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### **Trich Testing Bulls**

It is not an uncommon practice to conduct a breeding soundness exam prior to the breeding season on mature bulls. Knowing the motility and morphology of a herdsire makes logical sense to most cattlemen when discussing getting cows pregnant. But what about the possibility of disease that might be a causative issue in reproductive failure? Bovine trichomoniasis testing or “trich” as it is commonly referred to, is something that might need to be considered, especially if purchasing bulls who’ve been breeders or if you’ve experience reproductive issues within your herd in the past.

Trichomoniasis is a venereal disease that causes infertility, open cows, and occasional abortion in cows and heifers. Bulls carry the protozoa in their prepuce and transmit it to cows through breeding. Clean bulls can also become infected by breeding cows that are infected with trich. There are no clinical signs of infection in bulls and very few in cows. Bulls that are infected do not show systemic disease, swelling, drainage or any other sign that would lead to suspected infection.

The only way to identify infected bulls is for veterinarians to perform testing. This involves preputial scraping and diagnostic analysis to identify the presence of the organism in the preputial folds. Once infected, bulls remain infected for life. Because the organism lives in the preputial folds and is external to the bull's immune system so will not identify or respond to the organism to clear the infection. There is no treatment for trich, so infected bulls should be culled and sent to slaughter.

Bulls are the transmission route throughout a cowherd. When an infected bull breeds a cow, there is a high probability that the cow will become infected. Succeeding matings by other bulls in the herd transmit the organism to uninfected bulls, which is why it is common to find multiple infected bulls in a bull battery once a single trich-positive bull has been identified.

Trichomoniasis infection in the cow herd is often suspected when producers notice cows that should have settled early in the breeding season continually express estrus throughout the season. Cows will mate and conceive, but then later develop uterine infections and experience embryonic loss. Unlike bulls, once there is an infection, the cow's immune system will respond and clear the infection, but she will return to cyclicity only after the uterus returns to health, generally 60 days or more later.

While most cows will clear the infection and go on to conceive and carry a calf to term, there is a danger that individual cows can develop a carrier state and serve as a continual reservoir of infection in a positive herd. This potential for a carrier state is why it is recommended to cull any open cows in a positive herd to slaughter-only channels, along with the infected bulls. There is no reliable test for trichomoniasis to screen for carrier cows.

Trichomoniasis is a reportable disease in Kansas. As such, bulls that change ownership or possession within Kansas must meet one of the following criteria:

\*Non-virgin bulls or bulls 18 months or greater must either - Be tested for Trichomoniasis by a Trich-certified veterinarian and be certified negative within 60 days prior to change of ownership or possession, with no subsequent exposure to female cattle, OR be sold for slaughter destination.

\*Virgin bulls younger than 18 months of age may change ownership or possession without a negative trich test if the owner signs the Kansas Bull Status Affidavit verifying the bulls have not been sexually exposed to breeding-aged females.

\*Virgin bulls 24 months of age or younger that originate from a herd with a herd management plan approved by the animal health commissioner shall not be required to be tested for Trich and certified negative prior to changing possession or ownership.

Trichomoniasis is a devastating venereal disease that can move through a herd silently until it is too late. The investment in identifying and removing infected bulls before the breeding season is a small price to pay to avoid reproductive failure of the cow herd. All that said, testing mature bulls is a good place to start for most herds with mature breeding bulls.