

Preparing for Pink Eye!

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July 2014

Summer is finally upon us and as I travel the countryside it brings me joy witnessing this year's crop of calves out on pasture soaking up the rays. I repeatedly find myself in dialogue with producers about how the cattle and their management systems were put to the ultimate test as they braved such harsh winter elements. With that thankfully behind us, we must look forward in preparation to the potential challenges that this beautiful season has in store for our herds.

As we have experienced the wrath of the mosquito earlier this year, we must also consider the flies that settle comfortably on pasture and in our barns during these hot summer days. As pesky as they are to us humans and livestock they also are real vectors and transmit a considerable amount of disease in the process. With most cattle out on pasture today and without close-up visits it can be difficult to observe the effects of the different types of harassing fly species.

One of the most important reasons for fly control is to aid in the prevention of infectious bovine keratoconjunctivitis (pinkeye) in cattle. This infection causes inflammation in the eyelid lining and eyeball and if left untreated can ultimately cause ulceration of the cornea and permanent blindness. This is a painful condition that can have negative implications on the growth, health and welfare of each affected animal. The economic impact can be negative as weaning weights can be dampened and the price of calves at sale could be markedly decreased. Face flies from one animal to the next can efficiently transmit the organism *Moraxella bovis*, which is responsible for causing pinkeye. Multiple strains of *M. bovis* exist, making vaccination for prevention difficult at times. Long grasses, awns or thistles can be a mechanical irritant that can be a risk factor for cattle to contract pinkeye. Early forms of pinkeye can look like tearing, squinting and slight sensitivity to sunlight. These animals may try to seek shade and spend less time grazing. These early symptoms can rapidly progress (24-72 hours) to corneal scarring, where temporary or permanent blindness is possible.

Treatment

If you notice pinkeye in your herd it is important that you take action to prevent it from continuing to damage the eye and to prevent spread to the rest of your livestock. There are many different options for treatment of pinkeye, which should be a topic to discuss with your herd veterinarian. In simple cases, individual animals may be systemically treated with a long-acting form of oxytetracycline. During treatment it would be most ideal to isolate infected animals, but this is not always practical. Topical liquid and eye spray products are also available for treatment. Some may be irritating and only stay in the eye for minutes before it is diluted by tears, and therefore can be less effective than systemic antibiotics. It is important and worthwhile to consult with your herd veterinarian to determine what treatment plan is best suited for your case and management system. Always wear disposable gloves and disinfect handling materials when dealing with affected animals. Recording all treatments is good practice, and can also be beneficial to monitor

relapse cases and if the treatment protocol that you and your vet have put into action is effective.

Practice Prevention!

Prevention of pinkeye instead of treatment is the optimal scenario. In order to do so we must eliminate as many of the risk factors for pinkeye that are possible. Any mechanical irritant to the eye can predispose an animal to contracting this disease. Insecticide pour-ons, sprays and ear tags are all methods to aid in the control of the face flies that are risk factors for the spread of pinkeye. The use of back or head brushes with insecticides can also aid in fly control.

Long grasses, seeds awns and thistles can potentially irritate cattle's eyes and therefore clipping pastures that are grazed on can help reduce the incidence of pinkeye. Furthermore, clipping of pasture can also decrease populations of face flies that rest in the environment. Providing areas of shade can also offer animals relief.

Some vaccines are available for pinkeye. Vaccination of calves and yearlings can be a point of discussion with your herd veterinarian. A vaccine containing multiple strains of *M. bovis* would be most effective. Vaccinating may not reduce the incidence of pinkeye but may reduce the severity of the eye lesion.

Proper mineral supplement is essential for the health of your herd. If you reside in an area that is selenium or copper deficient this may increase the number or severity of pinkeye cases that you could experience. Adequate mineral supplementation fosters animal immune response. If your mineral program is not sufficient this may put your cattle at a disadvantage and unable to adequately respond to the bacterial pathogen.

Involving your veterinarian may be the most important part of your prevention plan. Seek advice about your own personalized standard operating procedure that is custom to your herd **before** the outbreak! Best of luck with your herds this season!