Trichomoniasis Control Tips

- Test all bulls 2-3 weeks after the end of breeding season and cull any T. foetus-positive bulls.
- Cull all open cows at preg check and any dry cows at spring branding.
- Test all incoming bulls that are added to the bull battery.
- Do not share or lease bulls unless a Trichomoniasis prevention program is in place.
- Do not add cattle from unknown herds or with unknown calving histories.
- Keep fences in good repair to prevent exposure to neighboring cattle.
- Consider using only virgin bulls.

Prevention

To prevent the disease from entering a clean herd, only add bulls with a negative test or certified virgin bulls. Also, only add cows or heifers from known negative herds. Annual testing of the bull battery is recommended to catch the disease early if exposure does occur. An effective vaccine is available to immunize females against the disease; however, the vaccine stimulates immunity that is protective for a short period of time and must be used according to label directions. Vaccinating bulls against T. foetus can be a valuable part of a total prevention or eradication program. The vaccine is not effective in preventing the disease in bulls.

Economics

Trichomoniasis is a disease that can be economically devastating in a short period of time. A susceptible cow that is bred by an infected bull will become infected and usually abort, cycle again, shed the organism, and then settle, infecting all bulls that breed her while she is infected. Infected bulls can only be sold for slaughter. A cow that rebreds will usually calve four to six months later than normal so her calf is much lighter at weaning. Many cows will not rebreed and will have to be culled as open cows. Other cows that were pregnant at preg check may abort. Although less common, abortion can occur as late as 240 days of gestation. The loss in calf crop can reach as high as 50% the first year, depending on the number of infected bulls in the herd with susceptible cows. A herd that has one positive test is quarantined and can only sell breeding age females for slaughter (unless more than 120 days pregnant) until the quarantine is lifted. The quarantine does not affect the sale of weaned calves. Preventing introduction of the disease into a herd is the key to avoiding economic loss. Table 1 indicates that Trichomoniasis continues to be a disease of concern in New Mexico.

Table 1. Historical occurrence of Trichomoniasis in New Mexico as reported by New Mexico Veterinary Diagnostic Services.

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Positive</th>
<th>Negative</th>
<th>Percent</th>
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</thead>
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<tr>
<td>2005</td>
<td>781</td>
<td>51</td>
<td>730</td>
<td>6.5</td>
</tr>
<tr>
<td>2006</td>
<td>4545</td>
<td>287</td>
<td>4258</td>
<td>6.3</td>
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<tr>
<td>2007</td>
<td>6685</td>
<td>137</td>
<td>6548</td>
<td>2.0</td>
</tr>
<tr>
<td>2008</td>
<td>7966</td>
<td>232</td>
<td>7734</td>
<td>2.9</td>
</tr>
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For More Information

For information about the state regulations, testing requirements, or import requirements for breeding stock, contact the New Mexico Livestock Board at:

(505) 841-6161 or visit
www.newmexicolivestockboard.com

For more information about prevention and control programs, contact your local veterinarian.

For more information about Trichomoniasis, contact New Mexico State University Extension Veterinarian Dr. John Wenzel at (575) 646-3019.
Contact the New Mexico Livestock Board for a copy of these regulations.

The Disease in Cows
Trichomoniasis is strictly a venereal disease that does not make cows or bulls outwardly sick. Cows develop the disease after being bred by an infected bull. The infection develops in the cow's reproductive tract and usually causes early embryonic death. The cow will usually cycle again after the loss of pregnancy, which results in her passing the infection to any bull that breeds her before she mounts an immune response and clears the infection. It takes about three to five months for a cow to clear the infective protozoa. The cow will clear the infection about 97 percent of the time. The remaining three percent of cows can become carriers and remain infected through calving. These carrier cows can keep the infection in the herd from year to year. Untested positive bulls will also carry the infection from year to year.

Immunity from the disease only lasts about 12 to 15 months so a cow can become reinfected if bred by an infected bull the next year. A few infected cows develop scarring in the uterus that makes them infertile. There is no medication available that is effective in treating the disease.

The Disease in Bulls
The bull is a mechanical spreader of the disease. The T. foetus organism lives on the surface of the penis and prepuce in small folds called crypts. The older the bull, the deeper and more numerous the crypts; thus, it is easier for bulls over three years of age to become chronically infected. Younger bulls (as young as yearlings) can develop the infection but may not become chronically infected. The bull contracts the disease by breeding an infected cow and picking up the T. foetus organism on the surface of the penis. There is no response by the bulls' immune system, so he does not develop any resistance to the organism. Additionally, there is no treatment for this disease, and infected bulls can only be sold for slaughter according to New Mexico Trichomoniasis Regulations.

Diagnosis
The disease is very difficult to diagnose in the cow because it requires five successive, negative tests, with each test being at least one week apart. The test is performed on cervical mucus samples. Because of the logistical challenges of testing cows, most testing is done on bulls. The official test is a PCR (Polymerase Chain Reaction) test. This test is performed on samples collected by Veterinarians certified by the New Mexico Livestock Board to do Trichomoniasis testing in New Mexico. A list of approved veterinarians is available from the Livestock Board or on their website at www.newmexicolivestockboard.com

Control
Control measures established in New Mexico in 2005 are designed to help limit exposure and spread of the disease but are only part of a complete program to prevent or eradicate the disease. Contact your local veterinarian for recommendations regarding prevention and eradication of Trichomoniasis on your ranch.