

## Discovering Value in North Dakota Calves; The Dakota Feeder Calf Show Feedout Project XII (2012-13)

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**N**orth Dakota cattle ranchers continue to seek more information about the cattle they raise. The value of calves after weaning can be estimated after measuring feedlot performance and carcass characteristics. The Dakota Feeder Calf Show Feedout project was developed to discover the actual final value of spring-born beef steer calves, provide comparisons between herds, and benchmark feeding and carcass performance. Cattle consigned to the feedout project averaged 608.9 pounds upon delivery to the Carrington Research Extension Center Livestock Unit on October 20, 2012.

After an average 212-day feeding period with 2.29 percent death loss, cattle averaged 1224.2 pounds (at plant, shrunk weight). Average daily feed intake per head, as fed, was 33.9 pounds while pounds of feed required per pound of gain were 12.2. Diet dry matter was 62 percent. The pen-of-three calves averaged 406 days of age at harvest. Overall pen average daily gain was 3.02 pounds. Feed cost per pound of gain was \$0.865 per pound and total cost of gain without interest was \$1.077. The cattle were marketed on May 20, 2013, and marbling scores averaged 479.6 (low choice). Feeding cost per head was \$632.30. Gross return per head was \$1579.58. However, when calves were valued at current market price upon delivery to the feedout project, calves were overpriced. Consequently, feeding cattle during October 2012 to May 2013 provided a loss.

Profit before interest expense ranged from \$102.49 per head for pen-of-three cattle with superior growth and carcass traits to -\$105.36 per head return for a pen-of-three with poorer feedlot and carcass performance. The average of the top five scoring pens-of-steers was \$54.90 per head while the average of the bottom five scoring pens-of steer (dead loss not included) averaged -\$58.63 per head. The overall pen-of-three competition average loss was -\$13.84 per head (Table 1).

**Table 1. Feeding performance - 2012-2013 Dakota Feeder Calf Show Feedout**

Pen-of-three Competition	Average Birth Date	Average Harvest Weight	Average Daily Gain	Average Weight per Day of Age	Marbling Score	Yield Grade	Ave Feeding Profit or Loss / Head
average of top 5 pens	3-Apr-12	1,239.9	2.94	3.00	488.000	2.08	\$ 54.90
					(low Choice)		
average of middle 5 pens	6-Apr-12	1,267.7	3.02	3.09	467.3.0	2.73	\$ (4.36)
					(low Choice)		
average of bottom 5 pens	2-Apr-12	1,222.2	2.89	2.95	512.0	3.84	\$ (58.63)
(no deads)					(low Choice)		
					479.6		
Overall Average	8-Apr-12	1,232.4	2.95	3.02	(low Choice)	2.78	\$ (13.84)
Standard Deviation	14.613	72.022	0.205	0.155	48.036	0.702	46.686
Number	41	41	41	41	41	41.00	41

Calves with better growth performance had heavier harvest weights, larger average daily gains, and higher weights per day of age. These cattle also had carcasses with better meat yields as measured by better USDA Yield Grades. Comparing profit between the average of the top five pens and the middle five pens, the top pens averaged \$50.54 more profit per head. In the 2011-2012 feedout project, the profit between the average of the top five pens and the middle five pens profit was \$55.42. The net return between the average of the middle five pens and the bottom five pens was \$54.27 per head. Feedout projects can provide a source of information for cattle producers to learn about feedlot performance, herd differences, and discover cattle value.