Discovering Value in North Dakota Calves
The Dakota Feeder Calf Show Feedout Project XI (2011-12)

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North Dakota ranchers are learning more about the type of cattle they raise. Post-weaning feeding explores the value of the calves by measuring feedlot performance and carcass characteristics. The Dakota Feeder Calf Show Feedout project was developed to discover the actual value of spring-born beef steer calves, provide comparisons between herds, and benchmark feeding and carcass performance. Cattle consigned to the feedout project averaged 596.3 pounds upon delivery to the Carrington Research Extension Center Livestock Unit on October 15, 2011.

After an average 200-day feeding period with 2.34 percent death loss, cattle averaged 1353.6 pounds (at plant, shrunk weight). Average daily feed intake per head, as fed, was 33.5 pounds while pounds of feed required per pound of gain were 9.2. Diet dry matter was 73 percent. The pen-of-three calves averaged 394 days of age at harvest. Overall pen average daily gain was 3.63 pounds. Feed cost was $0.737 per pound and total cost of gain without interest was $0.936. The cattle were marketed on May 3, 2012, and marbling scores averaged 446.8 (low choice). Overall, cattle feeding provided an $85.72 per head profit including death loss but not interest expense. The feeding and carcass value of spring-born calves can be determined with participation in a feedout project.

Profit before interest expense ranged from $216.14 per head for pen-of-three cattle with superior growth and carcass traits to $-5.26 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 $179.78 per head while the average of the bottom five scoring pens of steers (dead loss not included) averaged $38.29 per head. The overall pen-of-three competition average profit was $115.35 per head (Table 1).

Table 1. Feeding performance - 2010-2011 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	1-Apr-11	1,405.7	3.98	3.55	476.6 (low Choice)	2.75	$ 179.78
average of middle 5 pens	21-Apr-11	1,328.9	3.66	3.53	428.6 (low Choice)	2.45	$ 124.36
average of bottom 5 pens	9-Apr-11	1,259.6	3.77	3.36	443.6 (low Choice)	3.31	$ 39.29
Overall Average	6-Apr-11	1,325.2	3.78	3.43	448.8 (low Choice)	2.78	$ 115.32
Standard Deviation	16.931	94.852	0.254	0.190	46.695	0.619	48.789
Number	33	33	33	33	33	33.00	33

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 higher marbling scores and correspondingly higher USDA Quality Grades, and better meat yields as measured by USDA Yield Grades. With higher growth performance and better carcasses, the cattle were more profitable. Comparing profit between the average of the top five pens and the middle five pens, the top pens averaged $55.42 more profit per head. Profit between the average of the middle five pens and the bottom five pens was $86.07 per head. Feedout projects can provide a source of information for cattle producers to learn about feedlot performance, herd differences, and discover cattle value.