

Yersiniosis need not be a killer

Some practical preventative measures

As a newcomer to deer farming I have just experienced a significant loss of newly-purchased weaner deer to a disease called yersiniosis. Are there any preventative management practices I can employ?

YERSINIOSIS IS one of the most important infectious diseases of farmed deer in New Zealand, and was more common in the early days of deer farming. Its prevalence varies from year to year and district to district, with this year reported as particularly severe in many parts of the country.

Surveys allow us to make some broad conclusions about the disease and its causes.

The disease is caused by a bacterium (*Yersinia pseudotuberculosis*) which is carried by virtually the entire range of domestic and feral livestock. Generally all animals remain healthy, although they excrete the organism in their faeces. The organism is susceptible to dry and warm conditions, but in winter — especially when it's cold, wet and overcast — will survive in soil, water and on pasture.

Most susceptible

Weaners, particularly those 4-9 months of age in their first winter, appear most susceptible. If they are healthy, well fed and not burdened by parasites or abnormal stress, then they will usually experience a very mild infection with no outward signs. However, if stressed at the time of infection, a proportion (and up to 20 per cent) experience an outbreak of disease, develop diarrhoea and may die if left untreated.

The scour is typically green, watery and smelly, and may contain blood traces. In severe cases no sign of scour may be seen on the hocks, but the animals typically are withdrawn from the herd — particularly on

feeding — and show inappetence, rapid loss of condition, dehydration and rapid recumbency before they die. Post-mortem examination reveals inflamed intestines and very bloody contents.

Factors

It appears a series of predisposing factors, in any or all combinations, can initiate an outbreak. These are:

- bad weather (cold and wet)

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- underfeeding and inadequate shelter
- transport, weaning, relocation, mixing mobs, long periods of yard work and handling
- concurrent disease (eg lungworm burdens)

Good management and stock husbandry can intervene at any and all of these critical points.

Classic situation

A classic 'danger' situation can be imagined where stock has been weaned in late May/June after the rut, Tb-tested and held for reading in the yard for three days, transported to a central selling area for auction sale, relocated to a new property and not perhaps fed properly for 24-36 hours. The stock has been introduced to a new herd of weaners — and then it has rained and been very cold for a couple of days.

Once a young deer (or post-rut stag for that matter) becomes wet and cold it has little or no fat reserves to call on, and its coat is not well insula-

ted. It will try to seek shelter and may lie low without feeding.

If this continues for even a short time, body heat compounds the situation and it is thought the intestinal movements slow down. The yersinia bacteria multiply and produce toxins which damage the intestinal lining; this leads to a rapid loss in body fluids, bleeding into the gut, dehydration and death.

But yersiniosis can be treated effectively if action is immediate and speedy. Veterinary advice and diagnosis must be sought, as most animals will respond well to appropriate antibiotics and fluid treatment.

Farmer's role

The deer farmer's role in prevention is simply to:

- Reduce stress in any form.
- Feed well normally and anticipate bad weather.
- Provide shelter.
- Follow a planned preventative animal health programme.
- Know the symptoms and call for veterinary assistance as early as possible.
- As a precaution, consider weaning and relocation pre-rut when the weather and feed conditions are kinder.

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Note: Yersiniosis is a zoonosis, ie you can catch it from your weaner or infected deer. If you develop a severe gut ache, similar to appendicitis, seek medical assistance and make it clear you have had contact with deer — especially scouring fawns. Always wash thoroughly and change clothes after handling scouring weaners. ▶

'Reader Cervus' is a question-and-answer column on deer farming matters. You ask the questions — and MAF Deer will supply the answers.

