



Bull Breeding Soundness Evaluation



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A bull breeding soundness evaluation is a uniform method of assessing a bull's likelihood of accomplishing pregnancy in an appropriate number of open, healthy, cycling cows or heifers in a defined breeding season.

Bulls can be classified as satisfactory or unsatisfactory potential breeders. A classification of unsatisfactory does not mean a bull is completely sterile but that it can be considered sub-fertile. A sub-fertile bull eventually may get cows pregnant, but he will take longer than a fertile bull to settle a group of cows. The result is that sub-fertile bulls produce fewer calves as well as calves that are born late in the calving season, which are therefore younger and lighter at weaning. The net effect is fewer pounds of beef per exposed cow.

Performing breeding soundness evaluations on herd bulls is a sound investment for beef cow-calf operations. It has been shown that for every dollar spent on the BSE the producer will receive approximately \$7.00 return on their investment.

The BSE includes these four components:

1. Physical exam

Evaluates the physical characteristics of a bull necessary for mobility and athleticism in the pasture, structural soundness, overall internal and external reproductive tract development, etc.

2. Scrotal circumference

Evaluates testicular size and health, as well as estimating the bull's sperm-producing capacity. Bulls must meet minimum scrotal circumference measurements based on age in order to pass a breeding soundness evaluation.

3. Sperm motility

Ensures the bull is producing sufficient numbers of live sperm. Bulls must have at least 30 percent motility to pass a breeding soundness evaluation.

4. Sperm morphology

Ensures the bull is producing sperm that are properly shaped and capable of fertilization. Bulls must produce at least 70 percent normal sperm to pass a breeding soundness evaluation.

The recommended minimum requirements for scrotal circumference, sperm motility and sperm morphology are outlined by the Society for Theriogenology. Additional factors influencing the number of cows a bull can breed in a season include pasture size and terrain, physical soundness, age of the bull, libido, number of bulls in the group and so forth.

Based on the results of the breeding soundness evaluation, a bull is assigned to one of three classifications:

1. Satisfactory potential breeder (fertile)

This classification indicates the bull:

- Passed a physical exam.
- Met the minimum requirements for scrotal circumference.
- Has at least 30 percent sperm motility.
- Produces at least 70 percent normal sperm.

2. Unsatisfactory potential breeder (sub-fertile or sterile)

- The bull did not pass at least one of the four components of the breeding soundness evaluation.
- The detected abnormality is one that is not likely to improve with time or veterinary intervention.

3. Deferred

- The bull did not pass at least one of the four components of the breeding soundness evaluation because of a condition that may resolve itself over time or with veterinary intervention. A “deferred” bull should be rechecked at a later date.

A breeding soundness evaluation does not evaluate a bull’s libido, nor does it ensure that a bull will remain a satisfactory potential breeder the entire breeding season. If a bull suffers injury to its feet, legs, reproductive tract or other area, such an injury may render it incapable of breeding your cows. Therefore, it is still extremely important to observe bulls regularly during the breeding season.

A breeding soundness evaluation also does not guarantee bulls are free of infectious diseases, so a veterinarian should be consulted to determine what other diagnostic tests may be appropriate for each herd.

Bulls must be tested each year. Just because a bull passed a breeding soundness evaluation last year does not guarantee it will still be a satisfactory breeder this year.

Summer heat, especially in the South, can cause temporary or permanent infertility in bulls. If a bull is classified as “deferred” and it appears to be due to heat stress, the bull can be retested again in 60 days. Some bulls will recover. If after 60 days, the bull still fails a breeding soundness evaluation, it is likely the damage is permanent, and the bull should be culled.

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