

A Tale of Detached Tails

Consider Age When Making Decisions Based on Bull Semen Tests



Photo by Jill J. Dunkel

A FARMER IN southwest Missouri recently sold two Hereford/Angus cross bulls through an online marketplace. Following the advice of a local veterinarian, the seller had not semen-tested the 13- and 15-month-old bulls due to questionable accuracy of early exams. The buyer acknowledged the yearlings were untested, paid cash and loaded the bulls on his trailer. A few hours later, he called asking to return the younger bull for a refund. It seems two consecutive samples examined by his veterinarian showed the semen of the 13-month-old included sperm with detached heads and tails. What does that mean and what would you do?

Associate Professor of Extension Veterinary Medicine Scott Pook said he would have deferred the 13-month-old and advised a retest in about three to four weeks. Based in Columbia, Mo., Pook explained, “When these young bulls are first

hitting puberty, things change quickly. They begin to have greater sperm production and you see substantial differences from one test to the next. Detached heads and tails could have been among the first sperm produced, and a young bull has to ejaculate enough times to clear all those out.”

Kit Pharo, founder of Pharo Cattle Company in Cheyenne Wells, Colo., agreed that a 13-month-old bull with questionable test results should be retested at a later date. “Abnormal sperm cells, especially the detached heads and tails are not usually permanent. If you were to test that same bull 30 days later, he probably would be good to go.”

Pook was a practicing veterinarian in Wisconsin for 19 years and has been with the Missouri Extension Office as a board-certified veterinarian in both beef and dairy practices for nearly 20 years. He explained that it takes about 60 days for sperm

to go through the various stages of spermatogenesis and to prepare for ejaculation.

“When young bulls first began to ejaculate, they are actually moving and clearing stale sperm out of their system,” said Pook. “The same type of thing can happen in older bulls who have not been breeding for a while. A semen test is just a snapshot of a bull’s semen at one specific time on one specific day.”

With more than four decades of experience in the cattle business, Pharo develops bulls in Texas, Colorado, Missouri, Montana and Nebraska to sell at regularly scheduled auctions. They have sold to cattlemen in 44 states, including Hawaii, as well as to buyers in Australia, Canada and Mexico.

“We never test yearlings before 12 months of age because they are still developing, and most bulls we sell are at least 18 months old,” said Pharo. “If a bull does fail, we wait and give him

another 30 days. Occasionally, a bull will fail a test because of his reaction to electroejaculation, so we'll do another test with less electricity or manual stimulation."

When conducting a Breeding Soundness Evaluation (BSE), Poock said it's important to first examine the bull's overall physical condition and then stimulate the bull to ejaculate. "I collect the sample and examine it under the microscope to look at sperm movement or motility," he explained. "Once I stain the slide, I look at sperm morphology - analyzing live and dead cells and looking for detached heads, coiled tails, distal or proximal droplets and other possible abnormalities."

Poock said the morphology should show at least 70 percent of the sample sperm is normal and live, and the motility should show most sperm moving progressively forward. "It's important that the bull's semen has enough normal sperm that moves

well enough to make progress toward the egg or oocyte so it can impregnate the cow or heifer."

After the evaluation is complete, Poock considers all the data and then rates the bull. The three classifications on the official BSE form from the Society for Theriogenology are 1) Satisfactory potential breeder, 2) Unsatisfactory potential breeder, and 3) Classification deferred. He said these ratings help everyone involved make important decisions about buying to breed their herds, or culling and selling to make more efficient use of their herds. Bulls classified as "deferred" are usually tested again in about 30 days.

Pharo's family-owned cattle company sells nearly 1,000 bulls annually, most age 18 months or older. "Each and every bull we sell has passed a BSE performed by a certified veterinarian to show that we have done our due diligence," said Pharo. "We will stand behind that bull for one year."

The selection of a fertile bull is a vital part of a successful breeding program for maximum efficiency and profit. While bulls age 18 months and older often require more of an upfront investment, their semen test results are likely to be more accurate and the bulls may be backed by a guarantee. Buying yearling bulls could mean less of an initial investment, but semen tests need to be handled and interpreted differently. The optimal time for an accurate semen test is around 14 to 15 months of age and, even then, a test that shows detached heads and tails or other abnormalities may not signal an immediate trip to the slaughterhouse.

In this business, there are no "one size fits all" guidelines for finding the perfect bull. However, if you understand and consider the various factors that could impact a BSE rating for potential breeding success, you can decide what works best for your operation.

FL

PLT Bunk Management

Artificial intelligence for feeding optimization

AI-powered Feed Calls

Minimize errors, improve consistency, increase profit

24-hr automated bunk reading

Real data on feeding behavior

Analytics and alerts

Bunk Status
Feeding: 2
Aggression: 2.75
Fill: 20%
Remaining 2400lbs



PRECISION
LIVESTOCK TECHNOLOGIES

www.precision-livestock.com

info@precision-livestock.com

806.318.8470

FEEDLOT[®]



COW-CALF | STOCKER | FEEDLOT HIGHLIGHTS

Volume XXXIII Number 4

April / May 2025

