

# Liver Fluke in cattle

Neil Roberts

Sarah Swainson

Dalehead Vet Group

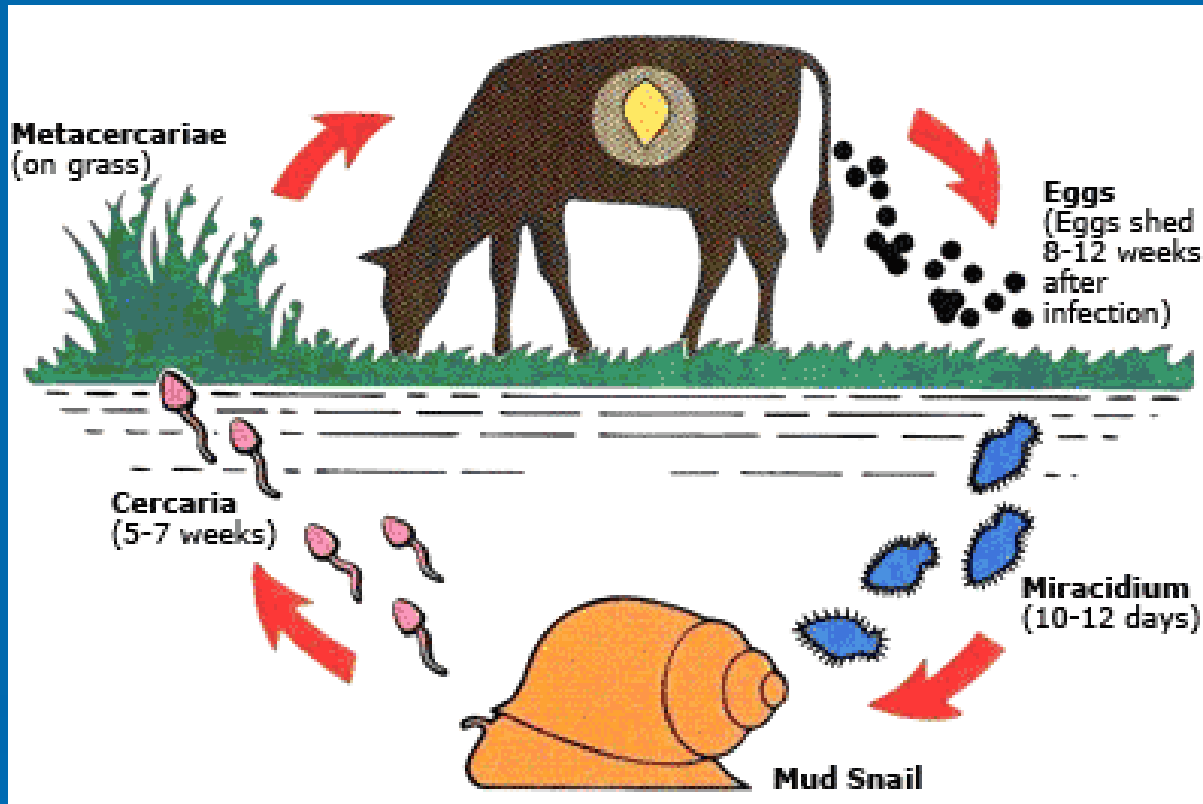


# Thirsk VI Centre newsletter

## October 2007

- Acute fluke infections have been diagnosed at Thirsk and Penrith. This is an early indication of fluke infection for cattle and sheep in the next 3 months. Practitioners may wish to remind farmers of the risk of infection, bearing in mind the very wet summer that we have had.

# Life cycle of Liver Fluke



- Eggs only develop at temperatures over 10°C
- Mudsnaails thrive in wet environment and multiply in warm weather
- Metacercariae survive on pasture over 1 year

# Fluke life cycle inside cow

- Ingested flukes migrate through gut wall and penetrate capsule of liver
- Young flukes migrate through liver for 8 weeks and then reach bile ducts
- Adult flukes in bile ducts are active blood suckers and lay eggs after 4 weeks
- Entire life cycle in cow takes 12 weeks
-

# Timing of fluke infections in cattle

- Overwintered eggs on pasture start to develop when weather warms up in spring
- Warm, wet summers favour mudsnails
- Immature flukes eaten on grass mid-summer
- Immature flukes migrate through liver for 2 months and become egg laying adults 3 months after ingestion


# Prevalence of fluke in cattle in this area

- Dung samples – presence of fluke eggs indicates current infection with adult flukes
- Bulk milk or blood samples – presence of antibodies indicates prior exposure in previous 9 months
- Abattoir reports for cattle and sheep
- Fluke forecasts based on summer temperatures and rainfall

# Symptoms of fluke infestation

- Diarrhoea and weight loss
- Bottle jaw and anaemia
- Reduced feed conversion efficiency
- Reduced milk yield and quality
- Increased susceptibility to Salmonella
- Increased metabolic disease around calving

# Treatment considerations

- Efficacy against early immatures, immatures and adult flukes – timing of treatments
  - Drench or injection (no pour-on)
  - Meat and milk withdrawal
  - Fluke or fluke and worm treatment
  - Cost
- 



# Treatment options

- Albendazole – Valbazen, Endospec, Albex
- Clorsulon – Ivomec Super
- Closantel \_ Closamectin
- Nitroxynil \_ Trodax
- Triclabendazole \_ Fasinex, Tribex,  
Combinex