



# COW SENSE CHRONICLE

FEBRUARY 2014

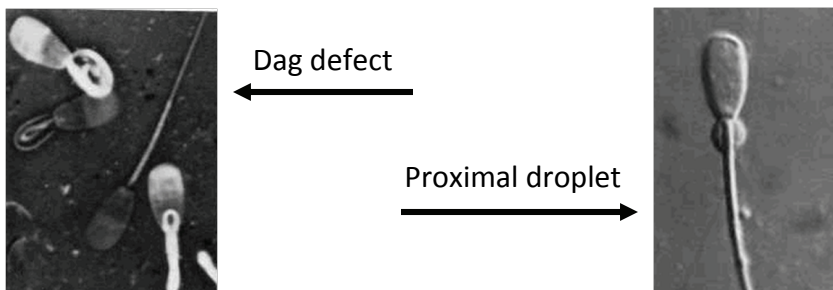
## BULL BREEDING SOUNDNESS EXAMS

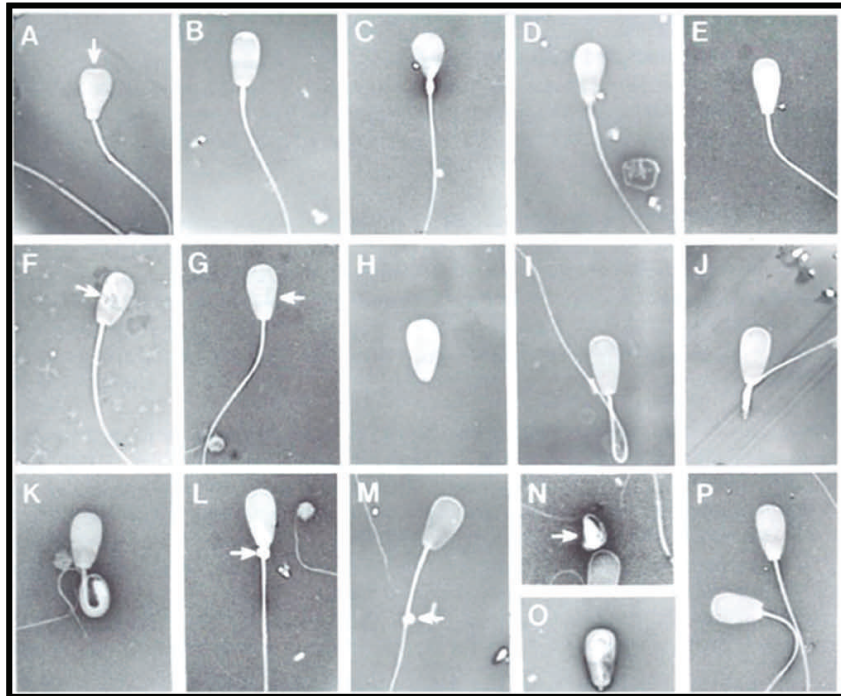
In honor of the month of romance, this edition of Cow Sense Chronicle is dedicated to bull breeding soundness exams. Most recommendations suggest conducting breeding soundness exams on bulls 30-60 days before breeding. Timing will vary for individual ranchers, but finding bulls for sale to replace those that fail their exam might become more challenging the later one waits.

A breeding soundness exam usually includes a physical examination, measurement of scrotal circumference, and evaluation of a semen sample. The physical exam usually includes visual appraisal to assess soundness and condition, and rectal palpation to assess reproductive organ health. The bull breeding soundness exam is a good time to review previous management, including any disease or stress the bull may have experienced. Infection, fever, and frostbite can all impact semen quality.

Bull scrotal circumference is related to sperm production and semen volume, as well as to age of puberty in the bull's daughters. The relatively larger a bull's scrotal circumference, the relatively younger his daughters will be at puberty.

Semen samples are evaluated for motility (movement) and morphology (visual appearance, looking for percent normal sperm). Guidelines for motility are greater than or equal to 30% individual motility and "fair" gross motility. Morphology guidelines are for 70% or greater normal sperm. The figure on the next page shows some examples of abnormal (panels A-O) and normal sperm (panel P). Several bull fertility traits, both positive and negative, are highly heritable, including scrotal circumference, percent dag defect (below, left), and percent proximal droplets defect (below, right).





Examples of abnormal (panels A-O) and normal (panel P) sperm.

When conditioning bulls for breeding season, a 30– to 90-day adjustment period for new purchases is ideal. Producers are encouraged to work with their veterinarian to develop an appropriate health program for new and established bulls. Yearling bulls should continue to gain 1.5 to 2 pounds per day and it’s recommended that bulls be in body condition score 6 at turnout. Ensuring that the bulls are in good condition at turnout is important, as they’ll lose 100-300 pounds during the breeding season. Bulls should be monitored frequently for injury throughout the breeding season.

Industry recommendations are for bulls to reach 75% of their mature body weight at age 2. Mature bulls in good condition can usually get by on an all-roughage diet post-breeding, but young bulls may need supplemental energy depending on forage quality.

In the latest USDA National Animal Health Monitoring System cow-calf survey, only 31% of operations in the western region conducted semen evaluations on bulls. On operations with 200 or more cows, 61% of operations tested current bulls, while 96% tested new bulls. I suspect this difference reflects the fact that new bulls are often tested by the seller, rather than the buyer!

In closing, I’m not the only one to use this romance angle in a February piece. Please enjoy this Chevy Super Bowl commercial and you’ll see what I mean!

<http://www.youtube.com/watch?v=dOMrA-BGuLY>

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