

Animal WOFs Newsletter – March/April 2012 –



Welcome to another *Animal WOFs for Lifestyle Blocks* newsletter.

Each issue we are covering important animal health issues relevant for that time of year. Please feel free to give us feedback or ideas for the next issue, with any topics you would like to see covered.

In this issue:

Animal Health Diary – things to watch out for at this time of year

Pinkeye – contagious conjunctivitis... how to prevent and treat!

Vaccinations in horses - Part 1 – Tetanus

by our guest writer Janine Janssen

“Weed of the month”... an introduction to poisonous plants



Animal Health Diary March/April



Important aspects of autumn animal husbandry:



- Monitor facial eczema spore counts and keep animals protected with zinc bullets, fungicide sprays, zinc in water troughs or zinc feed additives. Also drench young stock for internal worms and monitor faecal samples.

<= *Fungal spores that cause Facial Eczema*

- For August-born lambs run the rams with the ewes now. For September-born lambs put the ram in with the ewes in April. Leave the ram with the ewes for 2-3 cycles (one cycle lasts for 3 weeks in sheep). Also check rams are not going lame.



- To have piglets born in August or September, take your sows to the boar in March and April (taking the sow to the boar reduces territorial aggression).

- Check your feed levels in preparation for winter. Do you need to change your stocking rates, buy in supplementary feeds or consider fertiliser application prior to winter?



- Ryegrass staggers can occur at this time of year, we will discuss this more in the next newsletter, but monitor grazing animals for tremors, head shaking, wobbliness and stiff gaits as these may be signs of ryegrass staggers.

Pinkeye – contagious conjunctivitis... how to prevent and treat!

Pinkeye, also called Infectious Kerato-conjunctivitis, is a bacterial infection to the eyes that causes inflammation and in some cases blindness.

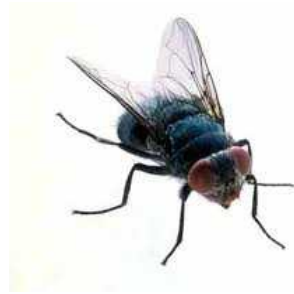
In cattle it is caused by the bacteria *Moraxella bovis* which infects the eye and produces a toxin that attacks the cornea (surface of the eye) and conjunctivae (membranes surrounding the eye).

In sheep and goats pinkeye is mainly caused by different bacteria called *Chlamydophila* and *Mycoplasma*.

Pinkeye can affect up to 80% of a mob and affected animals can lose a significant amount of body weight when affected. A carrier state can develop and pinkeye can reoccur every year.

Predisposing factors:

- Dusty conditions
- Flies
- Bright sunlight
- Physical irritation to the eye from long grass, thistles or similar plants
- Unpigmented eyelids and protruding eyes



Thistle

Pinkeye is most common in summer and autumn when the environment is more dusty, flies are common and UV light levels are high.

This is because eye irritation and the most miniscule damage to the eye from dust or plants causes increased tear production which in turn attracts flies. The flies feed on infected tears and spread the infection from animal to animal.

Hereford animals or “white faces” are more susceptible to pinkeye than other breeds as the white eyelids in Herefords don't offer much protection from the sun.

The genetic selection for animals with darker eyelids and less bulgy eyes can help to reduce the risk of catching pinkeye.



Hereford calf

Clinical signs:

Initially animals with pinkeye will have runny eyes and tear staining running down the face.

Our vet Hugh examining a calf with pinkeye in a head bale. Note the characteristic tear staining down the side of the face and the eye being held partially closed.



The membranes around the eye will be bright red and swollen (hence the term “pinkeye”) and the cornea may become bluish or cloudy. A small ulcer, seen as a white spot, will appear in the centre of the eye.

Note the blue cloudy appearance of the cornea with a large central ulcer. The membranes around the eye are also swollen and red. This eye will have no or minimal vision in this state.

In the majority of infections noticed and treated at this stage, the infection will resolve and heal, leaving little or no permanent damage.

In more severe infections the central white spot on the eye continues to enlarge. The eye colour will change from white to yellow, indicating a build up of pus inside the eyeball. At this stage animals will be completely blind. Animals blind in both eyes may die from starvation, thirst and accidents like falling into drains.

With severe ulceration the cornea may rupture, leaving an irreparably damaged shrunken eye in the socket.



Note the ruptured cornea with a shrunken eyeball and some membranes from the eye protruding.

Once treatment has started the eye will slowly return to a more normal colour with a white scar in the centre, often there will be red blood vessels growing towards the scar which will disappear over time.

Note the darker more normal appearance of the eyeball, along with a white centre scar with some red blood vessels running through it. The tear staining has dried up and this eye is healing well.



From an animal welfare point of view it is unacceptable to leave animals to progress to a severe case of pinkeye without treatment.

Diagnosis:

This is mainly based on clinical signs.

Here's a brief overview of the main clinical signs seen with pinkeye:

- Profuse tear staining and tears running down the side of the face
- Animals blinking frequently or holding eye partially closed
- Reddening of membranes around the eye
- A white spot in the centre of the eye
- A bluish, opaque, white, yellow or red appearance of the eyeball (rather than the normal darkblue clear appearance)
- Blindness – animals may run into fences and appear disoriented

Other eye problems that can present in similar ways are grass seeds or other foreign bodies causing eye irritation, eye cancers and viral diseases.

Treatment:

- Orbenin eye ointment

This long-acting penicillin is our first-line treatment for pinkeye cases. It has no withholding period for milk or meat and needs to be applied to affected eyes every 48 hours until the infection has cleared and the eye is back to normal.

In early cases a single treatment may be enough but in more advanced cases treatment may need to be continued for 2-5 weeks.



- Antibiotic injections

Intramuscular injection of an oxytetracycline drug like Bivatop can be effective in treating pinkeye, however these will be much more expensive than the eye ointment and withholding periods apply.

- Eye patches

These are great if one eye only is affected and can be made from people's dust masks purchased from hardware stores, that are glued over the affected eye. They provide good protection from dust, sunlight and flies and can thus reduce spread of disease in the herd.



- Third eyelid flaps

In severe cases the vet can suture the third eyelid across the eyeball under a local anaesthetic, to protect the cornea from further damage. These flaps are left in place for 7-14 days and often allow the eye to heal much better than it would without the flap.

- A vet can inject the eyeball with antibiotics which gives high levels of medication to the affected eye. This considerably helps the chances of good healing for the badly affected eyes.

Do seek veterinary advice especially for more severe cases as early and appropriate treatment may save the animal from permanent blindness!

Prevention:

This includes fly control with products such as Cyrax or Flypel to reduce the fly population and thus limit the spread of pinkeye through the mob.

Reduce the amount of thistles, other weeds and long grasses that can damage the eyes. Keep young calves out of spikey dry stubbly pasture.

Beware of introducing affected animals into the mob, eg calves with runny eyes from saleyards, as they may carry pinkeye onto your farm.

A vaccine for pinkeye is available. It is called Piliguard and is for use in healthy cattle to aid in the control of pinkeye. It is a preventative, not a treatment, and can be used in unaffected herd mates in the face of an outbreak.

The Piliguard vaccine comes in vials of 100ml, which is 50 doses of 2ml each, and costs around \$250. A whole bottle would need to be purchased as we are unable to break up the bottles into smaller doses.

Vaccination can be done 3-6 weeks prior to the anticipated pinkeye season, usually summer and autumn and annual revaccination is needed to continue protection.

Tetanus in Horses

Most people know that Tetanus has something to do with dirty wounds, puncture wounds or bite wounds, some know that it is also called Lock Jaw, only a few know that this disease is caused by a bacterium that affects not only horses but also other animals like cattle, sheep and dogs and even humans!

Tetanus is a disease caused by a toxin produced by *Clostridium Tetani*. Clostridia are anaerobic gram positive rods that live in the soil. This means that they live in the ground and multiply when there is no oxygen (such as in a deep bite wound or puncture wound). These bacteria are able to survive for large periods of time, as long as a few years, in most soil conditions. Unfortunately, most disinfectants or high temperatures do not destroy the bacteria.



Clostridium Tetani bacteria

Different animals have different sensitivity to the tetanus toxin. Horses are often more affected by the toxins and they are more susceptible to acquiring the disease following injury. Humans and livestock are also sensitive while dogs and cats are quite resistant and almost never get infected.

What causes Tetanus?

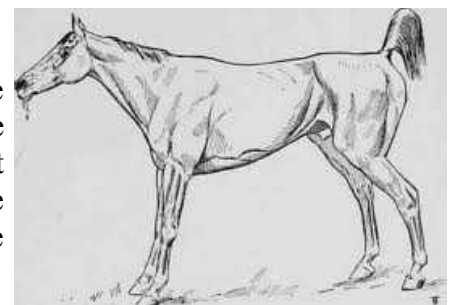


Tetanus in a lamb

The toxin produced by *Clostridium Tetani* is called Tetanospasmin. This toxin binds to local nerves and migrates up into the central nervous system where it interferes with the release of glycine, an amino acid that also acts as an inhibitory neurotransmitter. The result is a painful muscle over-activity, spasms and rigidity. In very severe cases the patient can not breathe because of the rigid paralysis of the respiratory muscles. These toxins can not be removed from the nerves, they have to come undone by themselves over time.

What are the signs?

The symptoms are initially difficult to spot and so may result in the diagnosis being too late for a possible recovery. The horse experiences extreme sensitivity to noise, light and even light contact which can be very stressful for both horse and owner. As a result the horse becomes nervous and may respond by an unwillingness to be handled or with aggression.



Tetanus in a horse

The symptoms progress as the toxin begins to take effect.

The term “lockjaw” arises as the horse’s jaw muscles contract so the mouth cannot be opened. The animal will have trouble eating and will be reluctant to move as spasms occur in other muscles. The neck will be extended and the front and hind legs become increasingly stiff. A constant expression of anxiety results from facial muscle spasms, as well as the ears being permanently pricked.

In the later stages, the horse will also sweat more than it would normally and show signs of colic. The severity of the symptoms greatly increases with time and there will be even more violent muscle spasms which generally involve the whole body. Protrusion of the third eyelid is commonly seen. In some cases the horse may actually collapse or die as a result of an inability to breathe.

How do I test for Tetanus?

Unfortunately there are no tests available for tetanus. The diagnosis is generally made based on the appearance of the animal and history of a wound. Culturing *Clostridium tetani* is virtually impossible.

How do I treat my horse once it has Tetanus?

The prognosis for treatment depends on the state the patient gets presented in and the type of animal that is affected. 77% of dogs can survive with intensive therapy, and in humans survival rate is 85-90%. In horses survival rates are as low as 24% with intensive therapy, although most horses get euthanased on humane grounds.



The tetanus toxoid is used with the tetanus antitoxin as part of the treatment plan. A course of antibiotics, such as penicillin, is administered to destroy the bacteria, thus preventing further release of the harmful toxin. The treatment is aimed to reduce stress for the horse, which reduces spasms and seizures. Sedatives are given to achieve reduced stress and pain levels. The horse needs to be kept in a darkened room, again to reduce stress, and placed in a warm area where there is little noise. Due to stiffness of the neck, food should be mashed or in fluid form and placed in an accessible area.

Improvement is noted within a week, but recovery can easily take up to a month.

How do I prevent my horse from contracting tetanus?

Vaccinating your animal against Tetanus is the best way to prevent this often fatal disease. We offer vaccinations for horses as early as 3 months of age. We can also vaccinate your cattle and sheep.

Your horse will receive 2 shots 4 weeks apart as a starter, the first booster will be given 1 year later with a 5 yearly booster following.



Equivac T vaccine



If your horse has sustained a wound and has not been vaccinated, please ring your vet and get them to vaccinate your horse and provide your horse with a short acting protection with antitoxin. Antitoxins bind to the toxins and prevent them from binding to the nerve endings.

Equivac TAT protection

Special for March and April:

Get your horse vaccinated for tetanus in March and/or April and get

**10% discount
on your bill**

Bill includes visit, mileage, time and vaccine. Any other work excluded.

“Weed of the month”...

This month featuring: - Rhododendron -

Description:

This evergreen shrub and very common garden plant grows from less than 1m to up to 5m or more. Leaves are oblong, smooth, shiny and are arranged alternately on the branches.

Distribution:

Rhododendron plants can be found all over the country, often in backyards and gardens.

Species affected:

All species that have access to this plant can be affected, especially stock that ingest prunings or clippings. Being browsing animals goats are most often affected.

Clinical signs:

Affected animals often salivate excessively, vomit and can have green froth around the mouth. They often show signs of colic, constipation or diarrhoea and may progress to trembling, weakness and collapse.

Signs are the same in all species and may in severe cases result in death.

Diagnosis:

This is based on possible exposure and clinical signs. At autopsy animals often have Rhododendron leaves in their stomachs.



Treatment:

Affected animals should be detoxified if appropriate and activated charcoal can be used, as instructed by a vet.

Non-specific and symptomatic care is needed, like keeping the animal warm, comfortable and hydrated.



Don't forget about the upcoming Llama Pack Training Workshop

For over 5000 years llamas have been bred to carry loads for humans.



Learn to release your llama's potential, whether it is for day-tripping or extensive back-country trekking.

Bring your own animal, observe or borrow a local. Although llamas have been bred to carry a pack, some alpacas also carry a small pack or go out for walks. As the workshop includes valuable training and general handling tips that apply to all

camelids, alpaca owners are welcome to attend.

When: Sunday 25th March 2012

Where: Manakau

Places are limited as this is hands on training so please contact Judy ASAP to book a space.

Judy Webby

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e-mail: judy@askjudy.co.nz



For more information please visit

<http://www.trademe.co.nz/Browse/Listing.aspx?id=434146892>

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