Welcome to the February Animail from Tauranga Vets. With some unusual weather patterns this summer you will have noticed some differences on your farm compared to this time last year! With warm wet weather around, you need to be vigilant with the prevention of facial eczema as fungal spores love these conditions. Warm moist conditions are also perfect for internal parasites to develop & infect our younger animals. In this newsletter, Kate covers some important information on Cooperia & resistance in young stock. Holly has written about Polioencephalomalacia a neurologic disease, and Tony talks about ryegrass staggers & polio.

**Cooperia**

From weaning to maturity is a critical period while the young ruminant develops all the systems for maximum production. Worms such as Ostertagia, Cooperia and Trichostrongylus can severely limit the potential life time production capacity. The signs of worm infestation can include illthrift, dirty tails, and potbellies.

Young cattle in NZ are commonly effected by a worm called Cooperia. An Agrisearch trial demonstrated the importance of using combination drenches to treat Cooperia. Only 5 out of 14 farms in the trial achieved greater than 95% efficacy (baseline for an effective drench) with oral moxidectin & none via injection or pouron methods. When trying to treat Cooperia this paper indicates the current recommendation of using a Levamisole containing product is valid. The other main parasite that affects young cattle in NZ is Ostertagia. The key difference between the two is that Cooperia live mainly in the lumen of the small intestine, while Ostertagia larvae actually cause damage living in the abomasal wall. Given that these are quite different types of worms, living in different parts of the body, with different drench sensitivity, a combination product is recommended. We stock a range of combination products either as oral, injectable or pour-on. Sustainable & profitable drenching involves choosing the best drench type, timing, & treatment regime. **We also have a set of electronic weigh scales for hire to help increase the accuracy of dosing.**

- Kate Heller (BVSc)

**Polioencephalomalacia: A Neurological Disease**

This is a neurologic disease which can affect cattle, sheep, goats, deer and alpacas. It is caused by thiamine deficiency but has also been associated with high sulphur intake or toxicities such as lead or sodium. It can present as individual cases or a herd outbreaks. Young animals are more prone although we have seen cases recently across a range of ages and species.

Acutely affected animals will show blindness and “star gazing” followed by recumbency, seizures and death. Mildly affected animals may initially stop eating, isolate themselves from the herd and show twitching of the face and ears.

If diagnosed early then treatment can be initiated. This is done by administering thiamine (vitamin B1). It is best for your veterinarian to assess the animal and administer the initial dose slowly in the vein. Subsequent doses can be given intramuscularly and may be continued for several days, even several times per day depending on the severity. If you notice that one of your farm animals is blind contact your veterinarian as soon as possible to arrange assessment and treatment.

- Holly Rabone (BVSc)
Ryegrass and Paspalum Staggers

Ryegrass and Paspalum Staggers are two fungal-neurotoxin induced diseases that cause tremors in cattle, sheep, deer, alpacas and horses. The clinical signs of these poisonings are similar and are usually seen when animals are disturbed and forced to move. The initial symptoms are subtle head tremors and skin twitching. This can progress to an obvious head nod, swaying, and a staggering motion which can lead to a stiff legged, jerky walk and collapse. Deaths can be accidental following injury such as drowning after a fall into water or being caught in fences.

Recognising affected animals and taking preventative steps against ryegrass and paspalum staggers is important; it prevents injury, and affected animals can show reduced production, such as poor growth rates and reduced milk production.

These diseases should not be confused with “Grass” staggers as this is due to a lack of Magnesium and is mainly seen in winter and spring in older cows and sheep.

Both of these diseases are usually seen late summer to early autumn, but are seen in different types of paddocks.

Ryegrass staggers occurs when animals grazing perennial ryegrass eat large amounts of a toxin, lolitrem B, produced by ryegrass endophyte, a fungus that grows inside the plant. This endophyte also produces another toxin that protects the plant from destruction by insects, in particular the Argentine stem weevil. Toxicity is increased as the animals graze lower, if they are forced to eat short grass they are more at risk of ryegrass staggers.

Paspalum staggers occurs when animals eat seed heads of paspalum that have been infected with an ergot fungus. These can be seen as dark masses that are larger than the normal seeds.

The key to treatment of both of these diseases is to remove the animals from the affected pasture SLOWLY AND QUIETLY and to provide supplementary feed such as hay, silage or nuts. Anecdotally treatments such as Nutrimol and Summer Tonic can be given to help affected animals. If removed from the toxic pasture and left quietly for a while, animals will usually fully recover.

Prevention is essentially stopping animals from getting access to affected pastures: Avoiding hard grazing of ryegrass and topping paspalum before the fungus can grow on the seeds.

Longer term management would include resowing pastures using ‘safe’ endophyte grass strains (like AR37) which have an endophyte that kills weevil but does not produce staggers toxin.

These two diseases are not the only neuropathies that animals can get, if you suspect that your animals may be suffering from one of these diseases or you have any questions about them or anything similar, please contact our vets through your nearest clinic.

- Tony Austwick (BVSc)

CHECKLIST

- Lepto vaccinations
- Drenching
- Face-Guard treatment
- Herd testing
- Pregnancy testing
- Tick control
- Flea & tick treatment for cats & dogs