Add Value to Your Cattle Through Pinkeye Control

It is the time is year when we all get busy and things that need to get done start to pile together. Some of you have already begun to implement your pinkeye control protocols while others are waiting for a later date, but if you have not planned to do it you may be losing money. Thank you to everyone who was able to join our recent meeting titled "Preparing for Pinkeye Season" presented in collaboration with Dr. Tom Massey. We plan to make a recording of that talk as soon as possible. According to Dr. Massey, "Pinkeye cost over $150,000,000 to cattlemen each year in sales and performance losses according to industry analyst". As many of you can attest, it is a real problem for some producers.

Pinkeye, or infectious bovine keratoconjunctivitis (IBK), is a painful eye disease that is common in cattle throughout the world. The economic impact of IBK in the cattle industry results from a loss in production due to increased medical treatment costs and injury from extra handling, reduced weight gain, decreased milk production and devaluation of sale animals due to eye disfigurement.

The bacteria Moraxella bovis has been long thought to be one of the primary agents cultured in cases of pinkeye. However, other bacterial agents such as Moraxella ovis and Moraxella bovoculi (plus others), and mycoplasma species also have been isolated from cases of pinkeye.

Numerous physical factors:

- Breed and age of the animal
- Stocking density of cattle and areas providing shade
- Availability of flies
- Cleanliness of facilities
- Ultraviolet (UV) light exposure
- Wind, grasses (pollen), and dust
- Dry pasture conditions
- Pre-existing Trouble with IBR or other respiratory issues

Face flies are a very important factor in the spread of the disease within a herd. Flies have to find a food source and pick up and spread the organism on their legs while feeding. Reducing or repelling Face flies can make a huge difference in the cases of pinkeye noticed on the farm.

<u>Clinical Signs</u>

The appearance and rate of progression of the disease will vary from animal to animal. One or both eyes may be involved, beginning with the signs of or increase in tearing and squinting. Cattle will have moisture or wetness around their eye and down the side of their face and not want to open their eye. If both eyes are involved, the animal may be reluctant to move due to impaired vision. When examined, the conjunctiva (eyelid) and the sclera (white portion of the eye) may appear veined, red and puffy. As the disease progresses, the cornea of the eye can become cloudy or white. An ulcer may develop a creator or cavity in the cornea, this is when the

eye is most painful and may lead to blindness or eye degradation. If the ulcer one the cornea is severe and deep enough, it usually leads to swelling and the eye can rupture.

Most infected eyes will heal in three to six weeks. Eyes that have been impacted and not noticed right away will have a white scar on the surface. These scars may fade through time. Cattle which have scaring or damage can be discounted and perform at reduced rates.

Treatment

There are a variety of was to treat for pinkeye and collaborative approach usually is the most effective:

- Treating with antibiotic therapy, particularly long acting antibiotics (work with Vet)
- Fly control
- Management of environmental factors are the best methods of treatment
- Moving cattle to a new pasture may help decrease fly pressure and create more space between cattle.
- Eye drops or ointments can be used for dairy operations or show animals where they are routinely handled.
- Covering the eye with a cloth patch

Prevention

- Use vaccines, available commercial or autogenous
- Control flies. That is one of the most important factors. Insecticide-impregnated ear tags in both ears have been shown to decrease the spread of disease
- Using insecticide sprays, pour-ons, dusters and back oilers can be used
- Provide shaded areas to help decrease the amount of the animal's direct sun light exposure.
- Mow or cut tall grasses or weeds.
- Vaccinations for infectious bovine rhinotracheitis (IBR) but not during a pinkeye outbreak or storm.

The best thing to do is use many of these approaches together and stay vigilant. They faster you identify and treat a animal at risk, they easier that it is to treat and reduce long term damage. Usually the cost of a good prevention routine is surpassed by the price per pound received for the cattle and it is humane way to care for our animals. For additional information or questions please contact your veterinarian or Corey Childs @ cchilds@vt.edu