

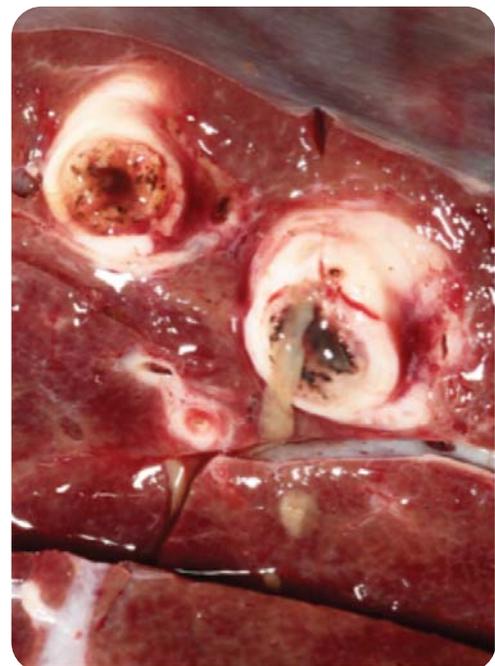
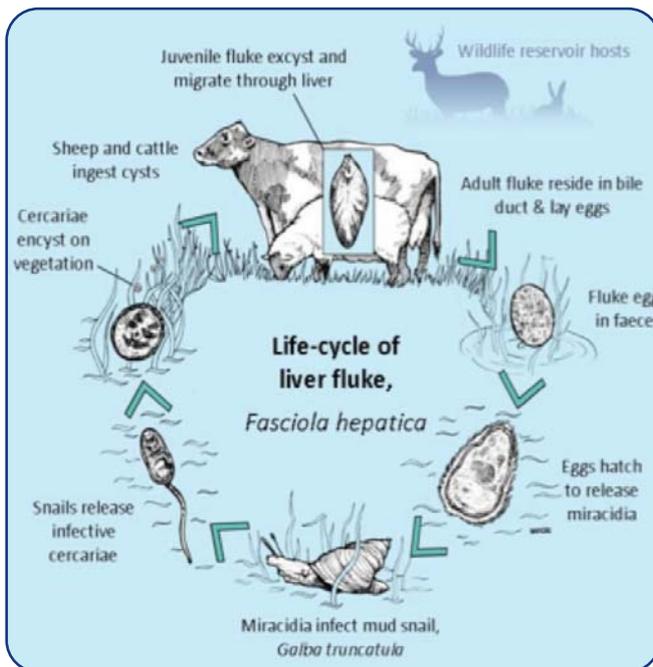
Feedback to Farmers – Controlling Liver Fluke

Liver Fluke Disease

Liver fluke live in the bile ducts of cattle and sheep livers and can lead to weight loss (anaemia) and reduced “weight gain” which will result in longer finishing periods and increased feed and labour costs. A moderate infestation of fluke in cattle can consume 0.5 litre of blood per week. The treatment of fluke has proven to be cost effective when compared to the reduction in revenue due to poor performance, losses in production and the rejection cost of infected livers (which are not allowed to enter the human food chain).

It is important to work with your vet and develop liver fluke control strategies specifically tailored to cover all sheep and cattle on your farm.

Liver fluke disease has been estimated to cost Scottish cattle producers an average of £20 to £25 per infected beast. In addition, there is the loss to the value of the liver and the increased disposal cost.



CLINICAL SIGNS

Your slaughterhouse will be able to demonstrate the effect the disease has on livers. The fluke resemble small leaf-shaped or similar, circa 25mm long and 10mm wide - see above right.

Acute fluke is caused by the migration of large numbers of juvenile flukes from the liver to the bile ducts. The resulting liver damage can cause sudden death in lambs and sheep in autumn and winter. Fortunately, acute fluke is relatively rare in cattle.

Chronic fluke is caused by the establishment of adult flukes in the bile duct, usually seen in late winter/early spring. The blood-feeding habit of the adults can cause severe anaemia and poor FCE productivity, reduced fertility, poor wool quality in sheep, reduced milk yield/quality in cattle, depressed lambing/calving rates and lower birthing weights.

PREVALENCE

Liver fluke disease is on the increase in Scotland, in both sheep and cattle. Where disease was previously seen only in the west and south-west it has now spread to the east and north-east. A number of factors may be responsible for this:

- **climate** – increased rainfall and higher temperatures have extended the parasite season
- **flukicide resistance** – there have been increasing reports of resistance to commonly used flukicide, particularly with triclabendazole, the drug of choice for acute fluke
- **animal movements** – there has been increasing movement of animals, and hence their parasites, across the country over the past few years
- **environmental change** – encouragement to retain or introduce rural wetlands, these provide ideal habitats for snails and fluke

The good news is that, due to its dependence on climatic conditions, liver fluke disease can be predicted. There are a number of parasite forecasting systems available to producers including the QMS-sponsored NADIS website at <http://www.nadis.org.uk>

PREVENTION

If you suspect you have a fluke problem, your vet can diagnose past or current infections using faecal, blood or milk samples. Your abattoir may also be able to supply information about the fluke status of the animals you send for slaughter.

- Test the effectiveness of your flukicide using post drench faecal egg count efficacy checks
- Avoid grazing livestock on heavy, low-lying pasture – this is ideal snail/fluke habitat
- Adopt a quarantine strategy – your vet or health advisor will be able to provide advice
- Remember, no single control strategy is likely to work on its own, you may need an integrated approach including grazing management, drainage and flukicide treatment
- Remember to include cattle in any control programmes aimed at sheep flocks on mixed farms. Cattle represent a significant maintenance host for the parasite

CONTROL

The main way to treat and control liver fluke disease is by injection or oral drenching with a flukicide. There are a number of flukicides on the market that target the various growth stages of the parasite. Use the right drug at the right time and don't over-use any particular product. For acute fluke infections, a drug which is effective against immature fluke is required, whereas, for chronic fluke, a flukicide for adult parasites is required.

Use a flukicide rather than a combination wormer as part of a specific fluke control strategy and remember to include cattle in control programmes aimed at sheep flocks on mixed farms.

Seek advice from your vet before deciding on a strategy and be sure to check the withdrawal period for meat – it can be up to 60 days for some flukicides.

