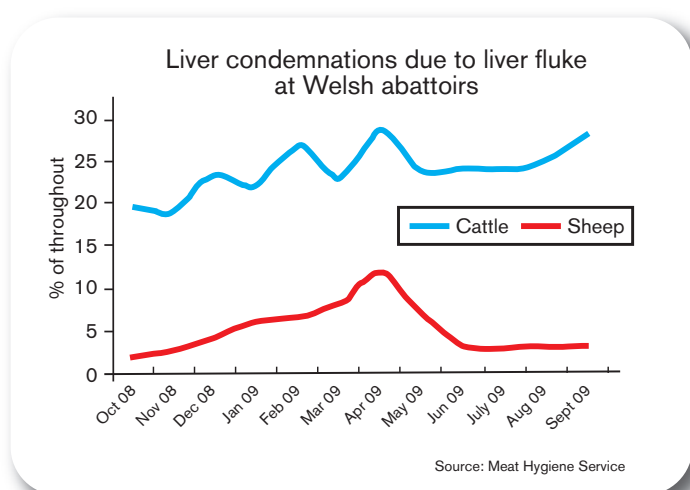


Liver fluke can have a major effect on the performance of cattle and sheep. Current estimates suggest that fluke can reduce the market value per finished animal by 10 to 15%. Taking action to control the damage caused by liver fluke will help reduce liver condemnations in abattoirs and improve the performance of your animals.

Liver fluke (*Fasciola Hepatica*) is a flat leaf-like parasite found in the tissue and bile ducts of the liver. Adult flukes only measure 2-3cm but cause severe damage to the cattle they infect, costing farmers millions of pounds each year due to lowered production.



Condemnations of livers as a result of fluke damage in cattle increased steadily between October 2008 and September 2009. Data from Welsh abattoirs show that during this time period an average of one in every four cattle livers were condemned as a consequence of fluke damage. The wet spring/summer experienced would be a contributory factor for this. Condemnations of livers from sheep peaked in April 2009 with nearly 12% of the sheep throughput having liver damage due to fluke.

Is liver fluke disease a problem on your farm?

Fluke affects both sheep and cattle so a problem with fluke in sheep on your farm is a good indication that your cattle could also be infected and vice versa.

Chronic fluke infections are usually seen in late winter/early spring. The damage to the walls of bile ducts and the blood-feeding activity of flukes can lead to anaemia. Chronic infections can lower weight gains and reduce milk production. They also predispose cattle to metabolic diseases. Liver fluke disease may be diagnosed from the clinical signs but a vet can take blood tests to look for liver damage or check faecal samples for fluke eggs. Ask your abattoir to let you know if there is evidence of fluke in the livers of the cattle you send for slaughter.



Liver fluke

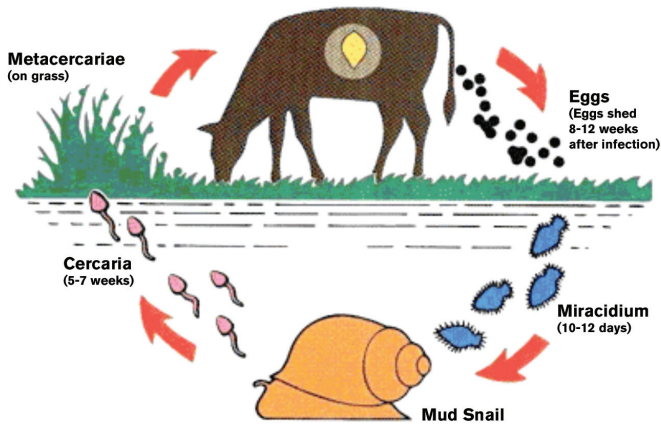
Cost of liver fluke infection

Losses due to condemnation of livers are only a small part of the overall costs of fluke infection. The main losses caused by fluke often go unrecognised and include:

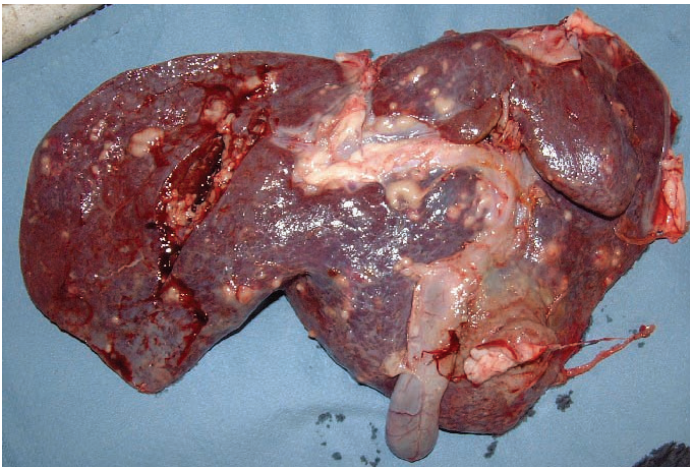
- Reduced live weight gain
- Lower feed conversion efficiency
- Reduced fertility
- Lower milking ability
- Occasional deaths due to acute or untreated chronic infections

Liver fluke life cycle

The liver fluke life cycle is complicated. Flukes live in the bile ducts and produce eggs which are passed out in the faeces. These develop into tiny worms which are picked up by mud snails (intermediate hosts). The flukes multiply in the snail and then pass out of the snail, settling onto nearby vegetation and forming cysts. These cysts which are full of parasites can persist for up to a year in the right conditions. When the cysts are ingested by sheep and cattle the young flukes move to liver where they cause considerable damage.



Mild winters, plus the warm and wet spring, summer and autumn seasons favour snail survival and so increase the season of snail activity and fluke development. Some farm management practices can also contribute to the problem. For example grazing wet land during high risk periods.



Example of an infected liver

Reducing the risk of disease

Don't import fluke. Develop an effective quarantine strategy for any new stock. Treat bought-in livestock with a flukicide that kills immature fluke and, if possible,

keep treated imported animals on drier pastures or housed for 3-4 weeks.

Wet land. Try not to graze sheep and cattle close to muddy ponds or ditches or on heavy, low-lying pastures. If possible, fence off boggy areas and try to improve drainage. Complete snail avoidance is impossible as it is very difficult to identify all snail sites.

Treatments. Use flukicides that are active against fluke during the autumn and early winter. Treatment will depend upon when your cattle are likely to be housed and the effectiveness of particular flukicide against the fluke present on your farm. Remember that some flukicides are effective against immature flukes and others are only effective against adult flukes.

Beware. Resistance to fluke treatments is an emerging problem. Regularly monitor the effectiveness of the flukicides used and adopt a rotation of drugs to prevent using one chemical family of flukicide for several years. Seek advice on the most suitable anthelmintic and other control measures from your veterinary surgeon.

Liver fluke forecasts

The risk of severe outbreaks of liver fluke increases following wet springs and summers. Forecasting systems help to predict the likely incidence and severity of liver fluke based on data from the preceding months. Accurate forecasts can normally be made by the end of the summer and 'early warnings' may be issued in the farming press. HCC is supporting the provision of regular fluke and parasite forecasts through NADIS (National Animal Disease Information Service) to help farmers plan their fluke and parasite control strategies.

Further information about the control of liver fluke can be obtained from the Animal Health section of the HCC website (www.hccmpw.org.uk).