.00 to \$7.00 per bushel. The intercept values (\$22.32 and \$21.16 for steers and heifers respectively) reflect other costs associated with feeding cattle (e.g., labor, equipment, and facilities).

Projected Cost of Gain for Steers and Heifers Based on Corn Price

Corn Price (\$/bu)	Steer Cost of Gain (\$/cwt)	Heifer Cost of Gain (\$/cwt)
\$2.00	\$50.50	\$51.58
\$2.50	\$57.55	\$59.19
\$3.00	\$64.59	\$66.79
\$3.50	\$71.64	\$74.40
\$4.00	\$78.68	\$82.00
\$4.50	\$85.73	\$89.61
\$5.00	\$92.77	\$97.21
\$5.50	\$99.82	\$104.82
\$6.00	\$106.86	\$112.42
\$6.50	\$113.91	\$120.03
\$7.00	\$120.95	\$127.63

We express our appreciation to these Kansas feed yards for providing this information:

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Kearny County Feeders

Decatur County Feed Yard

Poky Feeders

Deseret Cattle Feeders

Pratt Feeders

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