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Pink Eye and Silage Eye in Cattle

As much as it can be avoided, cattle can suffer with an array of eye infections and diseases, which can lead to ongoing health issues if not treated correctly. Find out the causes as well as the most effective treatment if you notice it in your herd.

Rapid identification of the issue, along with the correct treatment plan, is vital to averting more serious consequences in the health of your herd.

Below, we outline the ailments and provide an overview of the signs to look out for and the best way to prevent these eye issues.

PINK EYE

Causes

Pink eye is a highly infectious eye disease caused by a bacterium called *Moraxella bovis*, seen most commonly in the summer due to the spread by flies which feed on the mucous of infected cattle. Mild abrasion to the eye from dust and low grazing stalky pastures can increase the risk of infection. Infection spreads rapidly within a group, so prompt and correct treatment is crucial to control.

Signs

The disease can range from mild conjunctivitis (inflammation of the soft tissue around the eye) to severe corneal ulceration and eye rupture.



Signs can progress depending on duration and severity of disease:

- Weepy eyes
- Corneal ulcer
- Eye cloudiness
- Pus in eye
- Rupture of eye

Infection can spread rapidly through a group, so often where one animal is seen with severe disease, there will usually be other animals in the early stages of infection.

Impact

Pink Eye is a very painful condition and a serious welfare issue if untreated. Affected animals will have reduced feed intakes and growth rates and severely affected animals face permanent blindness.

Treatment

Affected animals should be removed from the unaffected as soon as possible to reduce spread in the group and ensure quick treatment. It may be necessary to go back through the unaffected group for a few days to pull out animals that were not showing initial signs.

Treatments options include topical antibiotic creams and intramuscular antibiotic injection. Anti-inflammatories may also be required. Severely affected animals should be housed with easy access to food and water as they are very sensitive to sunlight and may struggle to find food if they are blind. Treatment in the early stages is usually effective, but cases with more severe eye damage may not be recoverable.

SILAGE EYE

Causes

Silage eye is an infection of internal eye structures by *Listeria monocytogenes* (compared to Pink Eye which affects the surfaces of the eye). This bacterium can also

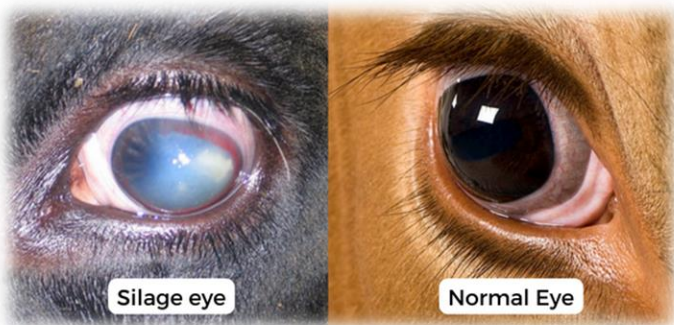
cause abortion, neurological signs, and sepsis depending on the site of infection.

L. monocytogenes is found in poorly stored baled silage and haylage that has exposure to oxygen as it ferments and gains access to the eye in small abrasions when feeding. It can also proliferate in bales that have been made and stored well but opened for a few days prior to being fed. Mouldy straw bedding also presents a risk. It can also be found in the soil.

Poor quality bale silage presents a problem for a few reasons. It contains *L. monocytogenes* in high numbers, cows will pick at it for a few days allowing the bacteria to grow more and cows bury their heads into it to find better sections and expose their eyes to contact with the silage.

Signs

This disease starts with an infection of the front compartment of the eyeball, and signs begin with tear staining and increased blinking, progressing to cloudiness and pus in the eyeball. There is generally not injury to the cornea or front of the eye. It doesn't spread from one animal to another, but several in a group can become infected at once.



Treatment

Removing the offending bale will avoid more animals becoming affected. Treatment is similar to that of Pink Eye. A long-acting antibiotic can also be administered if both eyes have become infected.

In the majority of cases, treatment when the infection is caught early has a good success rate. As with all eye diseases, rapid identification and treatment increases the likelihood of success.

Prevention

Care when making, handling and storing wrapped bales to prevent exposure to air during fermentation is crucial. Unwrapping bales several hours prior to feeding provides an opportunity for evaporation of acidic material, which reduces the incidence of eye infection with *L. monocytogenes*.

Avoid feeding spoiled silages where possible, but if there are no other options spread out the feed rather than in bale feeders and avoid feeding to pregnant cattle (due to risk of abortion).

Fly control

Reducing fly numbers can lower the risk of bacteria causing summer mastitis. There are a number of ways to reduce fly numbers including chemical control with the use of pour on products, sprays and ear tags.

Signs that flies are a problem are:

- Swollen teats surrounded by flies feeding around them
- Individuals separated from the main group
- Lameness, dull anorexic cows
- Raised temperatures
- Swollen udders show that the disease is progressing where the udder is hard and sometimes there is a foul-smelling yellow secretion



Flies love to congregate in certain areas of fields, including under trees and along the hedgerows; places your cows also love to go for some shade when it gets hot. Additional risks come from fields with thistle growth or poached areas. Try to avoid problem fields, or at least avoid overstocking them.

Check teats regularly for teat lesions and if any are present, treat and keep those animals separate from the rest of the group.

Teat sealants can also help reduce the chance of this type of infection. Teat sealant provides a physical barrier to prevent bacteria on the teat from travelling up the teat canal and causing the infection in the first place. Applying sealant to maiden heifers also has shown to be protective. If this is not something you already do, please speak to your vet about exploring this idea, as it is not without risk.

There are a range of products available and stocked by Glenthorne Farm Vets to help with fly control in cattle and sheep including pour-ons, such as Clik (sheep) and Spotinor. Read the instructions before use and make sure to apply a second application if recommended to really benefit from the product.



**Call the Farm Office
on 01889 567200 for advice on
what to use and when. Our vets
will be happy to discuss your
options**

Semen Testing in Bulls

There can be several challenges to keeping a fit and healthy bull, including having a sub-fertile bull that can struggle to get animals in calf. This is costly and has many knock-on effects for the wider herd. Find out more about semen testing and the benefits it can have when planning ahead.

Keeping a bull can be extremely expensive and the costs associated with a fit, healthy, fertile bull can be around £ 1,000 per year. Added to this cost, a bull can develop health problems or can have fertility problems.



While complete infertility of bulls is rare, sub-fertile bulls are relatively common (approximately 20% of bulls tested are sub-fertile). A sub-fertile bull will get some animals pregnant, but it will take several services and therefore more time.

The knock-on effect annually of cows calving later and later is costly. Batches of calves with an extended age range are more likely to have problems with pneumonia and scours, along with reduced daily liveweight gains. Fundamentally, if calves are born later in the calving period, they are lighter at weaning and have a lower value. At £3/kg, a 21 cycle later is a reduced calf value of £ 50-£ 60 per calf.

Bull Breeding Soundness Evaluation

The Bull Breeding Soundness Evaluation is performed 6 – 8 weeks prior to the service period to allow identification and screening of sub-fertile bulls. All bulls intended for use should be tested beforehand. This really should be a regular (at least annual) routine on beef breeding herds and will give valuable information on how bulls will breed during the year. It will also allow the best use of the bulls currently being used.

Testing 6 – 8 weeks before mating allows time for any re-tests, or more importantly, time to find replacements or juggle around the mating groups if any bulls are identified as sub-fertile. Pre-sale fertility testing can also be carried out and the bull can be accompanied to sale by a BCVA bull breeding certificate.

Semen Collecting Methods

Electro-ejaculation is now the standard method of semen collection used by trained vets. The procedure is quick and safe providing an appropriate crush is available.



The semen is evaluated on farm and in the lab at the practice. Semen is scored for volume, concentration and contamination before being examined under a microscope. Under the microscope, the sample is examined for gross motility and motility of individual sperm cells. A sample of the sperm cells is stained and the morphology of 100 sperm cells will be examined.

Examination of the Bull

Before entering the crush, the bull's gait is observed and during the crush the feet are properly inspected. The bull gets a full clinical examination of external and internal reproductive organs, and testicle size is also measured. This reflects directly on semen reserves and also reflects the fertility of any subsequent daughters.

After manual stimulation of the internal sexual organs a probe is inserted and gentle electro-stimulation is applied until ejaculation occurs.

It has become clear that an annual bull fertility check can be very beneficial as bulls can become sub-fertile at a later age. Most farms spend a lot of time and money checking their cow fertility, so why not also pay attention to their bull fertility, which is equally vital for securing a positive outcome.

**Call the Farm Office
on 01889 567200 to arrange a
bull fertility test or speak to a vet**

Forthcoming Events

**Plan ahead to make sure you have
enough Teaser power this Autumn**



**Look out for our Ram Vasectomy Days
towards the end of the month or
contact the Farm Office on 01889
567200 to book an appointment for
the procedure to be done at the
practice**