The Basics of Breeding Soundness Exams

Timothy W. Wilson
Extension Animal Scientist – Beef Cattle

Brood cows and heifers are culled each year based on their inability to produce and wean quality calves. These females lower the overall profitability of the herd and make it difficult to reach break-even. If a percentage of females are cycling properly, are in good condition, yet still do not conceive, what could be wrong? The problem may not be the females, but rather the bulls used in the breeding program. An important management practice that should be considered is conducting breeding soundness exams on herd sires each year prior to the breeding season.

A veterinarian or a qualified technician should perform this exam 30 – 60 days prior to the breeding season. Bulls that undergo a breeding soundness exam will receive one of three classifications (satisfactory, classification deferred or unsatisfactory). Timing this exam appropriately allows producers to either re-test a preferred bull or purchase a replacement bull if a negative classification is awarded. Re-examining herd sires after the breeding season can help explain a low or failed calf-crop.

This exam evaluates: 1.) soundness, 2.) reproductive anatomy and 3.) semen quality

Soundness is critical in the breeding process. Bulls must be in good body condition, have clear eyesight, adequate motor skills and be able to support themselves on their hind two legs. If any of these physical characteristics are lacking, a bull may not be able to successfully identify females in estrus and mount them properly.

Reproductive anatomy is evaluated to ensure it can be used effectively. Palpation of the external genitalia (penis, testis and epididymis) is performed to identify structural abnormalities. Scrotal circumference can be correlated to puberty and is therefore measured and compared by age to the minimum recommended guidelines. Vesicular glands are palpated rectally to identify any inflammation.

An ejaculate is collected to evaluate semen quality. Percent motility and morphology are examined to verify viable semen in the ejaculate.

Libido is the bulls desire to breed. Although libido is not used in the criteria included in a breeding soundness exam, it is very important that the sexual stamina of the sire used is sufficient to breed all cycling females.

There are many different factors involved in performing a breeding soundness exam. Failure of any one of the observations can result in an "Unsatisfactory Classification" being awarded to a bull. Young bulls or bulls that have a temporary problem may be classified as "Classification Deferred" and required to retest to receive a "Satisfactory Classification".

If you have any questions regarding breeding soundness exams, please contact your local veterinarian, county agent or contact me at twwilson@uga.edu.