



Talk 2009

In our district pink eye is a common problem in calves during late summer. The following article was written by Jakob Malmo from the Maffra Veterinary Clinic in Victoria, and equally applies to our daily farmer clients. One additional point to note is that once they eye is not weeping, not half closed or light sensitive, then the infection is now in the healing stage which may take 2-4 weeks, and antibiotic treatment at this stage is no longer required, even though the cornea is cloudy or pink and opaque.

Pink eye and pink eye vaccinations in calves

Pinkeye is a highly contagious disease affecting the eyes of cattle. One or both eyes of affected animals can be infected and infection can cause considerable pain and distress to affected animals. The severity can be such that it causes significant economic loss – this is due to reduced weight gain (or even loss of weight) and because of a reduction in the sale value of cattle that are left with eye scars or have become blind as a result of the infection. If the sight of affected cattle is permanently affected, they can be much more difficult to handle. Further, some buyers (such as some of the export buyers) are less likely to purchase cattle that have been permanently and severely scarred by pink eye.

One of the problems in deciding whether or not vaccination is worthwhile is the fact that pinkeye can be severe on some properties in once year, and not be such a major problem in the next. The incidence of disease within affected mobs can vary, but up to half of the cattle in a mob can be affected.

Pinkeye is caused by bacteria known as *Moraxella Bovis*. It is possible that other microorganisms can also play a role in the development of the disease, and on the severity of the disease when it occurs. The disease is seen most commonly in calves, probably indicating immunity in older cattle. Having said that, we sometimes see outbreaks of pinkeye in adult milking herds.

A Major predisposing factor to pinkeye is damage to the cornea (the front part of the eye). This can be due to dust, long grass or plant pollens. It appears that flies are important in the spread of the disease, as is the close contact between calves, such as when calves are yarded. As a result of these factors pinkeye is commonly seen in summer and autumn; particularly when conditions are dry and cattle are grazing long grass.

When infection occurs, the bacteria produce enzymes that cause damage to the cells of the cornea. They result in liquefaction of the external part of the cornea, leading to a development of a corneal ulcer. New blood vessels then grow towards the ulcer, resulting in the red central area of the eye that gives the disease its name. The ulcer, in severe cases, may rupture and this can result in blindness. Healing is commonly accompanied by scarring of the cornea.

Typical signs of infection are avoiding light, closing the eyelids and profuse discharge from affected eyes. As the ulcers become more severe, they become vet obvious. The eye becomes white or yellow with blood vessels growing towards the centre of the eye.

The primary means of treatment has been with antibiotics, such as Orbenin Eye Ointment instilled into both eyes of affected animals.

This is particularly useful in mild cases of pinkeye where there is discharge from one or both eyes and the surface of the eye has started to become white. It is recommended that two doses should be given approximately 72 hours apart. Both eyes should be treated.

An eye patch can also be applied to more severely affected eyes – this reduces exposure of the affected eye to sunlight and aids in the healing process. In more severe cases, an injection of antibiotic and anti-inflammatory drug into the upper eyelid is highly effective.

This may necessitate a visit by a veterinarian, but a number of affected animals can be treated at the same visit and this makes it a cost effective procedure. A single treatment is usually sufficient and this removes the need to yard the animals again to undertake a second or even third treatment. In even more severe cases, the third eyelid can be sutured across the cornea and this is particularly useful in the treatment of severe pinkeye related ulcers.



Control of pink eye has been based on controlling flies (regular application of fly repellents such as Arrest Easy-Dose) and avoiding grazing calves on long pastures. If possible, you should avoid yarding calves in very dusty conditions. Finally, the calf mob should be checked frequently so that affected animals can be detected and treated before eye damage becomes severe. Ideally, affected cattle should be removed from the mob so as to reduce the risk of spread of infection.

Some 12 months ago a pink eye vaccine for cattle was released onto the Australian market. This product was released after extensive studies on sample of the pinkeye organism collected from infected calves from various parts of Australia, including samples from calves in the Maffra area. A relatively small number of farmers used the vaccine last year and most were happy with the results.

Recently we have had a number of enquiries from clients asking "Is it worth vaccinating against pinkeye this year?" The pink eye vaccine protects against many, but not all, strains of the pinkeye organism. Experience indicates that it is reasonably effective, but it should be regarded as an aid to the prevention of pinkeye, not as the only method of prevention. Animals should be vaccinated once, 3 to 6 weeks prior to the onset of the pinkeye season. At this stage our recommendation is to vaccinate calves only, as the condition is less common in adult cattle. However, if you wish to further reduce the risk of pinkeye in your adult cattle, annual revaccination with pinkeye vaccine is recommended. The cost of the vaccine is less than \$4 a dose. So for a mob of 50 calves, the cost of the vaccine is around \$200. If this can markedly reduce the severity of an outbreak of pinkeye in your calf mob, this is likely to be money well spent. It will reduce pain and suffering in the calf mob, reduce the risk of permanent eye damage and hopefully save you the hassle of having to treat affected calves.

New Staff

Two new young vets have joined our clinic in 2009. Kathryn Ingram is a Dubbo girl who graduated from Sydney Uni and has a bachelor in rural science from Armidale UNE as well as a veterinary degree.

Claire Le Map joins us from Perth after graduating from Murdoch University in WA



140 Swanport Rd, Murray Bridge, S.A. 5253 Ph (08)85 322 333 Fax (08)85 310 303
www.murraybridgevet.com.au Email mbvet@lm.net.au