

Ross Mosteller  
District Extension Agent, Livestock & Natural Resources

### **Problematic Pinkeye**

There are many benefits to regularly checking on livestock after turning out on pasture. You can monitor forage resources, make sure water supplies are adequate or assess the general health and condition of animals. If you're like me - you can simply enjoy spending time outside with the cows in peace and quiet of nature, away from people. One issue that can happen at any time of year, but is frequently seen in summer is Pinkeye.

Infectious Bovine Keratoconjunctivitis (IBK) or pinkeye can be very problematic at times. It is manifested as an inflammation/infection of the cornea and conjunctiva of one or both eyes. Pinkeye is a highly contagious infectious disease that affects cattle worldwide. The incidence and severity of this common disease can vary widely from year to year. One year there will be limited issues and the next can be a total train wreck! Pinkeye can cause substantial losses to the cattle industry through decreased weight gain, lowered milk production and treatment costs. Additionally, market research shows substantial discounts for feeder calves with indications of active or past pinkeye infections. In fact, a recent South Dakota study shows that calves with eye issues only averaged 57% - 76% value of their non-affected counterparts.

Excessive eye weeping and eye closure are the two signs most commonly observed. Severely effected animals will be reclusive and move cautiously, even running into objects with reduced vision. As the disease progresses, the cornea becomes cloudy or white. Frequently, an ulcer develops near the center of the cornea. Cattle with pinkeye keep the affected eye or eyes closed because of pain and to avoid bright sunlight. The infection may run its course for several weeks. Long-term effects can be minor scaring to blue eyes to "dead" or popped eyes.

*Moraxella bovis* (*M. bovis*) is the major causative agent; however, other organisms have been detected in eyes with infections resembling pinkeye. Most often pinkeye is not the result of a random direct bacterial infection, but rather caused by a combination of factors. Factors contributing to infections are: physical eye injury, plant parts (seeds, stems, leaves, pollen), dust, pest such as flies and excessive ultraviolet light exposure.

Prevention efforts should be directed at minimizing eye irritation and reducing transmission between animals. Since flies cause both irritation and transmission, fly control efforts are paramount, although don't completely eliminate pinkeye risk. The benefits of fly control are many, in addition to the reduced risk of pinkeye. Reducing dusty conditions and providing protection against sunlight also aids in control. Cattle often have grass or weed seeds in their eyes, and these materials can irritate the eye and contribute to pinkeye development.

If a pinkeye is noted in any animal, the best way to get ahead of an infection storm is rapid response and treatment. Prompt treatment of cattle with pinkeye usually includes an antibiotic, topical treatment and often includes eyepatches to limit further irritation. Since the cornea heals slowly, any ulceration is likely to require several weeks for complete recovery. Caution needs to be given to the handling of animals with pinkeye infections, as they may have blindness and they may become more flighty than normal. Vaccinations for pinkeye have variable results, mainly due to the wide range of specific causative organisms in a particular region, that may or may not be included in a vaccine.

There are other infections that look like pinkeye so it is recommended that you consult with your herd veterinarian to assist you in the diagnosis, treatment and control of pinkeye or any other eye health issue. Prevention and control are best achieved with a watchful eye and proper animal health product guidance from a veterinarian. K-State's Pinkeye publication [MF-2210](#) provides additional information for those wanting to learn more.