

# VETERINARY CALL

by Bob Larson, Kansas State University

## Breeding Soundness Examination of Bulls

*Choices involving the selection and management of bulls are some of the most important decisions that beef producers make each year.*

According to a USDA survey, the two most common reasons that bulls are culled from commercial herds are because of infertility and physical unsoundness or injury. In order to address these risks, bulls should be thoroughly evaluated before each breeding season so that only bulls that are likely to be able to get a high percentage of exposed cows pregnant in a short period of time are turned out into the breeding pasture.

The need for a thorough breeding soundness examination (sometimes referred to as a BSE) is based on the fact that many prospective breeding bulls are infertile, subfertile or unable to mount and breed successfully. Examination prior to the breeding season reduces the risk of breeding failure due to bull problems.

The overall effect of breeding soundness examinations is to eliminate many subfertile bulls and to improve the genetic base for fertility within the herd and breed. Although individual situations vary, national reports indicate that 10% to 20% of bulls will fail a thorough examination (and another 10% that pass an examination will perform poorly in the breeding pasture).

Thorough breeding soundness examinations prior to the start of the breeding season and frequent

monitoring of health, soundness of feet and legs, and continued desire and ability of bulls to mate throughout the breeding season are critically important in order to ensure high reproductive success.

### The exam

Typically, young bulls between 1 and 2 years of age are purchased after they have passed a breeding soundness examination that includes a systematic examination of their feet, legs, penis and prepuce, testicles, and other reproductive organs, measurement of scrotal circumference, and microscopic examination of a semen sample. Some young bulls, either because of their age, their nutritional management or their individual genetic differences, are unlikely to achieve desired mating efficiency.

The breeding soundness examination is designed to identify those individuals that have not reached sufficient sexual maturity to successfully breed a reasonable number of females.

Mature bulls that were successful breeders the previous breeding season may experience decreased fertility that can be identified by a breeding soundness examination. Injuries, illness and age-related

changes can affect the testicles, feet and legs, or reproductive tract of previously fertile bulls making them unlikely to successfully breed the number of cows needed to result in high reproductive efficiency.

A skilled veterinarian doing a thorough breeding soundness examination is able to identify bulls prior to the start of breeding that are not likely to be successful breeders. However injuries, diseases, and other problems can occur during the breeding season to cause lower fertility in previously reproductively sound bulls.

Producers should closely and frequently observe bulls during the breeding season. Every day, or nearly every day, producers should get bulls up and watch them walk and observe their underlines in order to identify lameness or injury that will prevent successful mating. When a bull does become incapable of breeding because of an injury to his reproductive tract, he needs to be removed from the breeding pasture and replaced by another bull. **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 in Manhattan, Kan.*