

The 21st century has started with good calving percentages

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Calving percentage is a key reproductive trait in the cattle business. The pathway to a successful calving season is not simple. The process starts with a fertile bull and cow. The bull may arrive with all four feet ready for pasture turnout or as frozen semen ready for insemination artificially. Either way, a sperm cell must meet up with a viable egg released from the ovary of the cow at precisely the right time.

Since the evolution of the cow, the process has not changed to any extent, and since the advent of new technology, the process still has not changed notably. It is up to cattle producers to make sure management practices accommodate a successful breeding season.

At the Dickinson Research Extension Center, the bulls have all been pulled. Pulling the bulls means they have been returned to the bull pasture, given adequate space to acclimate to each other and attention given to the slow process of reapplying the weight lost during a busy breeding season. Late summer and fall is a much better time to put weight on the bulls, rather than waiting for the arrival of winter.

Physically fit bulls, well-fed and maintained, are much better semen reservoirs than thin, undernourished bulls. That's also true for the cows. Early weaning of younger or poorly conditioned cows will allow those cows more time to rebuild body reserves. A good body reserve leads to a healthy, worry-free pregnancy and a successful calving. The cycle begins again next spring with the production of a fertile egg in a suitable home, commonly called the uterus or womb.

Reproduction in cattle is never a point in time. The processes that influence reproduction often are subtle, overlapping and like passing a torch from one event to the next, such as a daily relay. Leaving out one event or dropping the torch may result in chaos. The bottom line in successful reproduction is often difficult to measure, except for evaluating composite traits that combine many of the pieces all leading up to a live calf.

Those producers who utilize the CHAPS program (Cow Herd Appraisal Performance Software) through the North Dakota Beef Cattle Improvement Association have several composite traits to evaluate the genetic and managerial processes at the ranch. Simple traits include pregnancy or calving percentage.

Calving percentage is the pregnancy percentage minus any embryonic or fetal death loss. The benchmark for these herds is 93.4 percent for pregnancy and 92.8 percent for calving. The benchmark is the average of all the herds across the last five years.

The trend during the last five years for pregnancy percentage was 94.2 percent in 2000, 93.1 percent in 2001, 94 percent in 2002, 92.7 percent in 2003 and 93.1 percent in 2004. The trend is quite stable, with no real gains or losses. The same is true for the calving percentage, 93.6 percent in 2000, 92.4 percent in 2001, 93.4 percent in 2002, 92 percent in 2003 and 92.5 percent in 2004. The average pregnancy loss percentage, or the CHAPS benchmark, for the last five years for pregnancy loss is 0.70 percent.

Another number that is often quoted for a reproduction rate is the percent of open cows. This number is the reverse of the percent pregnant. The percentage of open cows is 6.6 percent. The main point is that the components of reproduction are very hard to pull out and fix. The net result, however, is that the sum of the pieces does produce a calf, at least for our CHAPS producers, 93.4 percent of the time.

May you find all your NAIS-approved ear tags.

Your comments are always welcome at www.BeefTalk.com. For more information, contact the North Dakota Beef Cattle Improvement Association, 1133 State Avenue, Dickinson, ND 58601 or go to www.CHAPS2000.com on the Internet. In correspondence about this column, refer to BT0263.

CHAPS Program: Pregnancy and Calving Percentage

	2000	2001	2002	2003	2004
Pregnancy	94.2 %	93.1 %	94.0 %	92.7 %	93.1 %
Calving	93.6 %	92.4 %	93.4 %	92.0 %	92.5 %