This decision aid combines production and financial data to calculate the cost of a bred heifer as well as cost of a bred heifer and first calf pair. This information can be used to evaluate the cost of producing a bred replacement heifer or first calf pair and also the potential of production of replacements for sale. This is a long production cycle that begins when the replacement is weaned and finishes when the heifer is pregnancy tested or in the case of the pair when the calf is born or when the first calf heifers is diagnosed pregnant if sold as a three in one. The two main questions addressed by the decision aid are as follows.

- What is the economics of producing and selling open heifers, bred heifers or pairs?
- What is the cost of loosing a bred first calf heifer?

**Input Data**

The first data input form gathers the production data that describes the dates and timing of the production cycle from the time the heifer is weaned until a pair would be available for sale. Heifer value at weaning is input as the base cost as the production cycle is completed and costs are accumulated. Reproduction and culling data is used calculate cull sales and the number of calves available for sale.

Production and cost data is entered is the in the next sheets for the bred replacement followed by the information for the first calf pair. Actual production and cost data generated from actual records is desired. Estimated value and use of “what if” capabilities in the spreadsheet are helpful even if data is limited. Critical numbers are success in getting heifers bred and calving success.

**Reports**

The final page provides a summary to the production and financial information. One can observe the costs and net income associated with the two options. The sensitivity analysis provides information that shows the cost change as the two main parameters change – heifer cost and production cost.

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