

ECONOMICS OF OWNING VS. SHARE-LEASING OF BEEF COWS IN EAST-CENTRAL NORTH DAKOTA

Steve Metzger

As economic demands cause beef cow-calf producers to expand their herds there is continued interest in the economic feasibility of leasing beef cows on a share arrangement. Beef producers today are seeking ways to increase their economic returns while holding down the total dollars of investment required in capital items, including breeding stock. In order for beef producers to really understand the potential profitability of any possible share-lease arrangement they must know their actual costs of production and be able to compare those numbers to the estimated numbers from a possible share-lease arrangement.

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 program is one of 13 programs in the state. The data for the study was confined to that collected from members of the Carrington Area program during the 1999-2002 time period.

The number of beef cow-calf producers involved in any one year varied from a low of 19 to a high of 27. The four-year total of owned beef cows involved was 11,352 head while the number of share-lease cows totaled 1,188 head, as measured on a 12 month basis. The average owned herd consisted of 124.7 cows while the share-lease herds averaged one-half that number at 62.5 head. In all instances where there was a share-lease herd on the farm or ranch, there was also an owned herd maintained under the same production practices. In addition to the 19 share-lease herds there were a total of 91 owned herds in the four year study.

The share arrangements found within the share-lease herds varied from 70-30 to 50-50 for the operator and breeding stock owner, respectively. The simplest arrangement was a 70-30 split with the operator furnishing all the feeds and pasture while the breeding stock owner supplied the cows, replacements and bulls. Other arrangements varied the split of the weaned calves depending upon the contribution of the breeding stock owner towards such items as feeds, pasture and other expenses.

The cows in the owned herds weaned calves that averaged 548 pounds or 50 pounds more than those in the share-lease herds. The key measurement of pounds weaned per exposed female also favored the owned herds with a weight of 495 pounds or 48 pounds greater than the 447 pound average of the share-lease herds. Calving, weaning and death loss percentages were very similar for the two types of herds but the share-lease herds did have a 5.5% greater culling rate, averaging 19.8% versus 14.3% for the owned herds.

The total value of calves produced per cow favored the owned herds by \$18.54 with a total of \$456.15 per cow. The change in value produced is not proportional to the pounds produced per cow because the lighter weight calves do usually carry a higher value per pound. Additional income from such items as insurance and the livestock disaster program provided the owned and share-lease herds an annual average of \$5.73 and \$5.32 per head, respectively.

The average net inventory change, or drop in herd value per cow in the owned herds, due to such things as culling and non-reimbursed death loss was measured to be an average of \$35.71 per cow. This is a key item for operators to know and understand when determining their true cost of production. For the owned herds which averaged 509 pounds of production per cow for the 12-month period, this amounted to an annual cost of \$7.02 per hundred-weight (cwt.) of production. The average net income of the owned

herds was calculated to be \$90.64 per cow and the four-year cost of production including the charge for net inventory change averaged \$72.94 per cwt. produced. In both the owned and share-lease costs, no charge is included for the operator's labor and management.

The share-lease herds produced 462 pounds per cow and a total value of \$442.93 including other income of \$5.32. Total operator expenses including the average share lease payment of \$173.36 totaled \$431.47 per cow. The average breeding stock owner received a higher share of the income because the average share-lease arrangement had the breeding stock owner furnishing a share of the feed or pasture amounting to \$58.22 per cow. The operator's share of the average net income was \$11.46 per cow. With the share-lease payment included, the cost of production was \$93.39 per cwt. This equated to a 61%-39% share-lease.

A key element to consider in a share-lease arrangement is that the income should be shared in the same proportion as the expenses, including the cost of net inventory change. If an operator calculates his annual costs, without net-inventory change, to be \$280.00 per cow and the breeding stock owner calculates his annual costs including net inventory change and interest or opportunity cost, to be \$120.00 per cow this would then represent a 70%-30% share lease arrangement. If production averaged 525 pounds per cow this would represent an annual cost of production of \$76.19 per cwt. to proportionally divide the total costs of \$400.00 per cow. The operator needs to compare this cost of production to the current and projected future marketing prices.

A beef cow-calf operator would have to carefully consider the current price structure and the current position of the beef cattle cycle when entering into any share-lease arrangement. While it is vital to know the true cost of production an operator might also consider a share-lease arrangement as a method of marketing excess feed and range. This strategy might be considered if no market exists at a price comparable to the prices used in calculating the cost of production in a potential share-lease arrangement. As protection for both the operator and the breeding stock owner, all details of the arrangement should be in writing and this document signed by both parties. The producer is challenged to know his costs of production and to then relate that information to the potential outcome and profitability of any particular share-lease arrangement.