Livestock Newsletter

W.N.C. District Newsletter

Summer 2017

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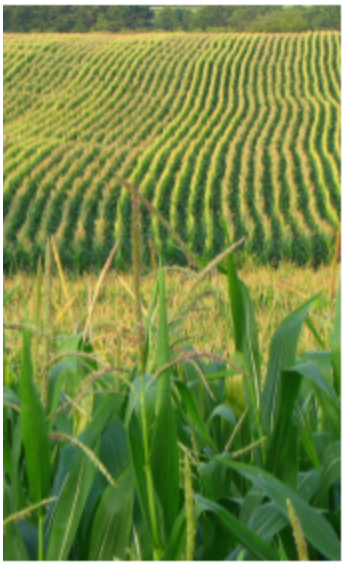

Infectious Bovine Keratoconjuntivitis - (Pinkeye) in Beef Cattle

Written by: Seth Nagy, County Extension Director and Agriculture Agent, Caldwell County

Infectious bovine keratoconjunctivitis, commonly called pinkeye, is a contagious bacterial eye disease. This disease spreads rapidly and causes economic losses. A study estimated U.S. losses of $150 million from decreased weight gain, milk production, and treatment. Young stock are most susceptible to pinkeye, but the disease may be found in cattle of all ages. Many older animals may have a natural immunity to pinkeye because of previous exposure. Pinkeye is most frequently found in grazing and feedlot cattle. Summer herd outbreaks involving up to 80% of young cattle and lasting 3 to 4 weeks are common.

Pinkeye is characterized by a reddish inflammation of the eye ball, swollen eye membranes (the conjunctiva), tearing, frequent blinking, and sensitivity to light. A white raised or ulcerated area appears on the center of the eye ball within 1-2 days. Left untreated, the entire cornea becomes thickened and opaque, resulting in a white color and blindness. The ulcer on the cornea may penetrate to the eye interior, and the eye may even rupture. Body condition loss and severe pain are common.

The main cause of the infectious pinkeye syndrome is the bacterium Moraxella bovis. High numbers of face flies (Musca autumnalis) are associated with higher rates of pinkeye. These flies cluster at the edge of the eyes to feed on tears and are very irritating to cattle's eyes. Face flies also carry and transfer the bacteria M. bovis from infected to non-infected animals. The house fly (Musca domestica) and the stable fly (Stomoxys calcitrans) also may spread pinkeye infections.

Other contributing factors include eye irritants such as ultraviolet sunlight, mechanical irritation from seeds, tall pasture grasses, awns on small grain seed heads, and dust. Rough forages such as fescue, hybrid Sudan grass and other forage sorghums mechanically irritate the eyes. Weeds and brush produce air-borne irritants, pollen and chaff, as well as serve as mechanical irritants. The incidence of foreign body irritation is greatly increased when animals eat out the middle of round bales, leaving a hay shelf over their heads. The same situation occurs when hay is fed in overhead feeders. This is especially true with hay made from small grains.

Recent field surveys have shown the incidence and severity of pinkeye varies among and within breeds of cattle. Cattle with pink eyelids (such as Hereford and Hereford crosses were more susceptible to pinkeye than Angus, Charolais and dark-faced breeds, possibly because more ultraviolet rays enter the eye. Some researchers recommend that only bulls with fully pigmented eyelids be used as herd sires since eyelid pigmentation is moderately heritable (26 -34 percent).

Using over-the-counter aerosol sprays and powders often further irritates infected eyes. These products cause increased tear secretion that washes away the antibiotic. Eye drops or ointments are better alternatives for mild or early cases of pinkeye. They are non-irritating and do not result in excessive tear secretion. Repeated doses are necessary to sustain adequate drug levels. Most strains of M. bovis appear to be sensitive to tetracyclines, penicillin, erythromycin and neomycin. The bacterium is usually resistant to cloxacillin (commonly found in dry cow mastitis ointments). Injection of a mixture of antibiotics such as penicillin, streptomycin or gentamycin, under the lining of the affected eyelids is recommended in herd outbreaks where repeated treatments are impractical. Often one injection is sufficient, but the treatment will need to be repeated in three or four days for severe or advanced cases of pinkeye. An intramuscular treatment is generally not recommended because very high dosages of an antibiotic are required to ensure adequate levels of the drug reach the eyes and tear glands.

While many optical antibiotics are available for pinkeye, treatment is not always successful in saving vision. Success depends on finding and treating cases early in the course of the disease. Complete recovery may take 3 to 5 weeks. Since face flies both carry the bacteria that causes pinkeye from one animal to another and irritate the eye, fly control is extremely important once pinkeye has been diagnosed. Spraying cattle with a fly knockdown spray will reduce new pinkeye cases.

The best protection against pinkeye is prevention. Vaccination against pinkeye is economically justified if the vaccine protects against multiple strains. Fly control is an important part of a pinkeye prevention program. Tall grasses can be kept short through pasture management, to prevent eye irritation while the cattle are grazing.

NC COOPERATIVE EXTENSION

Shoo Fly, Don't Bother Me
(Fly Control In Beef Cattle)

It is that time of year when we have to worry about fly control in our herds. We talk a lot about integrated pest management (IPM) and fly control is one place where it is critical. One thing to remember, you will never have 100% fly control, but you can manage them.

The first step is to know what flies are the problem so you can decide control methods and timing. There are several flies that are a concern in beef cattle. The horn fly is considered the most economically important fly pest in beef herds. Horn flies are biting flies that feed on cattle and cause blood loss, annoyance and reduce calf weaning weights. Horn fly presence is temperature dependent, while abundance is influenced by humidity and precipitation. So during wet and humid weather, populations peak. Other flies of importance include the face fly, stable fly, house, horse fly and others. This article will discuss options for horn flies. There are many control options available, but unfortunately, none are permanently effective. Using combination methods is most effective.

The recommended threshold to start treating cattle is when levels reach 200 flies on the cow. It is best to look at multiple cows to determine when to start treating, not just one cow.

Topical sprays/pour-on products are the quickest method to knock down fly populations. Most labeled products do a good job, but they have the shortest residual control of the methods. They are considered a secondary method especially for early and/or late season control. Pour-on dewormers are included here and offer 2-3 weeks of effective fly control if timed correctly.

Back-rubs have been used for a long time and work very well if managed correctly. First, they must be set-up in an area where cattle pass-through regularly (gate between pastures, in front of a water trough, a mineral feeder, etc.). Second, you must rotate the charging chemicals from year to year and keep charged regularly throughout the summer.

Insecticide ear tags or fly tags are easy to use and are one of the longer acting methods of controlling flies, but resistance is a concern. There are many brand names and active chemical ingredients available. The three main chemical classes are Pyrethroids, Organophosphates, and Endectocides. No matter which fly tag you use, here are some tips.

1. Tags have a limited lifespan, so use them when threshold numbers approach 200 flies (June time frame).

2. Rotate insecticide chemical classes. Don't use the same insecticide year after year. Read the label to know the active ingredient . There are several different chemicals within the same class, so switching the brand may not switch classes.

3. There has been much documented resistance of flies to fly tags over the years, especially with the Pyrethroids, but rotating between chemical classes every year will spread out this resistance greatly.

4. Remove insecticide ear tags when they are no longer effective, when the label recommends or in the fall.

IGR Minerals (Insect Growth Regulator) and similar products have been in use for 20+ years. They are additives that can be given in several forms including through minerals or boluses. They reduce the number of fly eggs hatching in manure and hay piles. For operations that do a good job with their mineral program and is either isolated or surrounded by cooperating farms, this system works well. The downside of feed-through products is that they work by controlling the fly population in a very specific area. If you are in an area with several other cowherds not using an IGR product, you cannot control the area population effectively.

Contact Us

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Producer Message Board

Please contact your county agent to have messages posted regarding selling or buying of farm equipment, animals, and so forth.

NC FARM SCHOOL

Growing farmers from the ground up.

Mountain Research Station Mills River, North Carolina, September 14th and 15th, 2017:

The NC Farm School Summit is coming to Western North Carolina to celebrate it's 3rd year in bringing NC Farm School graduates together from across the state. NC Cooperative Extension Agents from several western counties are hosting any who are interested in gaining understanding of specific production practices for an exciting two day event. Thursday, September 14th marks the kick off of the summit with a choice between an animal operation tour and a horticultural operation tour that will last a half a day. This first time offer will expose invitees to how Western North Carolina does local farming. There will be an opportunity for guests to join together for social time as well on Thursday evening. Friday, September 15th marks a full day of events for guest who can choose between two different specialized topics based on their specific needs. The first part of the day will cover a choice of social media marketing, poultry health, or high tunnels. The second part of the day will add vegetable grafting, plasticulture, or pastured pork. Those who attend can also expect a farmer panel that will address student's questions they asked as a part of registering for the event. NC Farm School invites all of our past graduates and anyone who wants to learn key production principles to come and learn from the best on these topics. You will hear from experienced farmers, university specialists, and industry professionals about what will make your farm a success. Details and event registration can be found online at: https://ncfarmschool.ces.ncsu.edu/summit-registration/

Upcoming Events:

Transylvania County Cattlemen's Association Summer Picnic

August 3, 2017
6:00 P.M.
Rosman High School Farm
Main Street, Rosman
Please bring a side dish or a dessert,
the main dish will be provided.
Contact Addison Bradley for
further information at (828)884-3109

Mountain Research Station Field Day

July 18, 2017
1:30 P.M.
Mountain Research Station
265 Test Farm Road, Waynesville, NC
Contact Kaleb Rathbone at
(828)456-3943 for more information.

Feeder Calf Sale

September 6, 2017 at 7:00 P.M.
W.N.C. Regional Livestock Center
Contact John Queen
for further information at (828) 646-3700

Carolina Meat Conference

September 25th and 26th, 2017
Join us for the 5th NC Choices Carolina Meat Conference – the largest gathering of pastured meat-makers in the country! Farmers, chefs, butchers, and industry leaders convene for two-days of unparalleled networking, hands-on training, and technical and business assistance. This conference supports a growing community committed to advancing market opportunities and increasing customer access to pasture-based meats. Attendees can expect more than twenty innovative class sessions on diverse topics, butchery demos, special technical tracks for professionals, and many opportunities for social networking.
To register visit www.ncchoices.com

NC COOPERATIVE EXTENSION
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NC STATE UNIVERSITY

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