

VETERINARY CALL

by Bob Larson, Kansas State University

Good From the Start

Selecting heifers that are likely to become ideal cows.

Selecting replacement heifers that are likely to develop into cows that become pregnant early in each breeding season and wean a healthy calf is an important management decision. The best heifers are those that reach puberty before the start of their first breeding season, are fertile, can become pregnant early in the breeding season, are resistant to abortion-causing diseases, can give birth with little difficulty and can care for the calf without assistance.

There are several characteristics determined at weaning that can be used to differentiate between heifers that are either likely or unlikely to grow into a great cow. First, heifers born early in the calving season will be old enough to reach puberty prior to their first breeding season. They are also the daughters of cows that became pregnant early in the previous breeding season, therefore, I place a lot of value on heifers born in the first 30 days of calving. I also look closely at the dams of potential replacement heifers and exclude daughters from cows that I don't want to replicate due to being difficult to handle; requiring more supplemental feed to maintain body condition than other cows in the herd; and having feet, leg, or udder problems that could have a genetic component.

The sires' expected progeny

differences (EPDs) of potential replacement heifers should also be evaluated. Emphasis should be placed on characteristics such as adequate maternal calving ease (CEM), heifer pregnancy (HP) and cow energy value (\$EN).

Examination of yearling heifers before breeding can provide information about the current pubertal status of both individuals and the group, and allows better predictions regarding success of the upcoming breeding season. Data used in the evaluation of breeding soundness of replacement heifers include body weight, days of age, reproductive tract maturity and potentially pelvic area. The optimum timing of a reproductive soundness examination relative to the start of breeding will depend on the nutrition, breeding and marketing plans for specific herds.

Because heifers are more susceptible to some abortion-causing diseases than older cows, it is particularly important replacement heifers are well-vaccinated. You should work closely with your veterinarian to plan the most effective vaccination strategy for replacement heifers to control the risk of pregnancy loss in your herd.

The final test of whether a potential replacement should be selected to enter the herd is if the



heifer becomes pregnant early in the breeding season. Some producers only retain heifers that become pregnant in the first 21 to 30 days of breeding. By doing so, they are placing strong selection pressure on traits such as age at puberty and fertility, which positively affects not only that replacement, but any future daughters from that heifer.

Fertile cows that consistently raise calves that produce a desirable carcass are the foundation for beef herds. Selection, nutrition, health management and good animal husbandry are all needed to create a herd full of ideal cows. **AJ**

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