The Rising Input Costs of Beef Cattle Herds in East Central North Dakota

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Beef producers looking to maximize the profit potential of their cowherds should look at their input costs and compare them to their production to determine if the increasing input costs over time has improved the production within their herds. In recent history, feeder cattle prices have recorded record highs. However during this same time period, cow/calf operation profits have not increased nearly as significantly.

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.

From 2007 to 2011 data was collected on an average of 5,740 cows per year, with the average herd size of 173 cows. Over these five years, the average direct and overhead costs per cow were \$472.86, with the low being \$437.56/cow in 2008 and the high rising to \$524.94/cow in 2011. Breaking the expenses down further, in 2008 the average cost to feed a cow for the year was \$286.49 and by 2011 that cost had climbed to \$322.45, accounting for \$35.96 or 41 percent of the rise in total expenses between the years. In 2008 the overhead expenses charged to the cowherd were \$59.57, climbing to \$91.90 per cow in 2011. This was an increase of \$32.22/cow and accounted for 37 percent of the total increase in costs per cow. The other 22 percent of the rise in input costs came from items such as fuel and oil, supplies, veterinary, and repair costs. Certainly the increased feed costs can be attributed to the rise in the crop commodity prices, which affect feed prices directly through the cost of purchased feed, but also indirectly through rising rental rates for both hay and pasture ground. The increase in overhead costs has also occurred because of the higher cost of hired labor, as well as an increase in depreciation costs due to the higher costs of machinery.

When looking at the income side of the equation during the same years, the average price per cwt. producers received for their calves was \$94.32 in 2008 and climbed all the way to \$147.90 in 2011. Net return per cow did increase during this rise in price from \$37.75 per cow to \$154.62. However, this increase was due only to the increase in price received, and was held in check by the increase in the costs of production.

During this same period, the average weaning weight in the cowherds decreased from 570 pounds in 2008 to 548 pounds in 2011, with the pounds weaned per exposed female falling from 519 to 476 pounds. Even as input costs and herd sizes were increasing, actual production from the cows has been decreasing, so producers were unable to fully realize the increasing profit potential due to the rising prices they had received for their product.

Input costs have risen significantly during the past five years for beef cattle production, and expectations would be that they will continue to do so in the future. To combat the rising costs, producers will need to look at ways to minimize those costs or to maximize the production they are getting for those costs. While there may be ways to cut some expenses such as cutting down fuel expenses by changing the way feeding is done, paying close attention and evaluating

each purchase of equipment or machinery, or changing feed rations fed during the winter months, it will be hard to cut expenses too much as cows still need to have their nutritional requirements met to be able to produce and raise their calves. Producers may be better off to look at strategies that will increase their production at their current cost levels, such as cross fencing pasture to increase their stocking capacities, purchasing alternative feeds with the same feed values at a lower price than what they have traditionally fed, and purchasing genetics that will add pounds to their calf crop. Furthermore all producers should be encouraged to keep track of each cow's production and develop a culling and replacement program to eliminate the poor producers from the herd.