COW/CALF CORNER

The Newsletter

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Just When You Thought It Was Safe To Go Back In the Water

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Several generations of Oklahoma cattlemen have grown up with the fact that their breeding stock were going to need to be Bang's tested at the sale barn or when changing ownership. In 2009, however, this fact of life came to an end; no more sale barn testing for brucellosis. Now we find ourselves, before the celebrations have even died down, looking at another emerging reproductive disease problem of cattle that may once again require testing of breeding stock when they change ownership. Trichomoniasis (commonly called trich) is the new bad guy.

Trichomoniasis is a protozoal disease that is spread among cow herds by venereal contact. It shows up as various infertility problems including open cows, late calves, abortions, and uterine infections. If given sufficient time, the cow will often develop sufficient immunity to conceive and carry a calf to term. The immunity is short-lived however, and if exposed to an infected bull again next year the problem repeats itself. One bull can infect a few cows, which infect several bulls, which infect many more cows. If undetected, the problem is usually much worse in the second year. The bulls are carriers of the disease and most bulls, especially those over two or

three years of age, are carriers for life. The only way to stop them from spreading the disease through your cows is to send them to slaughter.

There are two commonly employed tests for trich. The culture method consists of obtaining a wash of cells and debris from the sheath of the bull, which is then submitted to the diagnostic lab for culture. It is easy and relatively inexpensive, but not very reliable. To be considered a negative test, a series of three cultures must be obtained from the bull over time and all deemed negative. Its main value is as an unofficial screening test for detecting the presence of the disease in a herd that has multiple bulls. The Polymerase Chain Reaction (PCR) test is much more accurate, although more expensive. It will definitively confirm or deny the presence of the organism in an individual bull and only one test is needed.

Trich is not a new disease, but rather one that is becoming much more common. Easier movement of bulls, leasing bulls, and purchasing non-virgin bulls all have led to an increase in your chances of bringing this problem home with you. Oklahoma currently has regulations for bulls being brought in from out of state. The legislature is also considering new regulations that would require testing whenever Oklahoma bulls change hands. This is a disease we will be hearing much more about in the months to come, so take advantage of opportunities to educate yourself.

No one knows just how big a problem this is in Oklahoma at this time, but if your herd's number comes up in the disease lottery, it will be a very big problem for you. When Texas started mandatory testing of bulls whenever they changed ownership, they found about a 3% rate of positive tests, and most authorities expect the numbers to be similar in Oklahoma. Dr. Rod Hall of the Oklahoma Department of Agriculture, Food, and Forestry, estimates that Oklahoma stockmen are currently losing about $5.4 million annually to trich. Trich is a bad dude with fast hands. Learn what you can do to keep those hands out of your pocket.

Foot Rot in Grazing Cattle on Wet Pastures

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Many pastures in the Eastern two-thirds of Oklahoma are now soggy from repeated rains and thunderstorms. Standing water and muddy conditions can increase the likelihood of "foot rot" in grazing cattle. Mechanical injury or softening and thinning of the interdigital (between the toes) skin by puncture wounds or continuous exposure to wet conditions are necessary to provide entrance points for infectious agents. *Fusobacterium necrophorum* is the bacterium most often isolated from infected feet, but is also frequently isolated from non-diseased interdigital skin. The majority of *F. necrophorum* isolated belong to biotypes A and AB which produce toxins that cause necrosis (decay) of the infected tissues.

Feet infected with *F. necrophorum*, serve as the source of infection for other cattle by contaminating the environment. Disagreement exists on the length of time *F. necrophorum* can survive off of the animal, but estimates range from 1 to 10 months. Once loss of skin integrity occurs, bacteria gain entrance into subcutaneous tissues, begin rapid multiplication and production of toxins that stimulate further continued bacterial multiplication and penetration of infection into the deeper structures of the foot.

Diagnosis of foot rot can be made by a thorough examination of the foot and characteristic signs of sudden onset of lameness, usually in one limb; elevated body temperature; interdigital swelling; and separation of the interdigital skin. There are numerous other conditions causing lameness and affecting the foot that may be confused with foot rot. Cattle grazing endophyte-infected fescue pastures occasionally develop fescue toxicity with loss of blood circulation to the feet and subsequent lameness. These cattle are sometimes mistaken as having foot rot.

Treatment of foot rot is usually successful, especially when instituted early in the disease course. Most cases require the use of systemic antimicrobial therapy. Learn more about treatments and prevention of foot rot by reading OSU Fact Sheet ANSI-3355 "Foot Rot in Grazing Cattle" by John Kirpatrick, DVM and David Lalman; http://pods.dasnr.okstate.edu/docushare/dsweb/Get/Document-2023/ANSI-3355web.pdf

Visit with your veterinarian and determine the best antibiotic treatment for your cattle that have become infected with foot rot.

Because mature cows often are infected with foot rot and therefore treated with an antibiotic, it is extremely important for cattle owners to follow the label instructions completely. Do **NOT** market any treated cattle before the specified withdrawal time listed on the label of the product admininstered. Also keep treatment records with animal identification, date given, product name, lot or serial number, dosage, route of administration, and person giving the treatment.