

Livestock Health Series

Pinkeye

Jeremy Powell, DVM
Extension Veterinarian

Pinkeye (infectious bovine keratoconjunctivitis) is a disease affecting cattle caused by the bacteria *Moraxella bovis*. Pinkeye typically affects cattle during the warmer months of the year. This is due to increased exposure to the predisposing factors related to this disease. These factors, which include UV light, face flies, dusty environment and plant seed heads, allow for increased transmission of the disease and increased irritation to the eye, making it more vulnerable to disease onset. Increased irritation often leads to increased tears, which attract face flies. The flies move from animal to animal, spreading the bacteria that cause the disease. One or both eyes may be affected, and animals of any age are susceptible.

Symptoms associated with this disease include redness, excessive watery discharge, conjunctivitis (inflammation of the lining of the eye) and a cloudy or hazy cornea that appears blue to white in color.

This color change usually appears in the center of the eye, and an ulcer may develop in this area. In severe cases, the ulceration can penetrate completely through the entire cornea. This would allow the tissue from the inner eye to prolapse out of the opening. When this occurs, permanent blindness is usually inevitable. Cattle with pinkeye tend to keep the affected eye closed because of pain associated with bright sunlight.

Infected animals experience poor vision or blindness, and weight gains

and performance can decline. Some estimate pinkeye costs producers \$150 million each year and affects approximately 10 million head. These losses are due to unthrifty animals with poor feeding habits because of the pain, and the treatment and handling costs associated with this disease.

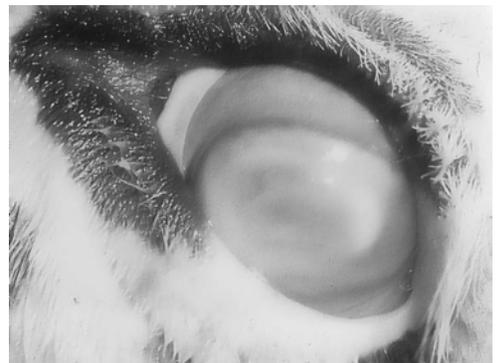


Figure 1. Example of pinkeye.¹

Treatment for pinkeye usually includes antibiotics and trying to control predisposing factors (UV light, tall grass, flies). Penicillins or tetracyclines are effective at killing the bacteria. An injection of penicillin or ampicillin with an anti-inflammatory can be administered under the lining of the affected eyelid (subconjunctival) and repeated every 3 to 4 days. Oxytetracycline can be used systemically at 20mg/kg IM; however, it should not be used as a subconjunctival injection.

Attempts should be made to control fly populations with organophosphate or pyrethroid insecticides. Controlling flies with

*Arkansas Is
Our Campus*

Visit our web site at:
<http://www.uaex.edu>

ear tags, dust bags, sprays or pour-ons will limit the exposure for the rest of the herd. Mowing tall grass in the pasture will help decrease the opportunity for cattle to get grass or weed seed in their eyes, thereby reducing the irritation and the development of disease. Shade should be available for animals suffering from pinkeye. Bright sunlight will only exacerbate this problem.

Recovery from this disease can be slow, and many times the cornea may retain a permanent discoloration. Vaccines are also available for use in

preventing this disease. Some vaccines require a booster dose to be effective during the first year of use. Vaccination will help limit the number of outbreaks in a herd but may not completely eliminate this disease. For more information about pinkeye and other diseases affecting cattle, contact your local county Extension office.

Reference

1. Smith, Bradford. *Large Animal Internal Medicine*. Second Edition. 1996. pg. 1386-1387.

Printed by University of Arkansas Cooperative Extension Service Printing Services.

JEREMY POWELL, DVM, is Extension veterinarian with the University of Arkansas Cooperative Extension Service in Fayetteville.

Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Director, Cooperative Extension Service, University of Arkansas. The Arkansas Cooperative Extension Service offers its programs to all eligible persons regardless of race, color, national origin, religion, gender, age, disability, marital or veteran status, or any other legally protected status, and is an Equal Opportunity Employer.