



## **Animal WOFs Newsletter – July/August 13 –**



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**

**Polioencephalomalacia – a blinding Vitamin deficiency**

**Birthing reminder... what to expect and when to call the vet**

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



# Animal Health Diary July/August



## 1. Vaccinate your livestock



This is a good time to vaccinate your “in calf” or “in lamb” (also in kid or in cria) animals with Clostridial and Lepto vaccines to provide protection for newborns in the colostrum. Previously unvaccinated stock will require two injections 4-6 weeks apart, then vaccines should be boosted yearly with a single injection. This will protect newborns until they are old enough to be vaccinated themselves, usually around 12 weeks of age.

A vaccine for BVD (Bovine Viral Diarrhoea) is also available for cattle, please ask your vet for more information. We will cover BVD in depth in one of the following newsletters as it is a bit of a complicated disease.

## 2. Monitor Body Condition Scores (BCS)

Ensure animals are fed well during winter, especially if there has been some weight loss with the recent drought. Aim for a BCS of 3 – 3.5 (out of 5) in preparation for calving/lambing etc as underweight animals will be more prone to illness and overweight animals may have problems with birthing and metabolic diseases.

For more information on Body Condition Scoring, see the newsletter from May 2011, on our website <http://www.lhvc.co.nz/animalwofs.html>



## 3. Shelters

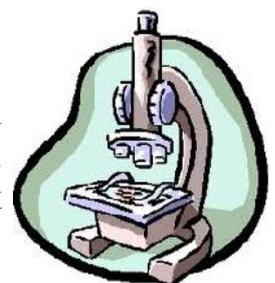
Check that waterproof and warm shelters are available for stock over winter, especially for goats and pigs, as this can reduce illnesses like pneumonia.

## 4. Footrot

Keep an eye out for footrot if the weather is quite wet – provide dry areas like concrete pads for cattle and sheep or wooden climbing frames for goats so feet can dry. Monitor for lameness and consider footbaths for prevention and treatment.

## 5. Faecal egg counts

Monitor young stock for signs of scour as worm burdens can still be high at this time of year. Consider testing for worm burdens with faecal egg counts or drenching young stock routinely with a good drench like Matrix, Eclipse or Genesis.



## Polioencephalomalacia – a blinding Vitamin deficiency

What is PEM (Polio-Encephalo-Malacia)?

PEM, also known as cerebrocortical necrosis, is an important neurological disease occurring in ruminant species like cattle, sheep and goats, and has been found in Alpacas also.

It is caused by a deficiency of Vitamin B1 (Thiamine). Ruminants depend on daily production of Vitamin B1 as it cannot get stored in the body due to its water-soluble nature.

It is not currently known what exactly causes drops in Thiamine levels, but the following are thought to be factors in development of PEM:

- Ingestion of certain plants like bracken fern that contain an enzyme called Thiaminase, which will break down Thiamine and render it useless for absorption
- Reduced food intake, often secondary to another disease
- High grain diets or sudden changes in diet



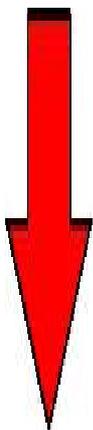
*Bracken Fern*

PEM occurs generally in young well grown animals but can occur in animals of all ages.

### Clinical signs of PEM:

PEM will present with some or all of the following signs, increasing in severity from top to bottom:

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- Depression, inappetance
- Incoordination and wobbliness
- Sudden blindness (stumbling around aimlessly, bumping into objects/walls or standing still and “staring” at a wall)
- Tremors of the head and neck
- Recumbency and inability to rise
- Star-gazing (head and neck pointing upwards)
- Convulsions and seizures
- In severe cases death can occur 1-2 days after onset of clinical signs



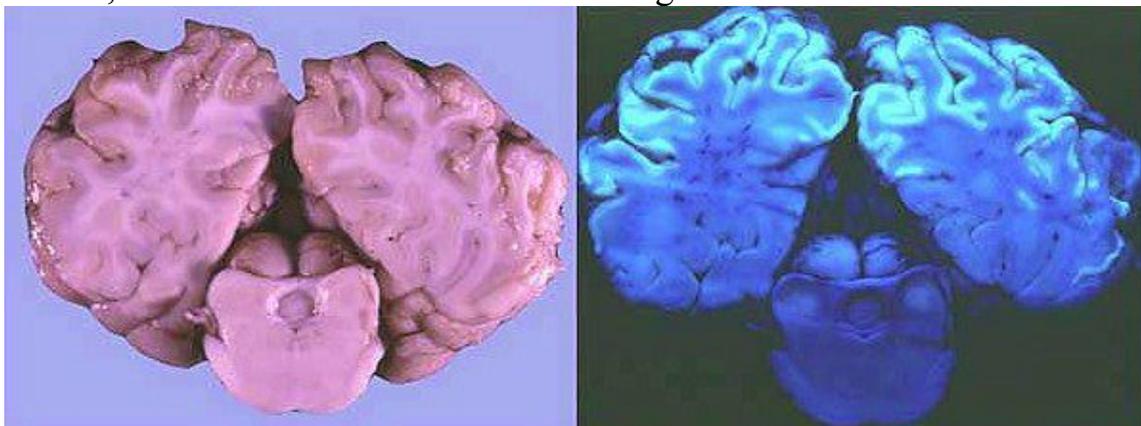
*<= Note this sheep with PEM stargazing, recumbent and unable to rise.*

*Note this calf => “staring” at a wall. With blindness animals will be reluctant to move around the pen and may bump into objects or walls.*



## **Diagnosis:**

This is usually based on history and clinical signs. The only way to definitely diagnose a case of PEM is by post mortem examination of the brain as it is usually discoloured, swollen and fluoresces under UV light.



*Cross section of the brain of a calf with PEM. Note the swollen appearance and also blue fluorescence under UV light.*

Other diseases that present in a similar way include ryegrass staggers, lead poisoning, listeriosis, bacterial meningitis and grass staggers. Depending on the presentation of the case, a vet can rule in or rule out diseases and sometimes a treatment trial can be done.

## **Treatment:**

PEM usually responds well to injectable Vitamin B1 (Duoject). In severe cases intravenous Vitamin B1 should be given by a vet, and intramuscular treatment may need to be continued twice daily for a few days.

Neurological signs like tremors and wobbliness often resolve shortly after treatment is started, blindness however may take longer to resolve and some animals don't recover fully.

It is also important to keep animals in a safe paddock or yards, as misadventure is a leading cause of death in animals affected with PEM.

If you find an animal with the above mentioned clinical signs, call us to arrange a vet visit as early treatment will increase the chance of recovery.

## Birthing Reminder...

With the upcoming calving/lambing/kidding/unpacking etc here is a brief review of what to expect and when to call the vet.

For more information please check our website <http://www.lhvc.co.nz/animalwofs.html> for the complete birthing article that appeared in a previous newsletter.

### The 3 stages of labour:

**Stage 1** is the preparation for birth.

This stage can last from 3 hours in a cow or ewe to 4-6 hours in a first calving heifer, hogget or hembra. The ligaments of the pelvis relax and the cervix, vagina and vulva dilate. The dam becomes restless and often separates from the herd. She may stand with her tail lifted and back arched and have a few early attempts at straining. Stage 1 ends when the water bag, also called amniotic sac, appears at the vulva.

**Stage 2** is the actual birth of the newborn.

With a normal presentation the front feet should be visible in the bag and come out first, followed by a head tucked in between the legs, muzzle first. 95% of ruminant newborns are presented in this way.

Once the newborn has appeared at the vulva, progress should be quick and steady until it has been completely pushed out. Once half of the newborn is in the birth canal the umbilicus becomes pinched and blood and oxygen supply from the dam is interrupted. This means the newborn relies on breathing for oxygen and if it isn't born fast enough, may suffocate or drown in it's own fluids in the uterus.



*A goat entering stage 2 of labour, with feet appearing in the bag.*

**Stage 3** is the expulsion of foetal membranes and uterine involution and contraction.

Usually the placenta is pushed out within a few hours of birth but can take longer. Call the vet if the dam is looking unwell, off her food or has very smelly membranes hanging out of her vulva.

### When to call the vet:

- Stage 1 labour is lasting longer than 4-6 hours
- The amniotic sac (or water bag) has been out of the vulva for 60 min or longer without a baby following
- You notice an abnormal presentation, like 2 feet presenting without a head or a head without feet
- There is no progress of a visible baby in more than 15 minutes
- The uterus has been pushed out after the newborn, this is called a uterine prolapse and needs to be treated immediately by a vet.
- If you have any concerns or are unsure if birth is progressing normally
- If the dam is unable to rise following a prolonged birth or large newborn

**For emergencies call us on 368 2891 or after hours 027 4444 332.**



## “Weed of the month”...

### This month featuring: - Bracken Fern -

#### Description:

The Bracken Fern plant sends up large, triangular fronds from a wide-creeping underground rootstock, and may form dense thickets. This rootstock may travel a meter or more underground between fronds. The fronds may grow up to 2.5m long or longer with support, but typically are in the range of 0.6–2 m high. The spores are contained in structures found on the underside of the leaf called sori. The linear pattern of these is different from other ferns which are circular and towards the centre.



#### Distribution:

Bracken Fern is abundant in New Zealand and, as it requires well-drained soil, is generally found growing on the sides of hills.

#### Species affected by Bracken Poisoning:

All species of ruminant animals can be affected as a result of ingesting excessive amounts of Bracken. Bracken poisoning is more common in dry conditions if limited amounts of pasture are available for grazing as well as late summer and early autumn.

Horses and pigs are also susceptible but will show different clinical signs to ruminants.

#### Clinical signs of Bracken Poisoning:

In ruminants, the majority of cases occur after prolonged feeding and clinical signs may be delayed for up to eight weeks following ingestion.

Affected calves show inappetance, depression and oedema and swelling of the throat which causes roaring noises and difficulty breathing. Calves frequently die in the acute stages of disease.



Adult cattle also develop inappetance and depression, along with a fever and widespread bleeding, which can be noticeable as pale gums, nose bleeding, black faeces or blood in the urine (redwater).

Sheep can develop a similar haemorrhagic syndrome to that in adult cattle, but may also develop blindness, weight loss and severe lethargy.

Ingestion of Bracken Fern can also cause Polioencephalomalacia (as discussed above).

## Diagnosis of poisoning:

This is usually based on history of prolonged access, however a blood sample from an affected animal can be helpful in diagnosing Bracken Fern poisoning.

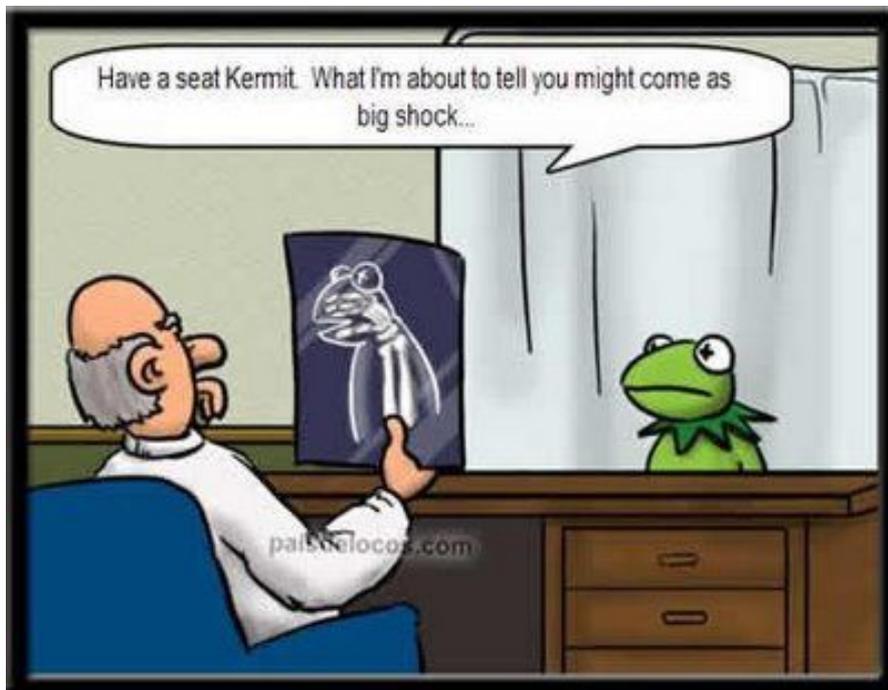
The differential diagnosis includes diseases like Leptospirosis, severe facial eczema, blackleg or salmonellosis.

## Treatment:

Many affected animals will die of secondary bacterial infections, often pneumonia, but if detected early, antibiotics can be given to prevent this. In cases with severe anaemia blood transfusions can be given to improve outcome.

The prognosis is poor in most cases and losses in sheep and cattle can occur for several weeks following an outbreak.

## Last but not least, for a bit of a laugh...



Looking forward to see you at the clinic or at your place,

*Step of the team  
@ LHVC.*

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