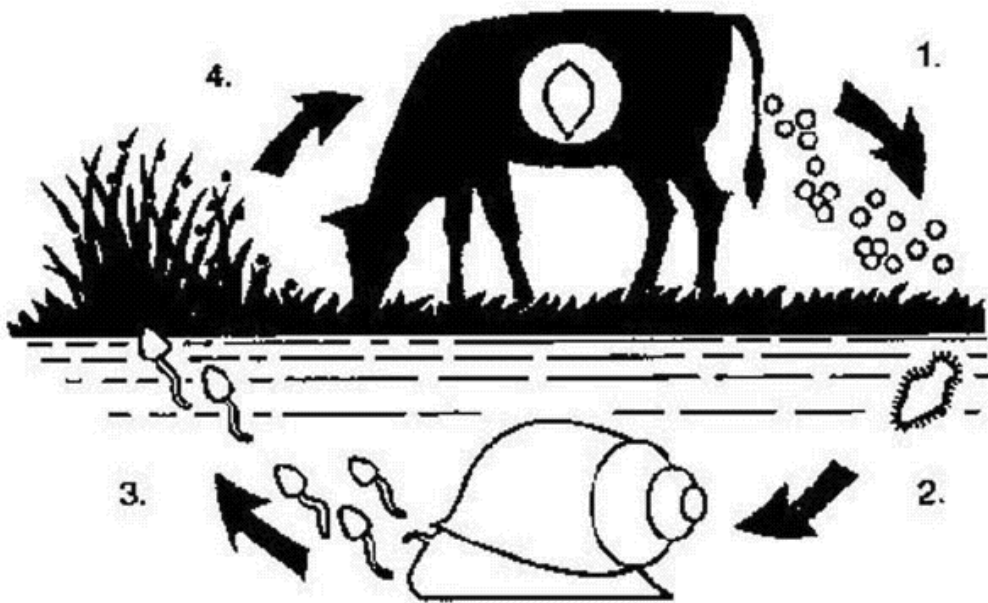


NADIS Cattle Disease Focus - Liver fluke infection (Fasciolosis)

What is Liver Fluke

The liver fluke is a flat leaf-like parasite found in the bile ducts of the liver. The life cycle of the fluke is very complicated. A simplified version is shown below.



- 1) The adult liver fluke in the liver of the cow produces eggs which pass onto the pasture.
- 2) These eggs hatch in warm damp conditions to produce mobile larvae which then infect one species of snail.
- 3) The fluke develops in the snail until developing into another swimming stage which settles on the pasture
- 4) This then develops into a highly resistant non-mobile stage which once eaten by the cow hatches and migrates to the liver

The signs in the cow are all due to liver damage, with the symptoms varying depending on number of flukes present in the liver.

The disease is commonest in the wetter western areas of the UK and Ireland with the levels of infection and disease being very dependent upon the rainfall from May to October. Within the wet areas of the UK, the distribution is entirely dependent upon the presence of the snail host. No snail, no fluke.

Clinical Signs

In the UK liver fluke tends to be more severe in sheep and goats can do considerable harm to cattle. In cattle, liver fluke is normally a sub-acute or chronic disease

The principle signs are:

- ◆ Progressive weight loss
- ◆ Reduced milk yield

Less common signs include:

- ◆ Bottle-jaw
- ◆ Abdominal swelling due to accumulation of fluid (ascites)

Diagnosis

- On the clinical signs described above
- Faecal egg count, presence of any eggs is suspicious of fluke infection
- Your veterinarian can also do blood tests which show the extent and severity of liver damage

Treatment

- A large number of anthelmintics are available for treating fluke in cattle. As fluke tends to be chronic, most will be effective, but seek veterinary advice if you have not treated fluke before

Prevention

- 1) Where fluke is present, excluding cattle from typical snail habitats (low lying we areas, margins of ponds) can reduce fluke infection but complete snail avoidance is impossible as it is very difficult to identify all snail sites
- 2) Drainage eliminates the snail and offers an effective means of control, indeed it is probably responsible for the large fall in cases of fluke since the 1970's.
- 3) Chemical control has been used to reduce snail numbers but is no longer available.
- 4) Routine worming of cattle in December/January should control fluke in average rainfall years. If the rainfall is heavy an additional dose for out-wintered cattle may be required in May

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The Meat and Livestock Commission is a sponsor of NADIS (National Animal Disease Information Service), which is a network of 40 veterinary practices and 6 veterinary colleges monitoring diseases in cattle, sheep and pigs in the UK.