

# INFO SHEET

## Veterinary Services

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Animal and  
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## Management Practices Associated with Profitable Cow-Calf Herds

An historical approach to improving farm income is to adopt production practices used by profitable farmers. What are some production practices used by profitable cow-calf producers?

To answer this question, the USDA's National Animal Health Monitoring System (NAHMS) examined management practices of 35 producers who participated in the NAHMS 1993 Cow/Calf Health and Productivity Audit (CHAPA) and who also completed a Standardized Performance Analysis (SPA). SPA is a standardized method for analyzing the production, financial, and economic performance of cow-calf operations sponsored by the National Cattlemen's Beef Association and the USDA's Cooperative State Research Education and Extension Service (CSREES).

The 35 producers were divided into two groups, those with positive economic returns (13) and those with negative economic returns (22). Economic returns are described below:

- + Calf sales
- + Cull cow/bull sales
- Operating expenses (including unpaid family labor, excluding mortgage payments and property taxes)
- +/- Inventory value adjustment

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- Capital replacement
  
- = Economic returns

Capital replacement is a charge for all capital (land, facilities, and breeding stock), owned or borrowed, used in the production of beef. Capital replacement has two parts: non-real estate costs and real estate costs. Non-real estate costs equal depreciation plus interest paid on non-real estate debt, plus an opportunity interest charge on the equity in the non-real estate assets. Real estate capital cost is its cash lease value. Using capital replacement provides for a fair comparison across operations so that operations with mortgages are not placed at a disadvantage with those operations which own land debt free. Operations with negative economic returns were not necessarily consuming equity, but did not receive market returns on their capital and labor.

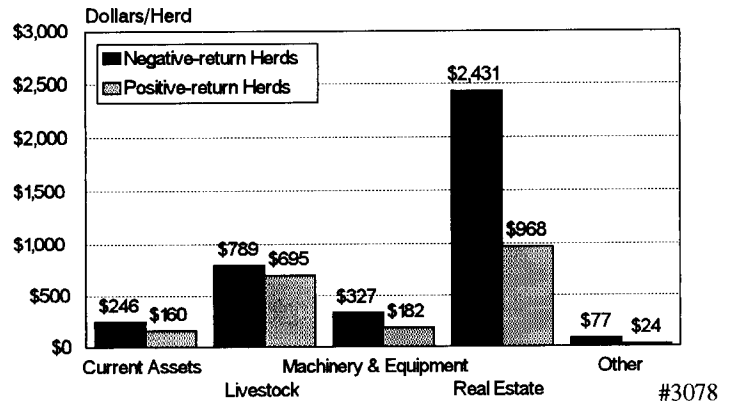
Operations with positive returns showed a general trend toward optimum production rather than maximum production. For example, these operations weaned slightly fewer pounds per exposed cow than negative-return operations (422 lbs. vs. 428 lbs.). This implies that the negative-return producers were spending more to obtain a few extra pounds than what those pounds were worth in the market place.

With no advantage in productivity, positive-return operations achieved their high returns through increased efficiency, cost containment, and receiving better market prices. An example of better efficiency is average age of first calving for replacement heifers. Three-quarters of the positive-return operations had their replacement heifers calving at 24 months compared to one-half of the negative-return operations.

Positive-return producers paid more attention to price when buying or selling their animals.

Figure 1

### Investment per Beef Cow - Market Value, 1992



Positive-return producers were more likely to use price as the most important factor for determining when to sell their calves than negative-return operators (31 percent vs. 5 percent). And as a result, positive-return operators received slightly higher average prices for their calves (\$87.97/cwt vs. \$86.90/cwt). As a selection criteria for bulls, price was more important to positive-return operators than to negative-return operators. Being more price conscious did not mean they sought the lowest-price bull, rather they may have been after the most cost-effective bull.

Positive-return producers kept costs down by not feeding expensive feeds. Fewer fed corn silage (8 percent vs. 18 percent), grain (8 percent vs. 27 percent), or creep feed (15 percent vs. 29 percent) than negative-return operators.

The biggest cost savings came from the amount of capital invested per cow. The investment value for negative-return operations was \$1841 more per cow (\$3,870 vs. \$2,029) than for positive return operations. This additional investment at a relatively low capital charge of 6 percent would result in an extra cost of weaned calves of almost \$26.00/cwt. Eighty percent of the difference in investment was attributable to real estate value (Figure 1). Given the market value of their land and buildings, negative-return producers were not producing enough beef per acre to make the land pay for itself.

In terms of debt per cow, negative-return producers owed \$530, \$255 more than positive-return producers. At 10 percent interest, this debt differential would have resulted in \$6.42/cwt less revenue in the pockets of negative-return producers.

To help keep track of their operations, positive-return operators were twice as likely to use some type of computerized record keeping system as negative-return operators. Other management factors associated with positive-return operations were the use of special pastures for calving (46 percent vs. 27 percent) and use of three or more breeds (62 percent vs. 27 percent).

Management factors where there were little or no differences between the two operation groups included the number of times cows and heifers were observed during a 24-hour period of the calving season: three times per day for heifers and twice per day for cows. The number of hours in labor before giving assistance was similar among the two operation groups: 2.8 hours for heifers and 2.5 hours for cows. There was little difference in the percentage of operations deworming or treating for grubs, ticks, lice, or flies.

Producers with a positive net return were more likely to seek a veterinarian's advice in deciding when to deworm cattle.

The number of breeding cows per operation was similar, 167 for the positive-net return herds and 162 for the negative-net return herds. This fact suggests that size in and of itself is not the major factor in determining profitability. Rather the ability to manage the size herd one currently has will determine economic success. For this study the most important management factor was keeping costs under control, especially investment per cow.

For more information on the NAHMS Beef Cow/Calf Health and Productivity Audit, contact:

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