

Trichomoniasis

1:30 p.m. session, Tuesday, Dec. 7, 2005

Presenter: Russ Daly, South Dakota State University

RAPID CITY, SOUTH DAKOTA (Dec. 7, 2005) — Russ Daly from South Dakota State University (SDSU) began his talk on trichomoniasis (trich) with a horror story: One producer's heifer jumped fences and eventually infected an entire bull battery with trich. Unfortunately, he said, such a story is an all-too-common possibility.

The organism causing trich, Daly said, is only about the size of the head of a bovine sperm cell. While it's sensitive to extreme heat or cold, bull and cow reproductive tracts are extremely inviting. The organism localizes itself in the penis and sheath, and older bulls are more susceptible. Once a bull is infected, he explained, it's infected for life.

Bulls infect cows with trich during breeding. While animals may not look ill, Daly says the cow's body responds with intense inflammation. If the inflammation spreads rapidly, it can kill the embryo. Most often, the inflammation spreads moderately, resulting in fetus death at 50-60 days; however, if the inflammation spreads more slowly, the fetus can die at 7-8 months of age, resulting in complications for the cow.

While cows, after aborting, usually clear themselves of trich in a few months, this immunity is short-lived, and the cow can become infected again. Trich also results in an extended calving season and can interfere with pregnancy rates and bull fertility.

Since there is no treatment for trich, Daly said the best advice is to prevent infection entirely by managing for containment. Any time a new bull enters the herd is an opportunity for trich to spread, he explained. The organism is harder to detect in cows since they may only be infected for a short window, so Daly suggested testing every bull at least three times. The first test, he said, will only be 70%-90% sensitive to the virus. After a second test, the percentage grows to 99%, and after a third it becomes 99.98%.

After testing all bulls, Daly suggested producers cull open cows and late calvers, as they may have previously been infected. A third important measure is maintaining strict biosecurity by purchasing only virgin bulls, maintaining fences and preventing commingling of cattle. He also noted that putting in place an artificial insemination (AI) program might be a great option, if feasible.



Once an older bull is infected with trichomoniasis, he's infected for life, said SDSU's Russ Daly. [PHOTO BY LYNN GORDON]

“Trich is certainly a disease that has been an economic blow,” Daly said. To combat it, he discussed states that have put prevention programs in place. South Dakota has trich regulations that require nonvirgin bulls imported from another state to be tested, and has prohibitions against open cows being sold across state lines for breeding. Colorado, he said, has a voluntary certification program for trich-free herds.

— by Brooke Byrd, assistant editor, Angus Productions Inc.
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