

DAKOTA FEEDER CALF SHOW AND FEEDOUT – EXPERIENCING THE FEEDING AND CARCASS VALUE OF CALVES

Karl Hoppe, Vern Anderson, and Ernie Ward

Seeing the true value of a calf is not easy. Auction market prices provide the value when a willing seller and buyer agree upon price based on visual appraisal and history. However, a true value of the calf involves finishing performance and carcass value.

The Dakota Feeder Calf Show and Feedout project was developed to discover the value of beef steer calves after feeding and harvest. The calves were received in groups of three on October 13, 2001 to the Turtle Lake Weighing Station for weighing, tagging, processing and showing. The calves were evaluated for conformity and uniformity with the judges providing a discussion to the owners at the beginning of the feedout.

The calves were then shipped to the NDSU Carrington Research Extension Center, Carrington, ND for feeding. Upon arrival, the calves averaged 602.4 pounds and were treated with prophylaxis tilmicosin. On November 27, 2001, calves were moved on to a high grain diet (72% grain as fed, 84% grain dry matter) containing 63 mcg NEg per pound. Cattle were weighed periodically and reports provided to the owners.

The first market group of cattle (82 head) was sold April 9, 2002, and harvested on April 12, 2002. The second sell group (77 head) was sold April 25, 2002, and harvested on May 3, 2002. Cattle were sold to IBP, Dakota City, Nebraska, on a grid basis with premiums and discounts. Carcass data was collected after harvest.

After an average 189-day feeding period with 2.45 percent death loss, cattle averaged 1207.9 pounds (at plant, shrunk weight). Average daily feed intake per head, as fed, was 27.01 pounds while pounds of feed required per pound of gain were 8.87. Diet dry matter was 72.8 percent. The pen-of-three calves averaged 391.4 days of age at harvest. Overall pen average daily gain was 3.04 lbs. Feed cost was \$0.252 per pound and total cost of gain without interest was \$0.423. The early market group contained 67 percent choice and 93.9 percent yield grade 2 and 3 while the late market group contained 37.6 percent choice and 92.1 percent yield grade 1 and 2. Profit before interest expense ranged from \$66.44 per head for pen of three cattle with superior genetics to a \$(82.17) per head loss for poorer performance.



Determining cattle value by feeding performance and carcass characteristics can be accomplished through a feed out project. Exceptional average daily gains, weight per day of age, marbling score and retail product value can be found in North Dakota beef herds. Feedout projects provide a source of information for cattle producers to learn about genetics and discover cattle value.

Affiliation of coauthors and non-CREC staff: V. Anderson, Animal Scientist, NDSU-CREC, E. Ward, State Bank of Turtle Lake.

Ultrasounding steers to determine carcass characteristics.

Dakota Feeder Calf Show and Feedout results, 2001-2002

Pen of three Average Birth Date	Average Harvest Weight	Feedlot Average Daily Gain, Lbs	Average Weight Per Day of Age, lbs	Average Retail Product Value per WDA	Average Feeding Profit or (loss)
1-Apr-01	1186.5	3.37	3.16	\$ 3.231	\$ 66.44
9-Apr-01	1246.9	3.41	3.33	\$ 3.049	\$ 21.24
1-Mar-01	1260.1	3.28	3.10	\$ 3.128	\$ 63.48
3-Mar-01	1359.7	3.57	3.31	\$ 3.239	\$ 62.67
5-Apr-01	1149.6	3.37	3.09	\$ 2.996	\$ 48.11
9-Mar-01	1358.9	3.29	3.25	\$ 3.279	\$ 39.41
13-Mar-01	1236.5	3.33	3.13	\$ 3.034	\$ 43.40
14-Apr-01	1246.1	3.36	3.38	\$ 3.161	\$ 3.78
15-Apr-01	1272.2	3.47	3.34	\$ 3.230	\$ (8.48)
1-Apr-01	1324.3	3.36	3.35	\$ 3.360	\$ (2.29)
9-Apr-01	1256.3	3.26	3.25	\$ 3.073	\$ (14.51)
20-Apr-01	1294.2	3.36	3.45	\$ 3.260	\$ (14.66)
9-Mar-01	1260.0	3.40	3.02	\$ 3.147	\$ 42.60
11-Mar-01	1196.0	3.61	3.02	\$ 2.742	\$ 9.88
1-Mar-01	1252.5	3.60	3.08	\$ 2.876	\$ 35.89
30-Mar-01	1162.5	2.97	3.03	\$ 2.976	\$ 22.15
4-Apr-01	1083.6	3.10	2.91	\$ 3.015	\$ 27.69
7-Apr-01	1194.6	3.25	3.24	\$ 3.019	\$ 9.45
4-Mar-01	1283.3	3.57	3.08	\$ 3.022	\$ 10.86
6-Mar-01	1160.4	3.17	2.89	\$ 2.838	\$ 20.15
18-Mar-01	1242.0	3.30	3.18	\$ 2.973	\$ (6.08)
19-Mar-01	1261.6	3.11	3.14	\$ 2.882	\$ (15.84)
6-Apr-01	1183.4	3.36	3.08	\$ 2.812	\$ (9.64)
4-Apr-01	1226.2	3.13	3.29	\$ 2.999	\$ (2.37)
12-Apr-01	1190.1	2.97	3.11	\$ 3.042	\$ (27.79)
7-Mar-01	1150.5	3.14	2.78	\$ 2.686	\$ 3.29
11-Apr-01	1144.8	3.34	3.02	\$ 2.942	\$ (1.35)
25-Mar-01	1175.0	3.19	2.92	\$ 2.863	\$ 3.09
9-Mar-01	1183.0	3.18	2.96	\$ 2.558	\$ (24.84)
26-Mar-01	1146.8	2.80	2.92	\$ 2.886	\$ (16.41)
1-Apr-01	1153.7	2.93	3.07	\$ 2.876	\$ 3.32
5-Mar-01	1225.7	3.30	2.96	\$ 2.698	\$ (25.87)
9-Apr-01	1177.6	2.93	3.05	\$ 2.914	\$ (42.01)
1-Apr-01	1215.5	3.09	3.24	\$ 2.569	\$ (82.17)
11-Apr-01	1126.6	2.97	2.93	\$ 2.930	\$ (10.61)
8-Apr-01	1103.5	2.95	2.95	\$ 2.798	\$ (37.46)
16-Mar-01	1173.3	2.80	2.86	\$ 2.696	\$ (51.62)
18-Mar-01	1190.6	2.78	2.91	\$ 2.743	\$ (56.95)
13-Apr-01	1284.6	2.34	2.29	\$ 1.990	\$ (235.72)
1-Apr-01	1304.3	2.28	2.20	\$ 2.014	\$ (268.48)
19-Mar-01	1183.5	2.24	1.99	\$ 1.880	\$ (219.95)
Average					
26-Mar-01	1215.3	3.15	3.03	\$ 2.888	\$ (15.57)
Standard Deviation					
15.1	65.00	0.328	0.296	0.3257	\$ 72.27