Beef Production Incomes and Expenses for South Central North Dakota 2009-2013

Jory Hansen
Carrington Area Farm Business Management Program

Cattlemen and women across the region have benefitted from increasing feeder calf prices over the past five years as is easily seen when looking at the net return on a per cow basis for cow-calf enterprises from 2009 to 2013. Projections indicate 2014 will be even more profitable than past years as the calf prices continue to rise while feed costs have leveled, or even fallen in some cases.

Data for this study was gathered directly from producers enrolled in the North Dakota Farm Business Management Program in Region 3 at Bismarck, Casselton, Carrington, Jamestown, Napoleon, and Wahpeton. Each of these sites collected and summarized the data for its own area using the FINPACK farm analysis program. After summarization, the data was combined into an annual regional report. Ranches located within the Red River Valley or west of Bismarck were typically deleted from the regional report and included with other regional reports that were more reflective of the area where the producers were located.

Cattle producers should be encouraged when looking at the rising profitability of cow-calf enterprises over the past five years. The income from calf and cull sales has steadily increased due to tight supplies and steady demand for beef. A smaller national cowherd has impacted these tight supplies, and herd building that is beginning to take place will further affect the supply side in the short term, which gives the price of both fat and feeder calves as well as cull cows and bulls a very positive outlook in the near term. In past years herds from the high 20 percent profit group have averaged as much as 100 more pounds weaned per exposed female than the herds in the low 20 percent profit group. With the current higher calf prices this difference in weight is even more glaring when looking at the difference in the net return. The accompanying table shows that the average weaning weights as well as the average pounds weaned per exposed female has not varied much over the past five years. This shows that most increases on the income side of the enterprises are due directly to higher prices.

When examining the same chart and looking at the expenses, the total cost to keep a cow for a year has also steadily risen over the past five years. From 2009 to 2013 this cost has grown from $645.85 to $810.22 per cow, an increase of $164.37. Most of this increase can be attributed to higher costs of feedstuffs as well as higher pasture costs. There has also been a constant increase in the overhead expenses as well as breeding herd replacement costs. As the cow-calf enterprises have become more profitable the overhead costs have grown due to upgrading of equipment and asset replacement adding to the depreciation costs charged to the cowherd. The same thing has been seen in the breeding herd replacement costs. The cows that producers are adding to their herds have a higher value whether they are home raised or purchased from other sources. The amount spent on bulls has also increased over the past five years. When looking at these same years, the difference between the total cost to keep a cow for the year has been as much as $160.00 per cow more for the 20 percent low-profit herds when compared to the 20 percent high-profit herds.

For the high 20 percent profit herds, producing more pounds of calves at a lower cost per cow has resulted in those herds averaging almost $300 more per cow in net return when compared to the low 20 percent herds. This means that from 2009 through 2013 a cow in the high 20 percent profit herd has generated a total of almost $1500 more than her counterpart in a low 20 percent profit herd. With an average herd size of 165 head, those producers have been able to make $247,500.00 more in the past 5 years. Many different factors and management decisions play a part in this significant difference in profitability. While the short term outlook for cattle prices is very positive, the possibility for the beginning of a downturn in the markets is there. Falling prices would make management decisions much more important as the profit margins on cowherds start to decrease. It is important for cow-calf producers to know their costs of production going forward and for them to run a cost-benefit analysis on any changes they make in their programs.

Table 1. Beef production incomes and expenses for south central North Dakota, 2009-2013.

Average Per Cow	2009	2010	2011	2012	2013	*2014 Proj.*
Total Income (Calves and Culls)	**$634.49**	**$747.71**	**$865.76**	**$962.13**	**$1,039.68**	***$1,494.00***
Feed	$318.01	$300.88	$322.46	$340.87	$381.51	*$383.02*
Other Direct	$88.82	$99.49	$110.58	$126.71	$115.08	*$120.51*
Overhead	$69.36	$78.90	$91.90	$86.79	$102.23	*$112.25*
Breeding Herd Replacement	$169.66	$165.59	$186.20	$219.61	$211.40	*$222.21*
Total Cost	**$645.85**	**$644.86**	**$711.14**	**$773.98**	**$810.22**	***$837.99***
Net Return	**-$11.35**	**$102.87**	**$154.62**	**$188.15**	**$229.46**	***$656.01***
Ave. WW	568	548	548	547	554	*557*
Lbs. Weaned/exposed female	511	500	467	492	503	*505*
Ave. Weight Calves Sold	638	587	579	601	574	*560*
Ave. Price/ CWT	$95.77	$119.13	$147.90	$151.01	$172.78	*$262.35*