

Over The Wire

A Beef Cattle E-Letter for Area Cattle Producers

Should Replacement Heifers Be Raised or Purchased?

Jim Church

University of Idaho Extension

Struggling With Replacements?

Every cow-calf operation has to have a yearly supply of replacement heifers available to replace cull cows. The recommended replacement rate for budgeting purposes is 20%, with most operations replacing at least 16% of their cows each year. This is a big number. The management of replacement heifers can have a huge impact on the profitability of the operation.

Developing heifers is expensive and ranch managers struggle with keeping the cost of developing heifers down to improve the bottom line, while at the same time growing the heifers properly to insure future productivity.

With this in mind, every cattle manager should ask themselves if it is cheaper to raise your own heifers, or should replacement heifers be purchased?

Factors to Consider:

Dr. Jack C. Whittier, Extension Beef Cattle Specialist from Colorado State University indicated in a paper he wrote on this topic that there are two main factors a producer should consider when trying to decide if the heifers should be raised or purchased. The two factors are:

- Financial
- Convenience

Whittier went on to outline financial variables that were developed by Gayle Willett and Donald Nelson from Washington State University that producers need to consider including:

- Interest rate on savings or alternative uses of capital
- Interest rate on borrowed money
- Cash flow needs
- Labor availability and costs
- Relative price difference between cull cows and heifer calves
- Reproductive rates
- Forced cull rates
- Genetic improvement potential
- Price and availability of replacement heifers
- Tax implications

What are the Costs?

Dr. Whittier provided an example with actual costs in his article. He showed that when considering the value of the heifer calf, interest, cost of feeding and raising the heifer from weaning to pregnancy diagnosis and other non feed costs the total came to \$1557.

Now the question is how much would it cost to purchase a high quality bred replacement? You can see with the example that the breakeven price for a purchased bred replacement heifer is \$1557.

Other Considerations

We all know it costs a lot of money to develop heifers. If a producer chooses to buy bred heifers or cows as replacements there are other factors to consider:

1. Finding a good source of replacement heifers. The heifers need to match your genetic requirements, be adapted to your environment, be located fairly close to your ranch, have a large enough and regular supply and be priced competitively.
2. Genetic makeup and quality must match or exceed the current level of the heifers produced and sold off the ranch. You need to make genetic progress each year with your replacements. Purchased heifers need to be just as good or better than what you are selling.
3. Having a reliable source of replacements each year with no surprises in heifer costs and quality from year to year.
4. Herd health. The heifer supplier has to have a clean herd and a health management plan similar to your current health program.

Does Herd Size Matter?

Bill McKinnon from Virginia Tech indicated in a paper he wrote on this topic that smaller operators with 30 cows or less have a challenge keeping their own replacements.

With the need to only keep 5 head or so of heifers, it is difficult to have the separate pens and pastures that are needed.

McKinnon also pointed out that small herds with only 1 bull, have to select a bull that is a light birth-weight calving ease sire. This tends to reduce weaning weights and yearling weights. Also, smaller herds that retain heifers have to turn their bulls over quicker to avoid father/daughter matings.

Therefore it may be advantageous for small operators to purchase their replacements.



How Many Should Be Kept?

When calf prices are high is when most people want to keep or buy as many heifers as possible. Bankers also are willing to loan money to buy or keep more heifers. However, it has been proven by many economists that this goes against good business practices.

We haven't had a normal cattle cycle in a while due to the nation's cow herd being so small. This is being caused by the extreme drought and high cost of inputs. We are not seeing herd expansion. However, if we ever get to a normal cycle again, it pays to keep more heifers when they are cheap. They will be producing calves when the sale prices are higher. On the flip side, we should sell more heifers when they are expensive. They will be producing marketable calves on a declining market.

The problem with keeping more heifers on a down market is cash flow. There will be less money coming in. Producers wanting to keep more heifers will need to analyze their cash flow and have an understanding banker.

Iowa State University conducted an analysis of when to keep more replacements. In their study, they showed that the highest return over cash costs for retaining heifers was when producers retained the same dollar value of heifers each year. This was compared against keeping the same cash flow in regards to heifers kept and also against keeping the same number of heifers every year. Keeping the same number resulted in the lowest return over cash costs of the three scenarios.

Summary

This short newsletter has just scratched the surface of this topic. Hopefully this information will cause you to carefully analyze your replacement heifer management strategies.

We know that it is expensive to develop heifers and it takes about 40 months from the time the heifer is born until you sell the first calf off of her and you get a return on your investment. That is a long period of time.

Take some time to figure what your development costs are and if you are better off raising your own heifers or if purchasing replacements is a good alternative.

Whatever you decide should be based on overall profitability and genetic and quality advancement of your herd.

Feel free to contact me if you have additional questions on this topic or any other beef cattle related issue.



Photos Courtesy of Wood V- X Ranch Registered Red Angus, Sandpoint, Idaho.

Contact Information: Jim Church, 320 West Main, Grangeville, Idaho 83530; email: jchurch@uidaho.edu; phone: 208-983-2667.

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