

Herd Bull Investment – Annual Bull and Per Cow Cost Calculation

Purchasing herd bulls is an investment that is expected to pay out over a 3 to 5 years. The ownership costs (depreciation, death loss and interest cost) are as an annual cost spread over females serviced and calves produced during the bull's productive life. Depreciation is the purchased cost minus salvage value. Salvage value or cull bull net sales value is a substantial portion of bull initial purchase cost reducing bull depreciation.

The investment in a higher priced bull that can contribute to improved production of more market acceptable calves and better weaning weight for the cow-calf producer is **not that costly** when numbers are put into perspective for calves sired and as a percent of the breeding cows total annual cost. The bull is an investment with a long-term pay out rather cash expenditures like for feed used in the year purchased. The number of calves required to pay for the bull is a good indicator to monitor the investment.

This decision aid helps put the “bull investment” into proper cost perspectives. Annual cost is calculated in terms of the number of cows serviced and what change would be required in weaning weight to pay for the higher priced bull. Calculated cost per calf and per cwt. of calf weaned per cow exposed are good indicators to compare bull investments. This provides information on what the market would have to pay to justify paying more for a herd bull that could produce a more market acceptable higher valued calf. The impact on the saved replacement heifers and bull selection is not addressed in this decision aid that focuses on weaning weight and percent weaned.

Input Data

The key data for this decision aid is the bull investment or purchase cost, estimated salvage value, and economic life. When combined with an interest cost on capital these are the “ownership costs” of the bull investment. Once the bull is purchased these are fixed costs and only vary with the salvage value of the bull and, of course, the productive life. Annual costs include the grazing, feed, and veterinarian cost including the annual breeding soundness exam.

To calculate cost per cow the number of cows serviced per year needs to be input. In order to evaluate the impact of number of cows and production cost per cow, a sensitivity table is included. Cost level is quite sensitive to the number of cows serviced and reinforces the importance of the breeding soundness exam, good bull nutrition, and management. To calculate change in weaned calf weight needed to pay for added costs, the weaned calf crop and weaning weight must be input. Weaned calf weight per female exposed is calculated. The final data item is the projected average market price of the weaned calves.

The usefulness of this tool is in its capability to quickly evaluate different variables. Change the values in the **blue cells**.

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