



# Ridin' Herd

► by **Rick Rasby**, *Extension beef specialist, University of Nebraska*

## Did your nutrition program 'get 'er done?'

*For spring-calving herds, calving season is starting to wind down. The greatest loss of potential calves to wean is due to cows not getting pregnant during the breeding season. Cows not getting pregnant during the breeding season, for spring-calving herds, is usually a result of cows being in poor body condition as a result of the nutrient management program.*

### A red flag

There can be some losses due to abortion, but these losses are few, especially if you have worked with your veterinarian on a herd health and biosecurity program. Once baby calves are on the ground and have nursed their dam in a timely manner so that they get colostrum, calf losses between calving and weaning are minimal.

If calf losses are high in your herd due to abortion and from calving to weaning, consult your veterinarian. Calf losses at calving can be high in the Plains States for spring-calving herds due to weather, extremely cold conditions and snowstorms accompanied by high wind and not enough protection. If percentage of calves weaned per female exposed is in the 80s, in most situations it is related to nutrition, and it should raise a red flag.

### Analyzing your herd

Some specialists might raise the red flag if percent weaned per cow exposed is below 90. There are producers who are profitable when percent of calves weaned per cows exposed is less than 90%. If your herd falls below 90% and your cost of production allows you to have a profitable cow-calf enterprise, then the red flag is not warranted. The key is to have a good handle on cow costs.

There are Standardized Performance Analysis (SPA) guidelines that outline how to calculate production measures for the cow herd. These guidelines bring standardization to performance calculations so that when comparisons are made, they are made using the same calculations. The SPA performance guidelines also guide you through how you handle pregnant cows that are purchased or sold and other situations that may arise in regard to pregnant and nonpregnant females. SPA guidelines can be found on the National Cattlemen's Beef Association (NCBA) web site.

There is an abbreviated way to dissect

your cow herd by stage of production. Percentage calves weaned of females is the number of calves weaned based on the females that were exposed to the bulls to produce the calves that are being weaned. Mathematically, it is the number of calves weaned (numerator) divided by the number of females exposed to produce that calf crop (denominator) and this number times 100 to get it to a percentage [(No. calves weaned ÷ cows exposed) × 100]. The challenge sometimes is that the numbers needed to do the calculation are collected more than a year apart. For females that wean a calf in October 2010, the number of females exposed would be the number of females exposed to a bull during the breeding season in 2009.

We can also use this process to dissect percent weaned of exposed into a different phase of the production cycle to get at pregnancy percent, calving percent and weaning percent. Let's define percent pregnant as the number of pregnant females divided by the number of females exposed to the bulls, calving percent as the number of females that calve divided by the number of pregnant females, and weaning percentage as the number of calves weaned divided by the number of live calves born and nursed their dam. Percent pregnant would give an indicator of the number of nonpregnant females; calving percent would give an indicator of abortions and calves lost at calving due to dystocia; and weaning percent would give an indicator of calf losses from calving to weaning.

It took a lot of words to get to this point, but I wanted to make sure we were all on the same page. I worked with a producer who had 85% calves weaned of females exposed. This concerned the producer, who wanted to investigate this further. The next question the producer asked was, "When did I lose most of the potential calves to wean? Was it due to cows not getting pregnant, was it due

to abortion or dystocia, or was it due to calf losses from calving to weaning?"

Out of a 300-head cow herd, 255 cows weaned a calf. Records indicate 37 cows had no calving records, 6 calves were lost at calving, and 2 calves were lost between calving and weaning. We assumed the 37 head were nonpregnant because there was no record that they aborted. Pregnancy percentage is 87.7%:  $[(300 - 37) \div 300] \times 100 = (263 \div 300) \times 100$ . Calving percentage is 97.7%:  $[(263 - 6) \div 263] \times 100 = (257 \div 263) \times 100$ . And weaning percent is 99.2%:  $[(257 - 2) \div 257 \times 100 = (255 \div 257) \times 100$ . If you multiply pregnancy percent × calving percent × weaning percent the figure should be close to 85% ( $0.877 \times 0.977 \times 0.992 = 0.8499$ ).

After further looking at the records, of the 37 nonpregnant females, 18 were 3-year-olds, 14 were 4-year-olds to 10-year-olds, and six were 10 years old and older. Almost half of the nonpregnant females were young females that did not get pregnant for their second calf. A high number of nonpregnant young females is most likely due to nutrition after calving.

Many times we do a good job of meeting the protein needs of young females after calving, but many times we fall short of meeting the energy (TDN) needs of the young female after calving. The producer indicated that the last couple of years, due to less labor and pasture restriction, after calving all cows were managed as a group. First-calvers after calving need a diet that is 61%-62% TDN, and diets that consist of hay and alfalfa will not get the diet to 61%-62% TDN.

### Final thoughts

Take time to analyze your records and determine how the herd is performing. Percent calves weaned of cows exposed is critical as it affects total pounds of calf sold. The greatest loss of potential calves to wean is due to cows not getting pregnant during the breeding season. More times than not, it's due to cow body condition at calving. Cow body condition is a good indicator of your nutrition program. Young cows are less elastic compared to mature cows and will be the group that needs close monitoring as to how the nutrition program is managed.

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**Editor's Note:** "Ridin' Herd" is a monthly column written by Rick Rasby, professor of animal science at the University of Nebraska. The column focuses on beef nutrition and its effects on performance and profitability.