



## PARASITES EXOTIC TO AUSTRALIA 2

Compiled by Dr. Jeff Fyffe BVSc, MRCVS, MACVSc

### Elaphostrongylosis cervi

#### Geographic Distribution

*E. Cervi* occurs in Scotland, Holland, Czechoslovakia, Norway, Sweden, Soviet Union and New Zealand.

In New Zealand there is clear evidence that infection of animals released in the fjordland region of the South Island, has spread to other regions of the country due to stock movements.

Australia almost had an introduction of *E.cervi*. However our good quarantine procedures prevented it from happening.

#### Transmission

The life cycle is essentially the same as *P.tenuis*. The parasites migrate over the brain on their way to their final destination in the muscles of the front and hind limbs.

#### Other Species Affected

A wide range of cervid hosts can be affected by *E.cervi* including Red Deer, Maral, Sika, Reindeer, Roe Deer, and Moose. Fallow Deer are relatively resistant to full development, however the adult stage can be found in the brain.

#### Clinical Signs

Mild pneumonia is the first sign of the disease and if severe enough will affect growth.

The most important clinical effect of this parasite occurs when it is migrating in the brain. Symptoms include blindness, nervous disorders and hind limb incoordination. This must be differentiated from copper deficiency.

In New Zealand infected carcasses are sometimes condemned because of unsightly muscle damage.

#### Diagnosis

The diagnosis can be difficult since it requires finding the larvae in the faeces. Unlike *P.tenuis* the larvae are readily differentiated from lungworm.

#### Treatment

A variety of drenches have been used to treat *E.cervi* ranging from Fenbendazole to Ivermectin. None have been proven effective although temporary suppression of larval output has been achieved.

## **Significance**

The rigorous quarantine procedures for the importation of live deer from New Zealand has so far prevented the importation of *E.cervi* into Australia. Please be aware that ANY deer showing nervous signs, and in particular hind led incoordination, must be investigated for this parasite along with all other causes of ataxia.

### Reference:

Haigh JC and Hudson RJ 1993 In "*Farming Wapiti and Red Deer*" Mosby -Year Book Inc St. Louis, Missouri, pp 263-269.

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