

### ***WOODY TONGUE: Recognition, Treatment, and Prevention***

Many cattle producers have seen cattle with this problem over the years and are familiar with the disease. It usually occurs sporadically and rarely occurs as an outbreak in cattle. It is a relatively easy problem to treat successfully; however, if mis-diagnosed or treated inappropriately it can turn into a much more difficult situation.

#### ***What causes Woody Tongue?***

The cause of Woody Tongue (also called Actinobacillosis or Wooden Tongue) is a bacterium named *Actinobacillus lignieresii*. This is a common species of bacteria found in the mouth and rumen of cattle and sheep. Ruminants of any age may become infected although it is more common in animals over one year of age. When cattle eat coarse feed or plants with sharp stickers these may puncture the tongue or other soft tissues in the mouth. These small puncture wounds may deposit the *Actinobacillus* organism in the soft tissue of the tongue where it sets up an infection. The infection in the tongue is usually in the form of firm abscesses (nodules) and the tongue may become nodular in appearance or feel lumpy when palpated. The disease is probably more common than we think, as the prevalence of Woody Tongue in cattle at slaughter ranges from 0.7% to 3.6%. Therefore, it is likely some cattle have problems we don't notice or recognize.

#### ***How do I recognize Woody Tongue?***

When the tongue becomes infected with the nodular lesions the animal encounters a number of problems that are noticeable. The tongue is painful and swollen causing the animal to be unable to pick up food with its tongue. Therefore, they tend not to eat or are observed to have difficulty eating or swallowing. There is excess salivation (drooling) commonly noticed. The tongue may be swollen enough that it protrudes from the mouth. The area below the jaws is often enlarged and firm. On examination, the tongue is very hard and painful. Also, at the base of the tongue there is often an ulcer filled with plant awns or stems. Because cattle use their tongue toprehend food, the affected cattle often stop eating (due to the pain) and lose weight.

#### ***What other disease problems could look like Woody Tongue?***

Any condition that causes pain or swelling in the mouth could be confused with Woody Tongue. Therefore, trauma to the back of the throat, foreign bodies in the mouth, damage to teeth, or a common jaw infection (lumpy jaw or actinomycosis) can be confused with Woody Tongue. Because excess salivation is common in Woody Tongue, diseases such as rabies also have to be considered. Because the mouth will be examined the possibility of rabies transmission must be remembered and if the animal subsequently dies, a complete post mortem examination, including rabies examination should be done.

### ***How do I treat Woody Tongue?***

The treatment of Woody Tongue is usually successful and is relatively straightforward. Sodium iodide solution is given intravenously (IV) and is then repeated in 7-10 days. If you are not familiar with giving IV therapy, have your veterinarian do this or have them teach you how to give drugs IV. In severe cases, organic iodine can be given orally in a portion of the feed (grain mix) for 1-2 weeks—this is in addition to the IV sodium iodide. If signs of excess iodide occur (excess tearing, clear nasal discharge, coughing, or dandruff) the iodide therapy should be stopped. Antibiotics can be helpful as the organism is a bacterium. Most strains of *A. lignieresii* are sensitive to drugs such as ceftiofur, ampicillin, penicillin, florfenicol, and tetracyclines. Most of these drugs are not labeled for the treatment of Woody Tongue and will therefore require a prescription from your veterinarian with a stated withdrawal time.

### ***Are there any precautions to be aware of when treating Woody Tongue?***

Yes, there are a number of precautions you should take when treating Woody Tongue cases.

1. Do not get the sodium iodide solution outside of the vein. If this happens, large areas of skin can slough off and leave you with a severe problem.
2. Check carefully with your veterinarian regarding the dosage of all drugs used as many are not labeled for Woody Tongue.
3. For extra-label drug use obtain a prescription from your veterinarian with the appropriate withdrawal times included.
4. If signs of excess iodide administration occur—tearing, nasal discharge, coughing, dandruff—discontinue use of iodides.

### ***How can I prevent this problem?***

Since the organism that causes this problem is present wherever there are cattle, there is a limit to practical preventive measures. Avoiding stickers and plant awns in the feed can be very helpful—but not always practical. Avoid the feeding of extremely stemmy hay for long periods of time. Make sure there is sufficient iodide in your pasture supplements—loose salt-mineral mixes, molasses based supplements. Do not rely on 50 pound, pressed salt blocks as they will not provide adequate iodide to your cattle. Also, when Woody Tongue is seen, treat it soon and thoroughly so the animals recover.

Finally, if you experience this problem, discuss it with your veterinarian to be sure you are doing all the right things.

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