



Farm news

November 2023

Welcome to our two new vets!

Erin



Erin is from a rural town in Illinois, USA where she grew up on a pedigree Hereford farm. She attended the University of Illinois and received a BSc in Animal Science before making the move to the UK to attend veterinary school at the University of Glasgow. She graduated in June 2023 and started work this fall.

Erin is passionate about learning and is excited to get stuck in with all aspects of farm medicine. She's particularly keen about sustainability, herd health, and has a soft spot for goats.

In her spare time, Erin is typically exploring Derbyshire, FaceTiming her mom, or trying to convince herself she doesn't need a dog!

Fran



We're also delighted to welcome Francesco onto the team – he'll introduce himself next month, so watch this space!

Liver fluke in cattle -Chris Daykin



What is it?

Liver fluke disease is caused by a flatworm parasite (*Fasciola hepatica*). This parasite is initially carried by the mud snail before being eaten by cattle or sheep. Once ingested, the immature fluke migrates from the small intestine to the liver and bile ducts. As the liver fluke migrate through the liver, they can cause severe damage to the tissue. In sheep, acute liver fluke signs include anaemia, dullness, difficulty breathing and sudden death, while signs of chronic liver fluke include 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, however, are common and include reduced milk yields, reduced weight gain, poor fertility, anaemia and swelling under the jaw.

Do we need to treat?

Liver fluke is becoming more difficult to predict due to the changing climate. Milder, wetter winters and wetter summers are both contributing to an increased risk of liver fluke. To be able to better predict this, and to reduce the risk of anthelmintic resistance, we can use both blood and faecal sampling to assess the risk of liver fluke.

Unfortunately, the first signs of an acute liver fluke problem in sheep flocks are often sudden death and severely ill animals in the autumn. Post-mortem examinations can give a definitive diagnosis, although blood samples from first season grazers can help assess the risk.

Both faecal samples and blood samples taken in late autumn/early winter, at housing, 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.

What do we treat with?

Triclabendazole-based products are the only product available to treat the very immature fluke, but there is increasing resistance across the UK. This is why we try to reduce the use of triclabendazole where possible. A wider range of products can be used to treat adult flukes.

Combination products (aimed at both roundworms and fluke) are often used at housing, but these can promote resistance if either the wormer or flukicide component isn't really needed and is therefore used unnecessarily. You can help reduce the risk of anthelmintic resistance by testing your herd/flock and only treating for liver fluke if there has been exposure. This could also save you money - for example, you could save up to £5 per cow and up to 60p per sheep by treating for roundworms only, rather than both roundworms and fluke.

Talk to your vet or ring into the practice to discuss this further.



Gastrii Fontanales, the mud snail that serves as the main intermediate host of Fasciola hepatica in Europe. Image by Peter Oller & Judith Pöhl, licensed under the Creative Commons Attribution 3.0 Unported license.



An adult Fasciola hepatica, the cattle and sheep liver fluke. Image courtesy of F. FlukeMan, and licensed under the Creative Commons Attribution-Share Alike 2.5 Generic, 2.0 Generic and 1.0 Generic license.

Nature's Own Fly Control – Jessica Swinson



One of the many Vet Tech services we have to offer... Biological fly control for your farm. The population of nuisance flies on a farm can be controlled by regular introduction of this fly parasite. Biowasp contains two species of parasitic mini-wasp (*M. Raptor* and *S. Cameroni*). From approximately 9000 species of naturally-occurring wasp, they are the most commonly used species in biological fly control globally.

The mixture of the two parasitic mini-wasps are a powerful combination. *S. Cameroni* lives up to 50 days and is renowned for burrowing, enabling it to find fly pupae buried under 15cm of manure/bedding. The *M. Raptor* parasitic wasp is slightly smaller than the *S. Cameroni* and doesn't live as long, but is extremely effective as the female can parasitise up to 50 fly pupae during her life.



How does the process work?

The application is super quick and easy, and can be used for housed cattle, pigs and poultry. The BioWasp is scattered in areas of undisturbed bedding/muck, underneath drinkers and feeders, along walls and through slats. They can be used anywhere where fly larvae and pupae are found.



The mini-wasps hatch, then lay their eggs inside the fly pupae. When these eggs hatch, they then feed on the fly developing inside the pupae. These new parasitic wasps grow into adults and emerge from the pupae to restart the biological control process, increasing the BioWasp population whilst breaking the life cycle of the fly. To reap the best possible results, it is advised to start treatments early in the fly season (March/April) and carry on applying until September/October. The parasitic wasps are released at regular intervals, every 2-4 weeks. The intervals depend on the farming system in place and the dosage per number animals/species.

Along with the BioWasp there are other products that can be used in combination:



Fly traps – These are used to catch high volumes of adult flies entering the farm externally. They are intended for outdoor use and are a complementary tool to use with the fly control solutions along with the bucket trap fly bait.

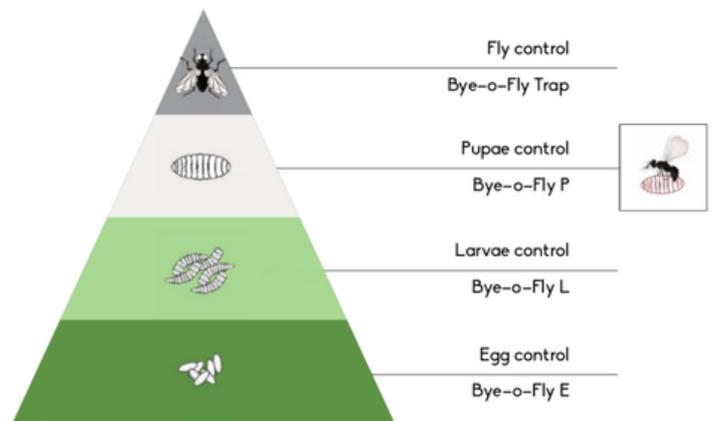
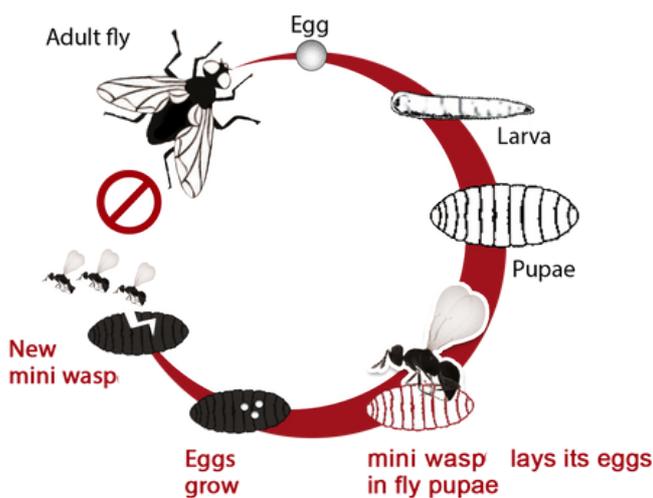
BioFly - This is a predator larvae which feeds on the larvae of other flies. This product is most effective in buildings with slurry tanks and wet pits.

BioMite - A predatory mite which targets and consumes the eggs and larvae of flies and gnats. It is effective immediately, and it is used as an additional or corrective tool.

None of these products interfere with humans or animals and are 100% safe.



Please contact the practice and speak to one of our Vet techs if you have any further questions or if you would like a proposed treatment plan for your farm in preparation for the next fly season.



Farm & Equine Centre
 Markeaton Lane, Markeaton, Derby, DE22 4NH
 Tel 01332 294929 Email farmandequine@scarsdalevets.com

