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Calving Distribution is an Excellent Trait to Evaluate Reproduction

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Cow-herd reproduction is a very talked-about number. As has been noted for years, if not decades, success in the cow-calf business is directly related to a producer's ability to get the cows pregnant.

The standard numbers generally referred to are relatively easy to calculate. These numbers are common numbers printed by cattle performance programs or simply calculated by hand. The North Dakota Beef Cattle Improvement Association annually publishes numbers that serve as benchmarks for those who utilize the CHAPS program (Cow Herd Appraisal Performance Software).

Important numbers in reproduction are percentage of cows pregnant and percentage of cows that have calves. The current CHAPS benchmarks are 93.4 percent and 92.8 percent, respectively. This means that of all the cows exposed to the bull, about 7 percent never calve.

In terms of overall evaluation of the cowherd, these numbers are good comparative numbers to see how one herd ranks over another. Most herds cull the open cows, make managerial adjustments and anticipate a better calf crop the next year. Such managerial efforts help keep some positive reproductive pressure on the herd.

Reproduction is a trait that is considered by many to be lowly heritable (in other words, genetic selection has less impact than environmental effects or general management). Statistics show reproduction is fairly stable in most herds, pending any detrimental health effects.

Another method of evaluating reproduction is to develop a calving distribution table. At first glance, calving distribution may seem harder to calculate, but the neat feature of these numbers is a producer doesn't need to know the number of cows exposed. Producers simply are dealing with the number of cows calving and recorded in the calving book.

A calving distribution table allows a producer to follow how cows are calving within the calving season, as well as the percentage that are calving within 21 days, 42 days, 63 days or later. These percentages again can be compared with the benchmarks for overall herd evaluation or utilized to follow how individual cows calve within the herd.

The CHAPS benchmark for the percentage of cows calving within the first 21 days of the calving season is 62.4 percent. (The calving season is said to start when the third mature cow calves or is calculated based on a known bull turnout date utilizing 283 days as the average gestation length.) The percentage of cows calving within the first 42 days of the calving season is 86.4 percent and within the first 63 days of the calving season is 94.6 percent.

If a producer doesn't have the CHAPS program, the calculations are easy to figure directly from the calving book. Simply count the total number of mature cows that calved and note that number on a separate sheet of paper.

The next step is to go down the calving book and highlight or circle the third mature cow that calved. Disregard the first calving heifers. Next, simply count down 21 days from when the third mature cow calved and draw a line. Repeat this process at 42 days and 63 days.

By counting the number of cows within each segment of the calving book and dividing by the total number of mature cows in the calving book, the percentage of cows calving at 21, 42 and 63 days is calculated. The first calf heifers are not included in these calculations because oftentimes the bull turnout dates or artificial insemination days are quite different from those of the mature cows.

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 BT0264.

CHAPS Producer Calving Season

Calving first 21 days	62.4 %
Calving first 42 days	86.4 %
Calving first 63 days	94.6 %