

-The DATALINE Program- This Bull Lost Money

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Implications

Appropriate genetic and managerial decisions influence beef cattle income potential.

Summary

DATALINE allows every segment of the beef industry chain to source verify the product throughout development. This electronic connection adds accountability to the CHAPS beef cattle network securing needed data for cow-calf producers. This data completes a circle of communication and gives the cow-calf producer the knowledge to make genetic and management changes which affect profitability, improve product quality and insure consumer safety.

Materials & Methods

DATALINE is an outgrowth of the Cow Herd Appraisal Performance Software (CHAPS) program developed by the North Dakota Beef Cattle Improvement Association and North Dakota State University Extension Service. The CHAPS and DATALINE programs have made it possible for cow-calf producers to allow a complete throughput of information from the beginning (conception) to the end (retail harvest). The first set of cattle through the DATALINE program were three loads of cattle from the Dickinson Research Extension Center (DREC). On November 11, 1996, 76 steers and on December 3, 1996, 91 steers and 67 heifers were shipped to Decatur County Feed Yard Inc. at Oberlin Kansas.

Results & Discussion

The weaning performance of DREC calves is presented in [table 1](#) by individual Angus sire and group averages (tables [2](#) and [3](#) use the same format). The calves sent had acceptable growth rates however are smaller framed cattle (4.7 vs. 5.7) than North Dakota CHAPS cattle. The feedlot performance is shown in [table 2](#), and serves as the initial benchmark values for overall feedlot performance for DREC. [Table 3](#) gives the carcass characteristics of these cattle. Compared to the 1995 beef cattle quality audit, these cattle are slightly smaller and less muscled, but produce a higher quality carcass. Genetic change could be initiated from the initial years data, with caution. The performance of the different Angus sires are similar. Pre-weaning growth rate and frame were similar for all sires with the exception of 336C ([table 1](#)). Tables [2](#) and [3](#) would indicate the same trend. In general, the performance of 336C was inadequate pre-weaning, in the feedlot and on the rail. This bull lost money. Dollar wise, the question should be asked if more dollars would have been generated selling the cows than maintaining cows conceived to this bull in the herd. Early trends would indicate some differences in feed efficiency and carcass traits resulting in \$25 dollar spread in market adjusted net return ([table 2](#) and [3](#)) among the different sires. Additional calves will be produced to build the data set and increase the confidence in the baseline data.

Conclusion

This program demonstrates cattle can be source verified back to the cow/calf operation, resulting in beginning benchmarks for weaning, feedlot, carcass and health traits.

Sire	N	Birth Weight	Wean Weight	Adjusted 205 Days Weight	Average Daily Gain	Weight per Day of Age	Age	Frame Score
127	25	86	556	555	2.0	2.4	230	4.5
132	16	76	550	555	2.1	2.4	231	4.4
155	19	79	546	553	2.1	2.4	225	4.4
1445	30	80	557	564	2.1	2.5	224	4.3
336C	11	71	417	502	1.8	2.2	195	3.7
Herd	206	80	522	550	2.1	2.6	205	4.7

Average	230	88	522	559	2.1	2.0	205	4.7
North Dakota	18415	89	533	576	2.3	2.7	200	5.7

Table 2: Feedlot Performance of Angus Sired Steer Calves in 1996 versus Angus and DREC Herd Averages

Sire	N	Receiving Weight	Final Weight	Feedlot Average Daily Gain	Days on Feed	Feed Efficiency	Age at Harvest	Market Adjusted Net Return \$ ^a
127	10	700	1126	2.9	147	6.62	417	33
132	8	642	1081	3.1	144	6.01	415	55
155	11	681	1060	2.9	131	6.35	401	48
1445	15	642	1103	3.2	146	5.84	413	58
336C	4	532	984	2.7	174	6.33	421	-21
Angus Average ^b	53	650	1078	3.0	143	6.16	408	42
Herd Average	159	623	1110	3.1	158	6.13	405	41
Decatur	10488	641	1137	3.1	160	6.20	na	34

a) The standard values used in the market-adjusted profit calculations per cwt were: Commodity Hot Carcass Average Price - \$106, Choice/Select Price Spread - \$8, Standard Grade Discount from Select -\$4, Prime Grade Premium from Choice -\$4, Discount for Heavies and Lights - \$10, Discount

for Dark Cutters -\$15, Premium for Yield Grade 1 -\$6, Premium for Yield Grade 2 -\$3, Premium/Discount for Yield Grade 3 -\$0, Discount for Yield Grade 4 -\$15, Discount for Yield Grade 5 -\$25, Fixed Price for Utility Grade and Lower -\$70.

b) Herd average for Angus sires used at the Dickinson Research Extension Center

Table 3: Carcass Characteristics of Angus Sired Steer Calves in 1996 Versus Angus, Drec Herd, NBQA Averages

Sire	N	Hot Carcass Weight	Rib Eye Area	Final Yield Grade	Quality Grade ^a	Market Adjusted Net Return \$ ^b
127	10	712	13.1	2.4	2.4	33
132	8	694	12.1	2.5	2.5	55
155	11	681	12.2	2.6	2.6	48
1445	15	705	12.8	2.3	2.3	58
336C	4	603	11.0	2.3	2.5	-21
Angus Average ^c	53	686	12.3	2.4	2.3	42
Herd Average	159	707	12.5	2.3	2.5	41
Decatur	10488	724	na	1.8	2.5	34
NBQA ^d	na	748	12.8	2.8	3.0	na

a) Quality Grade 1=Prime 2=Choice 3=Select 4=Standard 5=Non-Conformity

b) The standard values used in the market-adjusted profit calculations per cwt were: Commodity Hot Carcass Average Price - \$106, Choice/Select Price Spread - \$8, Standard Grade Discount form

Select -\$4, Prime Grade Premium from Choice -\$4, Discount for Heavies and Lights - \$10, Discount for Dark Cutters -\$15, Premium for Yield Grade 1 -\$6, Premium for Yield Grade 2 -\$3, Premium/Discount for Yield Grade 3 -\$0, Discount for Yield Grade 4 -\$15, Discount for Yield Grade 5 -\$25, Fixed Price for Utility Grade and Lower -\$70.

c) Herd average for Angus sires used at the Dickinson Research Extension Center

d) 1995 National Beef Quality Audit

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