



**Tri County Steer Carcass Futurity Cooperative**  
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[www.tcscf.com](http://www.tcscf.com)



January 11, 2010

TCSCF Consignors and State Coordinators

### **TCSCF Staff**

People are the most important part of the TCSCF program, so we thought an update would be helpful after the July update informing you of changes at ISU Extension and how they would impact the TCSCF program. Leann now works for ISU Outlying Research Farms with TCSCF underwriting part of her salary. John Woltmann is working part time for TCSCF and helping his father with their farming business. Darrell Busby is retiring from Extension on January 31, 2010 and will work for TCSCF. Lacey Sleep and Meg Groves continue their good work for TCSCF. Jake Alden, effective December 1, 2009, is a field representative for the American Shorthorn Association. We will miss Jake and wish him the best. We will still be seeing him as he will be assisting with Shorthorns on feed with TCSCF. The bottom line, the same people will continue to collect, prepare and report the quality data you pay for, expect and deserve.

### **Benchmarking of Your Steers and Heifers to Comparable Age Steers and Heifers**

Consignors ask "How did my cattle compare with other TCSCF cattle?" Now you can find out. Dr. Daryl Strohbehn was hired by the TCSCF Board to do a statistical analysis and develop software so the TCSCF staff can prepare two reports for your steers and heifers. The Critical Performance Record Summary report would include cattle closed out from 2004 to 2009, comparing not only your cattle from year to year but also comparing your cattle with cattle of similar age and in weight. If you have not reported birth dates to us you will have to give us an average age at delivery so we can generate the Critical Performance Record Summary. The summary should be a valuable tool in determining strengths and weakness of your cowherd, tracking changes and as tool for measuring changes. In the herds I have looked at the summaries reveal that there are apparent changes over time, the impact of vaccination changes is evident, and the impacts of genetic changes are charted.

The TCSCF Board has made the initial investment to develop the software with the idea that user fees will pay for the cost and maintenance of the program. The cost to prepare the report will be \$30 per consignor. If you request the benchmarking report before March 1, 2010 we will take \$5 off and if you forward us an email address that you are willing to have on test, re-implant reports and letters sent to we will take another \$5 off. So emailing a request for the Benchmarking Report prior to March 1, 2010 will cost you \$20/consignor. You can fill out the form at the bottom of page 4 and fax to 712.769.2610.

### **Do we see any difference in TCSCF calves that were creep-fed?**

We have been asked this question numerous times. You can help us answer the question. Fill out the survey at the bottom of page 4 and fax to 712.769.2610. The first 25 will receive a set of Certified Angus Beef steak knives mailed directly to your home.

### **Sire Profit Comparison Summary**

The sire profit comparison program is for sires with five or more progeny consigned to the TCSCF program. This program equalized environmental impacts on the cattle and then evaluated all sire groups for profitability under varying market and pricing grids. We have been evaluating sires for over seven years. This year our sire evaluation includes over 43,250 head from 1,087 sires. The end result of this sire profit comparison project is to better inform producers about the genetic variation in profitability between sires and assist them in future selection decisions. The sire profit comparison was updated this year to reflect the economic changes i.e. lower feed costs, lower carcass price, Choice-Select price spread and increased yardage cost. The sires are now ranked in the new economic environment we find ourselves trying to survive and thrive in.

In an effort to reduce cost, only the "2008 Observations of the Iowa Sire Profit Comparison Project" are included with this letter. The *Sire Profit 6 Year Averages*, the *Sire Profit 6 Year Ranking* and the *Methods Used in Standardizing Data in Sire Profit Comparison* are available to you three different ways; 1 – go to our website at [www.tcscf.com](http://www.tcscf.com), click on 2009 Sire

Profit Summary Reports; 2 – send an email to [leann@iastate.edu](mailto:leann@iastate.edu) and request the materials be emailed to you as attachments; or 3 – call our office at 712.769.2600 and Leann will mail you a packet.

The TCSCF Sire Profit Summary has become a valuable tool for consignors. To compile and analyze a data base of this size requires sound input from consignors, cooperation in data collection by TCSCF staff and the cooperating feedlots and the analytical expertise of Daryl Strohbehn, ISU Extension Beef Specialist. Thanks to all for making this part of the TCSCF program a success. **We would ask consignors to use sire registration numbers for sire identification rather than the sire's household name.**

### **Age & Source Verified Cattle**

The age and source verification program has been running for nearly 33 months and has put more than \$504,000 into the pockets of TCSCF consignors as of July 1, 2009. We still need to have all of the paper work before or when the cattle arrive in Iowa. Please remember that all producers must have a farm profile in their records. We will be able to back verify cattle, but it will be very difficult and we must follow a set of guidelines set forward by the USDA and implemented into our QSA program. If TCSCF has to go through the process of back verifying cattle, our age and source verification fee for those cattle will be raised. Please remember to fill every part of each form out along with any signature that is needed. Please feel free to call the office and we will be glad to answer your questions.

### **Igenity Project**

Blood for the Igenity project (2009) is winding down. At this time we are unsure if we will be continuing to draw blood in 2010. We drew blood samples from nearly 3000 head in 2009. We would still ask that you use the sire registration number for the bulls for the Sire Profit Summary. Please continue to send us the sire registration, breed of sire, and breed of dam, as we will still be including this information in your reports. This information might also be beneficial in any future projects. Igenity has now made it possible to bench mark your cattle against other TCSCF cattle that had blood draw for the project, as well as other Igenity cattle that were done commercially. There will be a page in this packet explaining how to do the bench marking. If your cattle had blood drawn from them last year, you should have received a letter from Igenity. The letter should have given a website and a password so you could access your information. If you didn't receive your information and thought you should have, please contact John Woltmann at the TCSCF office. We hope producers found this information from Igenity interesting and helpful.

### **TCSCF is CAB Progressive Partner of the Year**

Certified Angus Beef (CAB) recognized the TCSCF Cooperative as the 2009 CAB Progressive Partner of the Year. TCSCF appreciates all of the support CAB and their great staff have given the TCSCF program over the last several years. CAB has assisted in data analysis and report preparation. They have also developed publicity for not only the TCSCF program but have also featured many TCSCF consignors. TCSCF has many trusted partners and Certified Angus Beef is one of our best.

### **State Coordinators**

We would like to thank all of our state coordinators and their staff that assist with assembling and transporting cattle to Iowa, along with making sure all of the paper work is transferred to the TCSCF office and answering all of the questions about the TCSCF program. This year special thanks to you for your assistance with the age and source verified cattle. Without you and your assistance the TCSCF program would not work. Thanks!

Sincerely,

Darrell Busby  
ISU Extension Beef Field Specialist

John Woltmann  
TCSCF Manager

Lacey Sleep  
Data Coordinator

Meg Groves  
TCSCF Carcass Data Collection Coordinator

Leann Plowman-Tibken  
ISU Administrative Assistant  
CC: TCSCF Board and Feedlots

## Request for TCSCF Benchmark Report

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Yes, I would like to receive the \$30 TCSCF Benchmark Report.

Name \_\_\_\_\_ Email address \_\_\_\_\_

Address \_\_\_\_\_ City, State Zip \_\_\_\_\_

Forwarding your email address will save you \$5 on the cost of the Benchmark Report.  
Making your request before March 1, 2010 will also save \$5.

Creep Feed Survey

TCSCF Group Name \_\_\_\_\_

No of Head \_\_\_\_\_ Creep fed No \_\_\_\_\_ Yes \_\_\_\_\_

If yes, calves were creep fed (select one) 30 days or less \_\_\_\_\_, 30 to 60 days \_\_\_\_\_,  
60-90 days \_\_\_\_\_, 90-120 days \_\_\_\_\_, more than 120 days \_\_\_\_\_.

What type of creep feed did you use? (place a mark by the answer that best describes the product you used):

Corn-based \_\_\_\_\_, Soyhull based \_\_\_\_\_, Commercial bulk pelleted product \_\_\_\_\_

Creep grazing \_\_\_\_\_, Other: please list \_\_\_\_\_

Was a limiter (e.g. salt) used in the creep ration to moderate consumption?

Yes \_\_\_\_\_, No \_\_\_\_\_, Don't know \_\_\_\_\_

2<sup>nd</sup> group or year

TCSCF Group Name \_\_\_\_\_

No of Head \_\_\_\_\_ Creep fed No \_\_\_\_\_ Yes \_\_\_\_\_

If yes, calves were creep fed (select one) 30 days or less \_\_\_\_\_, 30 to 60 days \_\_\_\_\_,  
60-90 days \_\_\_\_\_, 90-120 days \_\_\_\_\_, more than 120 days \_\_\_\_\_.

What type of creep feed did you use? (place a mark by the answer that best describes the product you used):

Corn-based \_\_\_\_\_, Soyhull based \_\_\_\_\_, Commercial bulk pelleted product \_\_\_\_\_

Creep grazing \_\_\_\_\_, Other: please list \_\_\_\_\_

Was a limiter (e.g. salt) used in the creep ration to moderate consumption?

Yes \_\_\_\_\_, No \_\_\_\_\_, Don't know \_\_\_\_\_

Fax to TCSCF Cooperative 712.769.2610.

## Assessing the Cost of Beef Quality - Revisited

Under the leadership of John Lawrence, Director of the Iowa Beef Center, we analyzed your carcass and economic data to determine factors impacting net return. The economics of beef production has changed since we analyzed data from 1996-1999. Value-based marketing is common place, the national beef cowherd has shifted toward more Angus influence and carcass weights have increased. Most notably, however, is that cattle and grain prices have increased. Iowa fed cattle and corn prices for 1996-99 averaged \$64.13 and \$2.49, respectively, compared to \$88.87 and \$3.04 for 2005-2008. Because of increased demand from biofuel production, the expectation is that grain prices will remain higher than historic levels. How do the economic signals change with higher grain and beef prices?

This analysis of nearly 15,000 head of fall placed calf-feds found similar results to our analysis of data from 1996-1999 (Forristall et al) in spite of 22 percent higher corn prices and 38 percent higher cattle prices. The data does show strong correlations between economically important carcass and production variables, some of which are antagonistic. Carcass weight has a strong positive correlation with ribeye area and ADG; that is faster growing cattle have larger carcasses with larger ribeyes. As marbling score increases so does feed cost and feed to gain; thus higher marbling cattle put on more external fat and require more feed per pound of gain. Also, as ADG increases feed to gain decreases, a favorable outcome. Marbling is less correlated than some variables, but has a positive relationship with ADG, but negative with ribeye area, placement weight and health treatments.

In both studies marbling was identified as having the largest relative impact on net returns for feedlot cattle when the Choice-Select spread is \$8/cwt or higher. The Choice-Select spread where the relative importance of marbling score is equal to other factors is approximately \$6/cwt in the current analysis. The relative importance ranking of carcass and management variable was similar in this analysis and Forristall et al. Hot carcass weight and feed to gain were next behind marbling followed by ribeye area.

Models were estimated for steers and heifers placed in the fourth quarter (Table 4). The R<sup>2</sup> were 0.78 for nearly 10,400 steers and 0.73 for 3,255 heifers indicating that 78 to 73 percent on the variation in net returns is explained by the variables indicated in the model. The Regression Beta is the output of the ordinary least square regression model. All variables are highly significant (P< .01) and have the expected sign.

**Table 4. Regression Results for Tri-County Steer Carcass Futurity Cattle Placed on Feed in Fourth Quarter. Dependent Variable is Net Return per Head**

	Steers placed in 4th quarter			Heifers placed in 4th quarter		
R2 & obs are:	0.78		10,384	0.73		3,255
Variable	Regression Beta*	Std Error	Standardize Beta	Regression Beta*	Std Error	Standardize Beta
Intercept	-649.04	10.20	0.00	-496.39	17.86	0.00
Hot Carcass Wt	0.35	0.01	0.25	0.46	0.02	0.31
Fat Cover	-53.67	3.77	-0.08	-106.46	6.04	-0.19
Ribeye Area	12.10	0.46	0.15	12.12	0.91	0.16
Marbling Score	0.52	0.01	0.42	0.42	0.01	0.42
Feed To Gain	-26.05	0.82	-0.23	-28.71	1.24	-0.33
Daily Gain	35.82	1.41	0.20	21.54	2.44	0.12
Placement Weight	-0.34	0.01	-0.34	-0.29	0.01	-0.32
Health treatments	-1.29	0.03	-0.23	-1.24	0.05	-0.24

\* All variable are significant at P<.01

The Standardize Beta number is the percent of variation in NR explained by that variable. The larger the Standardize Beta in absolute value the more important the variable is to NR. The most important variable explaining NR in the baseline scenario is MS with a Standardized Beta of 0.42 for steers and heifers. For heifers HCW, PW and FG had Standardize Beta coefficients that explained approximately 30% of variation in NR. Placement Weight is the second most important explanatory variable for steers NR.

The Regression Beta coefficients are the dollar impact on NR for a one unit change in the independent variable, but may be difficult to interpret. Table 5 scales the regression beta into units that are more commonly used by producers. For example, multiplying the MS beta by 33.3 points is equivalent to one third of a quality grade, and is associated with increasing NR by \$17.08/head in steers and \$13.77/head in heifers. Similarly, a ten pound increase in HCW is associated with increasing NR by \$3.50/head in steers and \$4.60/head in heifers. An increase in one-tenth pound increase in ADG increases NR by \$3.58/head head in steers and \$2.15/head in heifers. The steer NR decreased \$1.29/head for every dollar spent in health treatments, therefore there is an effect beyond the treatment cost itself. Other variables associated with lower NR were FC, FG and PW. The other variables are interpreted similarly.

**Table 5. Economic Value of a One Unit Change in the Independent Variable on the Net Returns for Steers and Heifers Placed in the Fourth Quarter**

Variable	One Unit	Steers	Heifers
Intercept		-649.04	-496.39
Hot Carcass Wt	10 pound	3.50	4.60
Fat Cover	1/10 inch	-5.37	-10.65
Ribeye Area	1 sq. inch	12.10	12.12
Marbling Score	10 degrees	5.17	4.17
Feed To Gain	1/10 pound	-2.61	-2.87
Daily Gain	1/10 pound	3.58	2.15
Placement Weight			
Weight	10 pound	-3.40	-2.90
Health treatments	1 dollar	-1.29	-1.24

The Standardized Beta from Table 4 and the Economic Values from Table 5 should be used together. For example, the Economic Value of increasing placement weight 10 pounds is a decrease in NR of \$3.40 per head which seems small, but the Standardized Beta is 0.34 for steers, making it the second most important variable impacting NR. The reason is that it relatively easy to change placement weight 10 pounds, but more difficult to change it one standard deviation which is 95 pounds.

The complete report is available at <http://www.iowabeefcenter.org/content/beefqualityrevisited.pdf>



## Does Sorting Increase the Bottom Line?

By Darrell Busby, Beef Field Specialist, Iowa State University Extension

Does sorting increase revenue of cattle sorted for a grid market? Bud Beedle's master's project utilized 14,454 steers and 6,179 heifers marketed by the TCSCF cooperative in 2006, 2007 and 2008. Each lot of TCSCF cattle was sorted at least once using three people to determine first harvest or second harvest. Information used during the sorting process included weight of the individual animal, visual observation and manual rib palpation for fat cover, gain since re-implant weight and frame score. Cattle weighing less than 950 lbs., even though they may be fat, are usually fed an additional 35 days or 100 lbs. of gain to avoid severe discounts for carcasses under 550 lbs. Cattle weighing more than 1400 lbs. are harvested on the first harvest to avoid the severe discount for carcasses over 950 lbs.

TCSCF cattle were compared to national average figures from USDA/AMS during the month to see if differences existed. The table below shows the differences.

Year	TCSCF % YG 1, 2 & 3	National Summary % YG 1,2 & 3	% Point Improvement	TCSCF % Choice or better	National Summary % Choice or better	% Point Improvement
2006	98.16%	90.97%	7.19	73.32%	59.13%	14.19
2007	98.30%	88.31%	9.99	61.15%	60.59%	0.56
2008	96.70%	89.88%	6.82	55.82%	64.14%	-8.32

The yield grade improvements were consistent; however, the decline in % Choice was disappointing. Two main factors that impacted the decline in % Choice were the increase in new consignors whose cattle did not grade as well as long time consignors and the introduction of instrument grading. Instrument grading has lowered % Choice by 5% compared to cattle from the same consignors with similar fat cover. Factors that have not changed during the three year period are implant strategy and energy density of the ration. Factors that have changed but are difficult to quantify are genetics and weather.

Now back to the sorting analysis. The TCSCF sorting routine we have developed also reduces the number of carcasses receiving heavy and light weight discounts. The table below shows the value per head for the differences in Yield Grade, Quality Grade and Carcass Weight Consistency.

Group	Yield Grade Improvement	Quality Grade Improvement	Carcass Weight Improvement	Total Improvement per Head	Total Improvement per Lot
Heifers 1 <sup>st</sup> Sort	\$10.44	\$2.67	\$5.53	\$18.64	\$1,007
Heifers 2 <sup>nd</sup> Sort	\$5.18	\$1.12	\$5.11	\$11.41	\$445
Steers 1 <sup>st</sup> Sort	\$10.30	\$-1.69	\$5.36	\$13.97	\$1,299
Steers 2 <sup>nd</sup> Sort	\$13.30	\$-2.62	\$4.82	\$15.50	\$1,271

The added cost to sorting is the labor and facility costs which, based on feedlot size, ranges from \$1.20/head for a 500 head feedlot to \$.74/head for a 1,500 head feedlot. We are accurate on our sort 84% of the time for steers and 80% of the time for heifers. Not correctly estimating fat cover is the main reason for inaccuracies in sorting.

The complete growth and carcass data cost is \$9/head and the cost of sorting is approximately \$1/head which you are paying in yardage and/or chute charges but receiving from \$11.41 to \$18.64/head in additional revenue based on how we sort the cattle, not to mention lower feed cost/cwt. of gain because of not over feeding cattle. Many of you have shared added benefits to receiving TCSCF data and now we have an excellent analysis of our sorting program and its impact on profit.