



With housing around the corner, lots of farms are getting ready to fluke-dose all their cattle. But is this really necessary?

For those that currently aren't treating for fluke, we need to make sure this is not impacting your cattle's health.

### The disease

In cattle, chronic "fasciolosis" (liver disease) is the most common form of the disease and is thought to cost the UK cattle industry around £40.4 million annually. In youngstock this disease can lead to reduced feed conversion rates, poor growth and reduced carcass value.

In beef suckler herds this is associated with reduced fertility and milk quality, weight loss and predisposition to secondary infections. It is also important to recognise the effect on the performance of breeding bulls. Diarrhoea (mainly during the winter) can be noticed and is the most known symptom, however it is not always present.

### Life cycle

1. Adult fluke live in the bile ducts in the liver of a cow and shed eggs, which are passed in the faeces. These eggs are shed approx. 10-12 weeks post initial infection and end up in the environment.
2. The eggs hatch after 2-4 weeks and *miracidium* are released. This process happens faster in warm weather conditions. These *miracidium* need to be near water in order to get to the **mud snails**, who play an essential part in the liver fluke cycle.
3. Inside the snail, these develop for about 6 weeks and then are released as *cercaria* in the water. They swim towards the waterside and sit in the grass.
4. They become infective cysts (*metacercariae*) and these can survive for several months and can even overwinter in the environment. These are eventually ingested by grazing animals.
5. In the cow, these cysts will hatch in the small intestine and migrate to the liver. Juvenile fluke migrate through liver tissue and grow until they reach the bile ducts. This is where the adults settle and start shedding eggs.

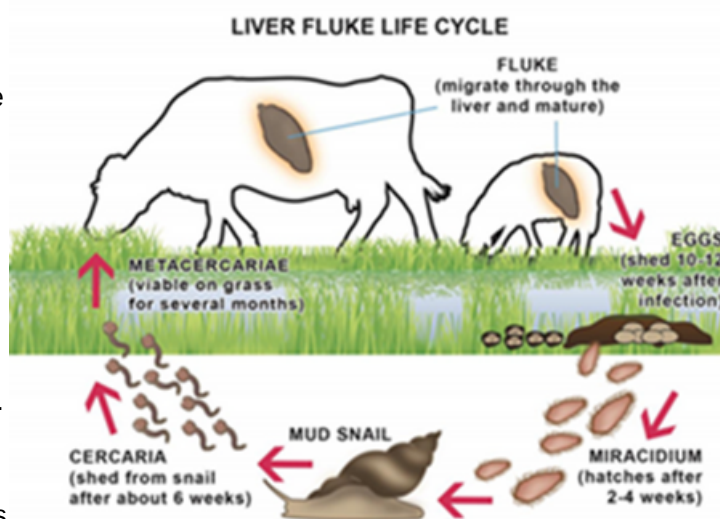


Figure 1. Liver fluke life cycle. (from COWS Technical Manual For Veterinarians and Advisors: Liver Fluke, 2013).

### Meetings coming up...

BEEF MEETING -  
ECONOMIC FEEDING OF BEEF CATTLE,  
TUESDAY 18TH OCTOBER  
@ KITES FARM, GL12 8JY



MEDICINE HANDLING COURSE  
@ THE PRACTICE ON  
THURSDAY 24TH NOVEMBER



11AM TO 1PM  
(SUITABLE FOR BEEF AND SHEEP)

## Diagnosis

There are 3 options to diagnose a liver fluke infection in cattle:

- Faecal Egg Count (FEC):** Has a low sensitivity (30-70%: big chance of missing fluke infection due to intermittent shedding or early infection)- the more faeces the better (ideally over 50g). Eggs are only shed and detected from 10-12 weeks post initial infection onwards. Pooled samples are a useful monitoring tool.
- ELISA Ab (bloods & milk):** Early detection of exposure, from 2-4 weeks post infection. Shows exposure, so can be positive up until 10 weeks post treatment. Most useful as an early indicator of infection in a season using first season animals.
- Copro Ag ELISA (faeces):** Second earliest indicator of infection, from 6-7 weeks post infection. Good indicator of treatment outcome. Only suitable for individual samples.

Fluke infection can also be picked up in the abattoir or on a post-mortem.

For some farmers, administering flukicides at housing is a habit, but this is not automatically necessary and could lead to resistance building up. It is worth discussing fluke testing around or after housing with a vet in order to determine whether a fluke treatment is actually necessary.

Active flukicide	Administration route	Stage of fluke killed	Product name
Triclabendazole	Oral	2+ weeks	Combinex* Fasinex 240 Endofluka
	Pour-on	6-8+ weeks	Cydectin TriclaMox*
Closantel	SC injection/Pour-on	7+ weeks	Closamectin pour-on*
Nitroxynil	SC injection	8+ weeks	Trodax
Clorsulon	SC injection	Adults only	Bimectin Plus* Ivomec Super*
Oxyclozanide	Oral	Adults only	Zanil Levafas Diamond*
Albendazole	Oral	Adults only	Endospec* Albex*

## Treatment

Different treatment options are available. The only flukicide that kills immature fluke (2+ weeks) is Triclabendazole, however, there is an increasing amount of resistance towards Triclabendazole, so it is important to avoid this flukicide in subacute cases.

Different flukicides kill different stages and therefore it is important to be aware of what stage your flukicide kills, as it will influence the ideal time of treatment post housing. e.g., if Endospec is used post housing, it is important to know that it won't kill immature fluke that might be present in the first 10 weeks.

\*These products are a combination of a flukicide and a wormer so it is advised to only use these when worming is indicated

## Control and prevention

Control strategies are farm and weather specific. The main prevention method is to avoid wet pastures, which are a high risk for snail populations. Improving drainage in wet pasture will also reduce the risk. Farm history, yearly risk and parasite forecast can be helpful in determining whether treatment is in place.

Blood sampling in Autumn can help in determining the presence of fluke in the herd and aid in the decision to treat. Post-housing FEC can also be performed in the winter followed by a non-triclabendazole treatment if indicated.

Newly bought in stock are a big risk for introducing fluke in a low-risk herd. Therefore, it is important to quarantine, test and treat all bought-in animals.

Feel free to give us a ring if you have any questions.

All the best, Fien



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T: 01666 823035 Option "1" for visits or enquiries, "2" for medicines or shop, "3" for TB testing