

Herd Bull Investment – Annual Bull Cost Analysis

The purpose of this decision aid is to calculate the owner cost of purchased herd bulls and calculate the economics of leasing bulls. The third analysis evaluates the economics of owning versus leasing bulls when a premium could be paid for the leaser calves in a buy back program. This would be a supply chain where the supplier of the bulls would provide the bulls and buy back the calves sired by the bulls.

This decision aid is to help producers put the “bull investment” into proper cost and production 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. Also calculated is the cost per calf and per cwt. of calf weaned per cow exposed. This provides incite into what the market would have to pay to justify paying more for a herd bull that could produce a more market acceptable calf.

Purchasing herd bulls is an investment that is expected to pay out over a 3 to 5 year productive life. The ownership costs (depreciation, death loss and interest cost) should be expressed 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 when the bull is culled is a substantial porting of bull purchase cost it reduces the bull depreciation cost.

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. The bull is an investment with a long-term pay out rather than just a cash capital expenditure.

The impact on the replacement heifers and bull selection uncertainty is not addressed in this decision aid. A higher priced bull does not insure the pricing is a correct predictor of genetic performance. Selection involves more than bull price.

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 operating costs include the grazing, feed, and health costs including the annual breeding soundness exam (BSE).

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 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.

To quickly evaluate different variables change the values in the [blue cells](#).