

# VETERINARY CALL

by Bob Larson, Kansas State University

## Longevity

*Keeping heifers in the herd for many years is important for herd profitability.*

Beef cattle typically do not have their first calf until they are 2 years old and those calves are not sold until they are at least 6 months old. Consequently, roughly 30 months or more of expense is sunk before income is ever produced. Cows that raise a calf every year for many years are able to spread the initial development cost, or purchase price, over more calves.

Commercial beef cows culled after one or two calves are not likely to have produced enough income through the sale of their calves and their own salvage value to offset costs they incurred up to that time. Herds with fewer 2- and 3-year-old cows and more mature cows compared to herds with poor longevity have a higher percentage of the herd peak-production ages and lower total costs per pound of calf weaned.

### Early conception is key

The most common reason a cow leaves a herd is because she is not pregnant. Replacement heifers conceiving early in the breeding season are more likely to have good longevity than heifers that take a few more weeks. A report using longevity data from herds in the South Dakota Integrated Research Management groups and from the herd at the U.S. Meat Animal Research Center indicated that, on average, heifers

calving in the first 21 days of their first calving season remained in the herd longer than heifers that calved later. In addition, heifers that calved early tended to continue to do so throughout their life and to wean a heavier calf through their first six calves compared to heifers that calved later in their first calving season. A successful foundation for herd longevity begins with early conception rates in first-calf heifers.

### Conception rate

All beef cows go through a period of infertility following calving that lasts an average of 50-70 days for mature cows (longer for heifers after their first calf) assuming they calve in good body condition and have access to a sufficient diet to maintain or gain weight.

If cows are thin at calving or if they lose body condition after calving, they will require more days to resume fertile cycles and may fail to become pregnant in the following breeding season. In addition, bulls that fail to successfully breed fertile cows or pregnant cows that lose their pregnancy due to an abortion-causing disease will obviously contribute to poor pregnancy success and reduced longevity.

Improving herd longevity starts with selecting heifers that become pregnant in the first 21-30 days of



the breeding season and continues by focusing on managing cow body condition leading up to calving and through the breeding season.

Good herd fertility and longevity must be protected by working to ensure good bull fertility and by protecting the herd from abortion-causing diseases. **A**

*Editor's note: Robert L. Larson is a professor of production medicine and executive director of Veterinary Medicine Continuing Education at Kansas State University in Manhattan, Kan.*