



## YERSINIOSIS

By Jeff Fyffe BVSc, MRCVS, MACVSc

Until a very few years ago, Yersinia bacteria were not thought to cause disease in animals or man. Today Yersinia species are recognised as a very significant cause of disease in animals that can be transmitted to man.

There are two principal types of Yersinia:

1. Yersinia pseudotuberculosis
2. Yersinia enterocolitica

Yersinia pseudotuberculosis is the strain that causes disease in deer.

ALL deer at some stage in their lives (usually in the first few months) come in contact with Yersinia. The full blown disease state only comes about when the deer are subjected to STRESS. Up to 25% of all deer have this bacterium living normally in the gut.

This early exposure to Yersinia pseudotuberculosis in the first few months of life provides natural immunity.

The bacterium is very resistant to a wide range of temperatures. It can survive and multiply at range of +4°C to -1°C. It will still be alive after freezing at -20°C.

In man Yersinia pseudotuberculosis causes abdominal pain, septicaemia and arthritis.

### The Disease in Deer

Yersiniosis in farmed deer may appear as a peracute syndrome with few clinical signs before death. It may also be seen as an acute bloody diarrhoea.

- The disease may occur in outbreak form or single animals may be involved
- Affected animals are depressed, dehydrated and off their food. Untreated animals usually die
- The most successful treatment is Tetracycline. Often the whole herd will have to be treated
- Vaccination is available in New Zealand
- Prevention is most important and better than vaccination
- DO NOT allow young deer post weaning to become cold stressed

### Differential Diagnosis

- Salmonellosis
- Coli-bacillosis
- MCF

### Exotic Diseases

- Bovine mucosal disease/virus diarrhea
- Blue tongue/epizootic haemorrhagic disease
- Rinderpest