

Herd Bull Investment – Annual Owned or Lease Cost Calculations

The purpose of this decision aid is to calculate the owner cost of purchased herd bulls versus leasing herd bulls. The leasing alternative is available in many production areas and fits well for small producers, less than 100 cows, that have a controlled breeding season of less than 90 days. Bull annual care and maintenance cost are reduced to months used and the lessor covers the fertility exam and vaccination cost. Leased bulls work well to bring superior genetics to a terminal cross program. Capital investment in herd bulls is reduced when leasing 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 insight 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 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 portion of bull purchase cost that does reduces the bull annual 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 raised replacement heifers and bull selection uncertainty is not addressed in this decision aid. A higher priced bull is not a sure predictor of genetic performance. Selection involves more than bull price. Doing a “what if analysis” helps keep price in proper perspective.

Bull Lease Provisions

It is essential to have a written lease with provisions that address including items such as: contract cost and duration of the lease, genetics of the bull provided and terms of delivery and pick up of bulls. Premature loss of service due to injury, infertility or death needs to be terms spelled out. Health and fertility issues must be addressed. Provisions for testing and controlling Trichomoniasis and Vibriosis are examples of health provisions to address.

It is best to review published web-based information and form a communication link with lease bull providers before choosing a provider and terms of the contract. Most bull lessors have provisions well spelled out in the lease terms and will provide an on-site review of bulls and their genetics data for review before any agreement is negotiated.

Selection criteria for leased bulls should be similar to purchasing the bulls to meet needs.

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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).

Lease costs are spelled in the lease contract terms. The spreadsheet can be used as a check list. Insurance costs for leased bulls must be included. Vaccinations, disease testing and BSE are covered by the lessor.

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 BSE 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, “what if analysis”, change the values in the [blue cells](#).