

PRODUCTION AND ECONOMIC FACTORS ASSOCIATED WITH BEEF COW-CALF PRODUCTION IN EAST-CENTRAL NORTH DAKOTA

Steve Metzger

As economic demands on the beef cow-calf producer continue to increase there is a very real need for producers to more fully understand their own costs of production and the potential for increasing their profit margins. Producers who know and understand all their costs will be in a better position to benefit from all phases of the beef cattle cycle. Producers need to understand how their costs and their production numbers fit into the broader picture and how they as producers fit into the competitive beef cow-calf business.

Data for this study was compiled through the Carrington Area Farm Business Management Program in conjunction with the North Dakota Farm Business Management Education Program. The Carrington Area program is one of six programs operating in what is known as Region III (South Central area) of the North Dakota program. The data for the study was collected and summarized through the Carrington Area program from 1992-2001.

Data was collected on an average of 2,419 cows per year with the average herd containing 100.1 cows. The data collection cycle followed the calendar year and did not include the costs or returns of raising replacement heifers or backgrounding weaned calves. The average weaning weight was 545 pounds per calf with an average of 515 pounds weaned per cow and an average of 497 pounds weaned per exposed female. Calving and weaning percentages were recorded at 96.5 percent and 91.4 percent respectively. The average value of the production was \$411.70 per cow.

With direct expenses of \$271.33 and overhead expenses of \$57.43 a total per cow average of \$328.75 was achieved, while a net inventory change of \$41.22 per cow was also recorded. This inventory change is the loss in real dollars of breeding stock value from the time of purchase or transfer into the herd until the time of culling, death loss or other transfer out of the herd. It is not affected by increases or decreases in the value of the breeding stock while they are a part of the enterprise. Total expenses including inventory change averaged \$369.97 per cow. The single largest average expense was feed which averaged \$200.45 per cow and included all forages, concentrates, range costs and supplements.

The cost of production per hundred-weight (cwt.) was \$64.16 with all direct and overhead costs included. When the cost of inventory change was also included, the total cost of production rose to \$72.16 per cwt. The average net return after all costs including inventory change was \$41.73 per cow or \$8.10 per cwt. of production. These calculations do not include an allowance for operator labor and management. This assessment would have to be taken from the net profits received. Although interest costs are included in the direct and overhead expenses, no allowance is made for principal payments that may have been due on debts associated with the purchase of breeding stock or other required capital assets. Principal payments would also have to be generated through the net profits of the cowherd.

For beef cow-calf operators to have the greatest opportunity to enhance their profitability they will need to know their own costs of production and their actual net returns after all expenses and inventory changes. Suggested goals for producers are to wean a minimum of 500 to 550 pounds per exposed female, to contain direct and overhead costs at \$330.00 or less per cow, to maintain an average feed cost of \$200.00 per cow, to maintain inventory change at \$40.00 or less per cow, and to achieve minimum calving and weaning percentages of 96 percent and 92 percent respectively. Producers may need to adjust their goals for feed costs and pounds weaned for those herds with cow weights in the higher weight ranges. Attaining measurable goals that reflect planned profitability will provide cow-calf operators with the best opportunities for success in the cow-calf industry.