



Farm news

October 2025

Liver fluke – a rapidly adapting parasite and how we can test for it Chris Daykin

Liver fluke (*Fasciola hepatica*) is a rapidly adapting, highly pathogenic parasite commonly found in the liver and bile ducts of cattle, sheep, goats and camelids. The disease it causes (Fascioliasis) is a threat to animals of all ages with little to no evidence of natural protective immunity. Prevalence for infection has increased over the past 20 years in the UK due to climate change increasing favourable conditions for the intermediate host (mud snails), increased livestock movements and changing farming practice.

Fluke risk varies from year to year, farm to farm and even field to field. It is now more unpredictable due to the changing seasons. The only way to understand fluke risk and make an informed decision now is to test, don't guess. The reason we advise testing before treating is because it avoids unnecessary and mistimed treatments, helping to safeguard animal health and welfare. Looking to the future, liver fluke has major economic costs and significant impacts on reducing greenhouse gas emissions from the agricultural sector.

LIVER FLUKE LIFE CYCLE

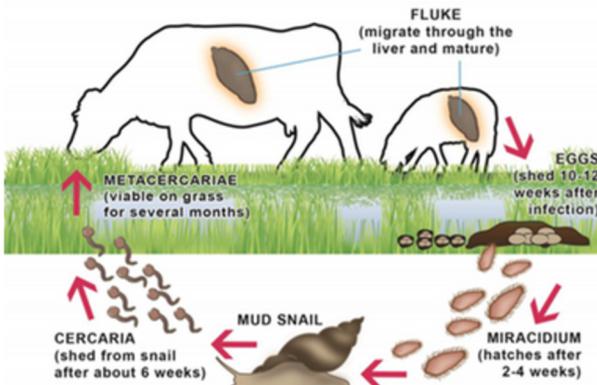


Diagram and image created by COWS for educational purposes (www.cattleparasites.org.uk)

Liver fluke has a complex life cycle that is dependent on the intermediate host, the mud snail *Galba truncatula*. Adult flukes will produce hundreds of eggs a day, passed out onto pasture in the faeces of the infected mammalian host. Fluke eggs require moisture and a temperature above 10°C to continue the life cycle. This means that they can otherwise lay dormant over winter until warmer weather arrives. When the temperature increases, a larval stage (miracidium) hatches 2-4 weeks later, homing in on the mud snail intermediate host. Once they have entered the snail, they undergo two further developmental stages (sporocysts and redia) before being passing out again onto the pasture as cercariae. In ideal conditions, this process takes about 6-8 weeks. Out on the pasture, they encyst (forming metacercaria), waiting to be eaten by the mammalian host. They survive for many months on the pasture, some of them surviving from autumn to the following spring. Once eaten, the immature flukes pass through the intestinal wall migrating to the liver, causing significant damage as they do so. It takes 10-12 weeks from ingestion for them to start laying eggs as a mature adult fluke.

A perfect home for a mud snail (*Galba truncatula*)

The ideal habitat for the mud snails is wet (but not too wet), with bare mud and open ground (not shaded by long vegetation). Typical areas where the snails can be found include cleared drainage ditches, banks on the sides of streams or ponds, soft ground around leaking water taps or pipes.

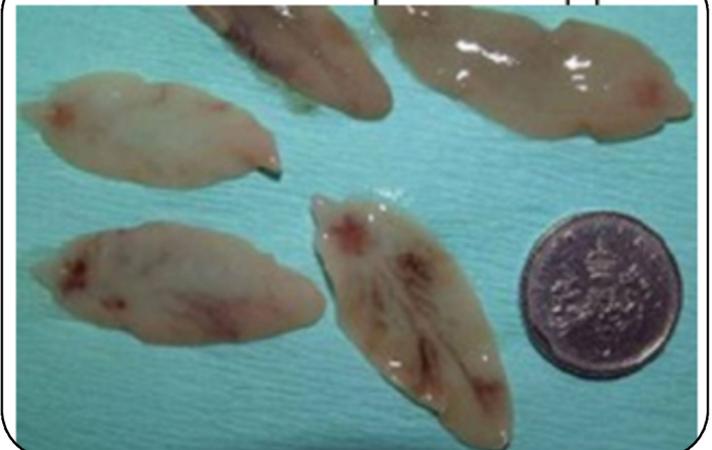
Clinical signs of liver fluke

Liver fluke disease occurs in acute, subacute or chronic form, depending on the numbers of infective metacercariae they have consumed (and over how long). Typically, acute liver fluke in sheep had been seen in late summer and early autumn, with chronic liver fluke showing signs over winter and spring. However milder and wetter winters mean that acute liver fluke disease could appear throughout more of the year.

Large numbers of metacercariae ingested by sheep cause sudden and severe acute signs include anaemia, dullness, difficulty breathing and sudden death. Subacute signs include rapid weight loss, anaemia, swelling under the jaw. Chronic liver fluke symptoms in sheep include progressive weight loss, anaemia and swelling under the jaw.

Acute liver fluke is rarely seen in cattle in the UK as their livers are bigger than sheep livers and are more resistant to damage. Signs of chronic liver fluke in cattle include reduced milk yields, reduced weight gain, poor fertility, anaemia and swelling under the jaw. Other noticeable production impacts include a 10% reduction in daily liveweight gain and extra time to finishing.

Adult liver fluke compared to a 5p piece



On farm testing

We have had access to three different on farm tests: serology (blood or milk sample), faecal egg counts and faecal coproantigen. Serology (milk or blood sample for antibodies) is a useful test to detect acute infection or historic exposure on farm as antibodies are produced 2-4 weeks after infection. Faecal egg counts detect the presence of mature flukes due to the presence of eggs. So in reality, this only detects the infection 10-12 weeks after it initially occurred. Therefore, it should only really be used later in the autumn when it is more likely that adults are present. A pooled sample can be a cost-effective way to assess the presence of adult fluke. Faecal coproantigen detects the presence of feeding immature liver flukes (so from 7 weeks post infection). These tests are not pooled because the sensitivity of a pooled test could lead to a false negative result.

When wanting to assess the infection risk from this season, antibody levels from a proportion of 'sentinel' first season grazers (this year's lambs and spring born calves) are the best tools to detect what is occurring on farm. These sentinels must have been exposed to 'at risk' grazing. Once infected, the antibodies produced against liver fluke persist in the animal. A previous infection in older animals will cloud results.

In older animals, taking faecal or blood samples in late autumn or winter can be used to assess the risk of chronic liver fluke. This is especially useful in cattle where a decision needs to be made as to whether to treat the housed animals for liver fluke or not.

It has been a particularly bad year for haemonchus (barber's poleworm) this year. Haemonchus can show similar symptoms to liver fluke (swelling under the jaw, anaemia, weight loss). Testing for liver fluke is an important way to differentiate between these two parasites.

A new lateral flow test that you can do on farm

Norbrook have produced a lateral flow test for liver fluke. It is a cost effective, pen-side test that you can do yourself (similar to calf scour tests). It is a rapid way to determine the need to treat for liver fluke at a key time of year, used as a complement to our other diagnostic tools. It detects antibodies to liver fluke in both cattle and sheep within 10 minutes, using a drop of blood from an ear prick. For comparison, it takes up to 6 days for blood sample results to come back from the lab. In sheep, we would advise using this for assessing acute risk as well as sentinels. In cattle, it can be used 2-4 weeks after housing or at dry off. When purchasing new stock it is also a rapid way to assess previous exposure.

If sending antibody bloods to the lab, this would involve a visit from us, our time on farm as well as the cost of the test. If doing a pooled antibody test for 10 animals, this could cost £170. If you purchased a 10 pack of lateral flows and did it yourself, it would be cheaper. If unsure on how to use these lateral flow tests, you could make good use of the Animal Health and Welfare Pathway and use that funding for us to come out to train you in its use and interpretation!

Upcoming Events..



NEONATAL SCOURS AND THE IMPORTANCE OF TRANSITION MILK

CALLING ALL BEEF SUCKLER AND DAIRY FARMERS!

JOIN US FOR AN ON FARM MEETING WITH A TOUR OF A WELL-MANAGED BEEF FARM IN NORTH LEICESTERSHIRE WITH FOOD AND PRESENTATION AFTER AT THE LOCAL RUGBY CLUB.

15TH OCTOBER 2025 3PM FOR A 3:30PM START

KINDLY HOSTED BY THE WOODINGS FAMILY AT GRANGE FARM, ST MARY'S LANE, COALVILLE LE67 3HS

FREE TO ATTEND BUT BOOKING REQUIRED. PLEASE CALL US TO RESERVE YOUR SPACE 01332 294929

KINDLY SPONSORED BY 





Red Tractor Approved 'Mastering Medicines' Course

22nd October 2025

Dairy 10.00-12.30
Beef and Sheep 14.00-16.00

By attending this course, it allows you to fulfil your Red Tractor Farm Assurance and dairy contract requirements. For our dairy clients, at least one person on farm, who is responsible for administering medicines must have undertaken this training within the last 5 years. However, we would also welcome anyone who wants to refresh their knowledge as well.

Cost per person: £35.70 + VAT

To book call us on 01332 294929







Practice Hog Roast

12th November 2025 7pm at our Markeaton Practice DE22 4NH

FREE to attend however booking essential for catering requirement's.

Please call us on 01332 294929 to reserve your space.





Farm and Equine Centre

Markeaton Lane, Markeaton, Derby DE22 4NH
01332 294929

Alfreton
01773 304900

Pride Veterinary Centre
01332 678333

Allstree
01332 554422

Shelton Lock
01332 700321

Hilton
01283 732999

Stapenhill
01283 568162

Langley Mill
01773 304914

Mickleover
01332 518585

Oakwood
01332 666500