Parasites in Deer

Parasites can lead to reduced growth rates in young deer and even death at severe parasite loads. Young farmed deer are particularly at risk from internal parasites during the post-weaning autumn period.

Which parasites?

The two main types of parasites affecting deer in New Zealand are lungworms (*Dictyocaulus eckerti*) and gastro-intestinal worms in the abomasum (*Ostertagia*-type), small intestine and large intestine. In a few areas, liver fluke (*Fasciola hepatica*) and tissue worms (*Elaphostrongylus cervi*) can also occur. Lungworm are very common in weaners and while small numbers appear to cause little or no problem, moderate numbers can lead to ill thrift and reduced growth rates and large numbers can cause sudden death by physically blocking the trachea (windpipe). It is believed that significant burdens can predispose to other diseases such as yersiniosis.

Gastro-intestinal (GI) parasites, especially abomasal worms, can result in scouring and ill thrift, reduced growth rates, the “fading elk syndrome” and death.

How do I know if my deer have parasites?

Lungworm
- Heavy breathing
- Coughing
- Poor weight gain
- Lungworm shed first stage larvae in faeces

Gastrointestinal parasites
- Scouring
- Reduced weight gain
- Weight loss
- Stomach and gut worms shed eggs in faeces

Risk factors contributing to infection
- Pasture contamination from infected deer
- Calving dates—early v late
- Pre and post rut weaning
- Class of deer (yearling, MA hind etc)
- Genotype (red < hybrid < wapiti)
- Climate—parasite larvae need warm moisture conditions to develop, while droughts, high temperatures and frosts kill them
- Stocking rate

Management to reduce challenge
- Pasture type, height and grazing residuals
- Use of browse or crops
- Topography
- Treatment history of hinds
- Parasite / anthelmintic history of the farm
- Provide ‘clean’ pastures
  - new pastures
  - after cutting for hay or silage
  - use paddocks previously grazed by sheep or cattle (Johnne’s free)
- Manage pastures and grazing to leave high residuals
- Alternate pasture species—red clover, lucerne
- Reduce stocking rates

Controlling parasites—what you need to know
- understand the parasite lifecycle
- test to identify potential problems early—FEC /FLC
- don’t wait for clinical signs in autumn—ACT early
- use effective injectible or oral anthelmintics, rather than pour-ons
- manage to reduce parasite challenges