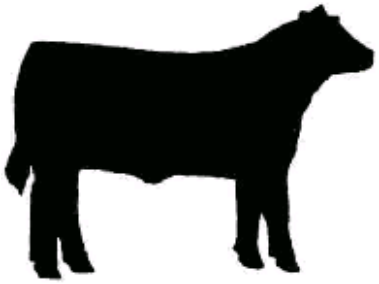

TCSCF
Tri-County Steer Carcass Futurity Cooperative

In cooperation with
IBC Iowa Beef Center

Observations from the Project Analysis

2007 Iowa Sire Profit Comparison Project

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The Tri-County Sire Profit Analysis assists producers in comparing sires from a profit standpoint. Making sound, economic decisions is the wish of most commercial producers. Since 2003 this program has grown from 35 sires to 701 sires in 2007. Over 22,000 head of sire identified cattle were evaluated in 2007, but we do not print sire averages and comparison unless there are 5 progeny by the bull.

What does it take to make a top 25% sire? Carcass weight, growth and quality are very important toward achieving added lifetime returns in the Tri-County tests. But that is not all, if a sire does horribly in one economically important trait he simply is an also ran. Generally, the progeny have to perform well in many categories to get their sire into the top 25% (see table at right). Sires generating calves that come in heavier than average with excellent immunity; gaining both fast and efficiently, produce more end product (final harvest weight and carcass weight) which is slightly heavier muscled and of higher quality grade yield greater lifetime profitability.

Data analysis shows there are many factors that influence sire profitability. Major factors found in this analysis are: final harvest weight and its corresponding impact on hot carcass weight, rate and efficiency of growth, quality grade and its impact on price received in a value based grid, and being heavier muscled. Moderately important factors were: cattle that stayed healthy with fewer treatments and associated health costs; and cattle that had higher dressing percentages. Lesser in importance, but still significant in their impact were: delivery weight and calf value. Fat cover and resulting yield grade were not important to lifetime profitability, but keep in mind the tight sorting routine and excellent marketing done at Tri-County keep over fat cattle out of the picture. This makes yield grade a moot point in profit determination. Under a different marketing program this may not hold true.

Sires were compared in two different grids with either a low or high Choice/Select spread. There was little rank order change, thus a sire ranking high in a muscle grid also ranked high in a quality based grid.

Not all top 25% sires are there for the same reason. Some are there due to superior growth and end product weight, while others due to moderate growth and superior carcass quality attributes. Additionally, a few sires are there with above average performance in all areas influencing profit. Finding sires that do everything with perfection is nearly impossible, so to improve your cattle program try to plug weakness holes with genetics that are better in your weakness areas.

Phenotypic correlations to profitability were calculated on over 22,000 cattle. This analysis showed the following relationships between traits and profitability in a high quality grid.

Tri-County Trait Correlations with Lifetime Profitability

Delivery wgt. = .23	Fat cover = -.08
Final wgt. = .43	Yield Grade = -.06
Feed to gain = -.41	Marbling score = .43
ADG = .59	Quality Grade = .46
Carcass wgt. = .66	Health Trmt cost = -.25
Dress % = .33	Cost of gain = -.49
Rib eye area = .51	Calf Value = .23

Comparison of Top Profit Bulls to Bottom Profit Bulls: 2004-2007

	Sire Groupings		
Trait	**Top 25%**	**Bottom 25%**	**All Sire Average**
Number of Sires	175	175	701
Feedlot Performance			
Delivery Weight	667	617	642
SPA Calf Value	$406	$385	$395
Warm Up ADG	3.56	3.29	3.39
Ave. Disposition Score	1.57	1.64	1.61
On Test ADG	3.51	3.10	3.29
Overall ADG	3.37	3.05	3.21
Adjusted Final Weight	1236	1150	1190
Feed to Gain	6.78	6.93	6.89
Feed Cost/cwt of Gain	$37.04	$37.90	$37.65
Health Performance			
Number of Individual Health Treatments	0.13	0.40	0.25
Individual Health Treatment Costs	$2.78	$9.76	$5.78
Carcass Performance			
Hot Carcass Weight	763	703	732
Dressing Percent	61.7%	61.1%	61.5%
Fat Cover	0.43	0.45	0.44
Ribeye Area	13.0	12.3	12.6
Ribeye Area/cwt. Of Carcass Weight	1.71	1.75	1.73
Yield Grade (calculated)	2.76	2.81	2.81
Marbling Score Number	SM^{50}	SM^{01}	SM^{28}
% Low Choice or better	80.3%	53.6%	68.0%
% Upper Choice or better	24.0%	9.6%	16.5%
Final Carc Price with $10.26 Select Discount	$137.36	$131.83	$134.73
Final Carc Value with $10.26 Select Discount	$1,048	$926	$986
Profitability			
Average Lifetime Profit	$352	$251	$301