



Beef Tips

September 2010

Department of Animal Sciences & Industry

www.asi.ksu.edu/Beeftips

Upcoming Events

Beef Stocker Conference

Sept. 30, 2010
Manhattan, KS
www.KSUBeef.org

KSU Cattlemen's Day

March 4, 2011
Manhattan, KS
www.KSUBeef.org

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Calf and feeder enterprise data show large variation in return to management per cow

Michael Langemeier, agriculture economics

Beef cow enterprise data from the Kansas Farm Management Association evaluated by high, medium and low profit cow calf producers for the period 2004 to 2008 was presented in the Nov. 2009 and Jan. 2010 Beef Tips. This article continues on the same data set but focuses specifically on the net returns for 2009 enterprises, sell calves and sell feeders. The cost categories used to discuss livestock profit thirds in this article are the same as in the earlier Beef Tips issues and at the KFMA web site (www.agmanager.info/kfma).

Sell Calves Enterprise

Information for the 2009 beef cow, sell calves enterprise is shown in table 1A (page 4). There was a \$357 difference in net return to management per cow between the low one-third and high one-third profit groups for this enterprise in 2009. Of this difference, approximately 32 percent is accounted for by the difference in gross income per cow, 21 percent is accounted for by the difference in feed cost, 5 percent is accounted for by the difference in summer pasture cost, and 15 percent is accounted for by the difference in labor cost. The remaining difference in net return (27 percent) was due to differences in interest, veterinarian expense, livestock marketing and breeding, depreciation, machinery, and miscellaneous cost items called "other".

Differences in gross income between the two profit groups were due to differences in weaning percentages (not shown in the table), average weight of calves sold, and average sale price per cwt. Feed cost includes purchased and raised feed. Summer pasture costs are listed as a separate cost item. The cost of raised feed is computed

using the opportunity cost of hay, silage, stalks, wheat pasture, temporary pasture, and straw produced by the farm and utilized by the beef cow enterprise. Purchased and raised feed (i.e., feed cost) is considerably more important in explaining the difference in net return than summer pasture. The large difference in feed cost per head is understated due to the fact that the high profit group actually sold their calves at a heavier weight.

Obviously, it is important for beef cow producers to benchmark their feed costs using comparative information. Labor costs include hired labor, operator labor, and family labor. Interest costs include cash interest paid, as well as an opportunity charge on capital invested in the enterprise. Machinery costs include repairs, machine hire, and fuel. The "other" cost category includes fees, property and real estate taxes, general farm insurance, utilities, and the farm portion of auto expense.

Sell Feeders Enterprise

Table 1B (page 4) presents information for the 2009 beef cow, sell feeders enterprise. There was a \$439 difference in net return to management per cow between the low one-third and high one-third profit groups for this enterprise. It is important to note that the difference in net returns is even wider for this enterprise compared to the beef cow, sell calves enterprise. This fact illustrates the problem some farms have in efficiently adding weight to their calves after weaning. The difference in gross income between the profit groups reflects differences in weaning percentages and calf death loss after weaning

continued...see Enterprise data on page 3

“You can’t manage what you don’t measure.”

Tally Time – Hay, you can’t manage what you don’t measure

Sandy Johnson, livestock specialist

Producers generally do a good job of tracking numbers of bales made per field, however both quantity and quality are needed to determine how well the forage will match animal requirements and desired performance. The 1993 USDA Beef Cow/Calf Health and Productivity Audit (CHAPA, 1993) indicated that 8 percent of operations representing 18 percent of cows used forage testing.

What would happen if the same feed supplementation program was used each year regardless of the forage quality? The table below shows the nutrient analysis of sudan hay from 3 different fields (actual values from a Kansas producer). If the forage was fed free choice to mature cows with a goal to maintain weight during early lactation with a supplement of 5 lbs of corn and 1 lb of a 36% crude protein pellet, forage from both fields one and two would nearly meet or exceed protein requirements but energy requirements would not be met (table 1).

The BRANDS ration formulation program projects that daily weight loss would be -1.23 lb per day for hay from field one or a drop in body condition score of about -0.41 in 30 days. Performance is slightly better with forage from field two, but cows would still be losing weight. The same supplement feed with forage from field three slightly exceeds energy requirements.

Table 1. Nutrient analysis and expected performance from 3 different fields of sudan hay.

Item	Field 1	Field 2	Field 3
DM%	85.2	82.0	63.3
TDN, %	52.8	53.7	59.6
CP, %	8.4	9.9	5.7
Percent of requirements*			
Energy	86	89	103
Protein	95	103	69
Performance			
ADG, lb/d	-1.23	-0.92	0
30 d BCS change	-0.41	-0.29	0

*When forage fed free choice with 5 lbs corn and 1 lb of 36% CP pellet to 1300 lb cows in early lactation.

To balance a ration with corn and the 36% protein pellet for each of these forages in early lactation, 1 pound of corn and 5 pounds of the 36% protein is required for field three, where as for both fields one and two, greater than 0.5% of body weight of grain is needed to get energy above 90 percent of the requirement. A low starch energy supplement may be a better alternative for use with forages one and two in this case or a different base forage. One size does not fit all when it comes to balancing rations with different forages.

Feed costs are consistently shown as a differentiating factor between high profit and low profit cow/calf producers and winter feed costs are a large share of those costs. Achieving desired animal performance while controlling feed costs is an ongoing challenge for beef producers. By-products or other sources of protein and energy supplements can often be purchased at a discount before winter feeding periods begin. Knowledge of forage quality can help determine more specifically what is needed to complete rations.

A complete forage assessment that includes the number of bales and a forage analysis for each hay lot is the first step in managing winter feeding costs. Many local county extension offices have a hay sampling probe that can be checked out and can answer other questions regarding sampling procedures and analysis. Once your feed analysis is complete, bring it to the extension office for a look at cost effective ways to balance rations. PLAN for success in winter feeding this year!

Economic research summaries available for livestock producers

A new publication, Connecting Livestock Producers with Economic Research (CLPER), authored by Dr. Glynn Tonsor is designed to enhance the dissemination of information from peer-reviewed economic research articles to the livestock industry. CLPER seeks to synthesize recent economic research in order to help livestock producers make informed decisions. Tonsor started his position as an assistant professor of livestock and meat marketing in the department of Agriculture Economics at KSU on March 1, 2010.

Quarterly issues of CLPER will be concisely written as 2 to 4 page documents summarizing key findings and economic implications for livestock producers of 4 to 6 academic journal articles published in recent months. CLPER will be posted for free downloading from Kansas State University's Ag-Manager website <http://www.agmanager.info/livestock/marketing/CLPER/default.asp> and be available for e-mail distribution for those interested in notification of new postings (<http://www.agmanager.info/Evaluation/Email.htm>). When applicable, links to journal articles that are available to the general public will be included. An excerpt from the CLPER July issue is below.

Farmer's Share of the Retail Food Dollar Statistic:

Summary: Agricultural economists at Montana State University recently assessed the empirical relationship between USDA's farmer's share of the retail dollar (FS) statistic and the economic well-being of farmers. Their analysis found that the farmer's share of the retail dollar is not an indicator of producer well-being. The authors argue the farmer's share statistic should not be used for policy purposes.

Implications: Proper understanding of market drivers and hence economic well-being of producers operating in today's global marketplace requires thorough investigation. Perhaps the most common perception underlying current "anti-competitive and fair market" discussions (i.e. June 18th USDA press release No.0326.10) is that farmer's declining share of the retail food dollar equates to declining economic well-being of farmers. The Montana State study reveals this perception is not only inaccurate but may misguide policy development that could be costly to market participants including producers. Produc-

ers, industry leaders and policy makers should consider this simple example: would you personally rather have 10% of \$1,000 or 100% of \$1. While this is obviously a simplistic example, it drives home a point: the view of food supply chain to be honestly contrasted with the possibility of the supply chain working to add value (where proportions are less relevant). Even if the relative share of one market level is declining, it is entirely feasible all market participants have benefited by market adjustments resulting in farmer's share of retail food expenditures declining.

Brester, G.W., J.M. Marsh, and J.A. Atwood. (2009). "Evaluating the Farmer's-Share-of-the-Retail-Dollar Statistic." *Journal of Agricultural and Resource Economics*. 34:213-236. ([LINK](#))

Enterprise data continued from page 1

(neither of which is shown in the table), the average weight of calves sold, and the average sale price per hundred. Note that the high profit group sold heavier calves. The largest difference in per cow costs was feed at \$98. There was also a large difference in labor cost per cow (\$46). These two cost items (feed and labor) accounted for 22 and 10 percent of the net return per cow difference, respectively. The difference in summer pasture cost was minimal.

This article illustrates the wide differences in net return to management per cow for beef cow producers. More detailed information pertaining to net return differences can be obtained from a publication entitled "Differences Between High, Medium, and Low Profit Cow-Calf Producers" which is available on www.AgManager.info.

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Enterprise data—continued from page 3...

Table 1. Kansas Farm Management Association: State Averages 2009 Beef Cow Enterprises, Sell Calves and Sell Feeders, Sorted by Net Return to Management per Cow

A. Sell Calves	Profit Category			Difference between	
	High 1/3	Mid 1/3	Low 1/3	High 1/3 and Low 1/3 absolute	%
Number of Farms	36	36	36		
Number of Cows in Herd	132	146	104	28	27%
Number of Calves Sold	115	114	93	22	24%
Average Weight of Calves Sold	595	545	550	45	8%
Sales Price/Cwt	\$94.16	\$98.00	\$99.38	(\$5.22)	-5%
INCOME PER COW					
Gross Income	\$518.61	\$449.83	\$404.99	\$113.62	28%
COSTS PER COW					
Feed	\$206.24	\$212.30	\$282.58	(\$76.34)	-27%
Pasture	\$127.56	\$140.10	\$144.91	(\$17.35)	-12%
Interest	\$96.55	\$118.68	\$131.90	(\$35.35)	-27%
Vet Medicine/Drugs	\$15.77	\$18.40	\$18.79	(\$3.02)	-16%
Livestock Marketing/Breeding	\$10.20	\$12.21	\$14.23	(\$4.03)	-28%
Depreciation	\$28.68	\$37.12	\$35.14	(\$6.46)	-18%
Machinery	\$52.73	\$66.19	\$78.52	(\$25.79)	-33%
Labor	\$84.43	\$97.56	\$137.18	(\$52.75)	-38%
Other	\$25.35	\$32.47	\$48.08	(\$22.73)	-47%
Total Cost	\$647.51	\$735.03	\$891.33	(\$243.82)	-27%
Net Return to Management/Cow	(\$128.90)	(\$285.20)	(\$486.34)	\$357.44	
B. Sell Feeders					
Number of Farms	37	36	36		
Number of Cows in Herd	149	105	82	67	82%
Number of Calves Sold	107	83	66	41	62%
Average Weight of Calves Sold	726	737	677	49	7%
Sales Price/Cwt	\$91.59	\$93.11	\$92.41	(\$0.82)	-1%
INCOME PER COW					
Gross Income	\$628.70	\$588.08	\$431.90	\$196.80	46%
COSTS PER COW					
Feed	\$264.82	\$356.19	\$362.69	(\$97.87)	-27%
Pasture	\$133.84	\$133.81	\$140.10	(\$6.26)	-4%
Interest	\$134.76	\$151.72	\$162.75	(\$27.99)	-17%
Vet Medicine/Drugs	\$24.29	\$24.30	\$23.52	\$0.77	3%
Livestock Marketing/Breeding	\$21.51	\$22.71	\$17.94	\$3.57	20%
Depreciation	\$26.30	\$40.15	\$50.01	(\$23.71)	-47%
Machinery	\$58.64	\$64.35	\$85.63	(\$26.99)	-32%
Labor	\$91.18	\$122.74	\$137.13	(\$45.95)	-34%
Other	\$30.24	\$40.02	\$47.81	(\$17.57)	-37%
Total Cost	\$785.58	\$955.99	\$1,027.58	(\$242.00)	-24%
Net Return to Management/Cow	(\$156.88)	(\$367.91)	(\$595.68)	\$438.80	

“It is important to note that the difference in net returns is even wider for this (sell feeders) enterprise compared to the beef cow, sell calves enterprise.”

Beef Stocker Field Day Set Producers can Learn to Optimize Their Profits

MANHATTAN, Kan. -- Kansas State University will host its annual Beef Stocker Field Day on September 30 at the KSU Beef Stocker Unit located on West Marlatt Avenue.

The field day will focus on optimizing stocker profitability by offering management tips and providing the latest information to help stockers adjust to changes in the beef industry. The sessions, offered by K-State faculty and beef industry professionals will cover current issues for stockers such as managing bovine respiratory disease risk, growth implants, mycoplasma and others.

Registration will begin at 9:30 a.m., followed by a complementary barbeque brisket lunch with posters and demonstrations for viewing. The afternoon will feature two more sessions and one breakout session. A complimentary pit barbeque featuring Certified Angus Beef product will follow the last session.

The cost of attendance is \$25 per person by September 15.

For more information, contact Lois Schreiner at lschrein@k-state.edu or see www.ksubeef.org

Environmental program offers free environmental assessment and/or nutrient management plan for livestock producers

The CLEANmp Program (Comprehensive Livestock Environmental Assessment and Nutrient management plan) is designed to provide services to all types and sizes of livestock and poultry production operations. It does not matter if an operation has or needs a state or federal permit; this program is not regulatory. Any producer who would like an independent environmental assessment and/or a nutrient management plan, at no cost, is welcome to apply for these services.

The nutrient management plan that will be developed under the CLEANmp-West Program contains all the components of a NRCS comprehensive nutrient management plan and EPA nutrient management plan. This program is from a federal grant funded from the EPA, to provide this service to livestock and poultry producers west of the Mississippi River until September 2011.

The CLEANmp website is <http://www.cleanmp-west.org/Homepage/Home-Main.aspx>

The program is administered through SES, Inc. in Merriam, KS. Sam Hanni, Senior Consultant can be contacted directly at (913) 307-0046 x19 to visit more about the program or visit their website at <http://www.ses-corp.com>.

