

Break the Fluke Cycle this Spring

While most of us associate liver fluke with the high-risk period during autumn and winter, it is important that we do not forget about fluke this spring, or miss a key window to reduce the significance of this costly parasite on our farms.

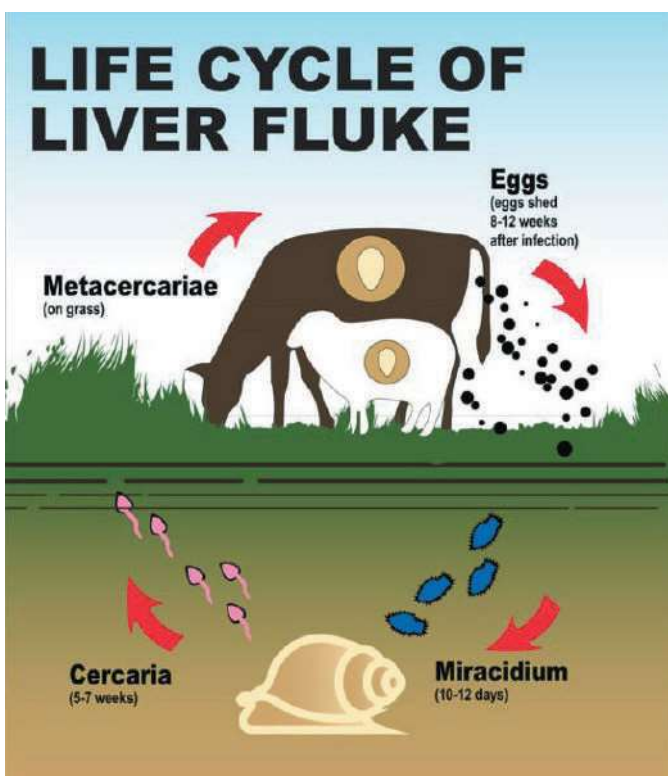
In the late spring and early summer, all liver fluke infecting ruminants are adults which infected those animals the previous autumn/winter. These adult fluke live in the gall bladder and bile ducts of the liver, and cause chronic inflammation. They lay eggs which pass out in the faeces and contaminate the pasture. The symptoms of chronic fluke are:

- Loss of condition,
- Anaemia
- Increased susceptibility to other diseases
- Reduced milk yield
- Poor Fertility
- Diarrhoea

Diagnosis

Thankfully, chronic liver fluke disease is easily diagnosed. I would recommend that all farms, at risk of liver fluke disease, collect faecal samples from 10 animals and ask their vet to check for liver fluke eggs in early spring.

Other options can be used, such as ELISA tests including the blood/milk ELISA to check for liver fluke antibodies, or the faecal copro-antigen ELISA test which detects proteins produced by the fluke while feeding. Post-mortem/abattoir feedback should be utilised as well as monitoring for the clinical signs associated with fluke infection.



Liver Fluke Burden with No Obvious Symptoms

Sheep and cattle can carry burdens of liver fluke with no obvious symptoms of disease, which is why it's so important to be pro-active and check for eggs in the faeces this spring before returning animals to pasture. This will prevent them from contaminating fields with fluke eggs, and reduce the number of fluke which they are exposed to in the high-risk period of autumn/winter.

Appropriate Product Selection

We all have a duty to utilise medicines responsibly by selecting the right active ingredient for the correct life stage of parasite which we are trying to target.

As only adult liver fluke are present in spring, we should use a product, such as albendazole, which only targets adult liver fluke and avoid using products which treat all life stages.

The untargeted use of broad-spectrum flukicides can contribute to the development of resistance, which is a critical issue for farming.

Active Ingredient	Preparation	Age of Fluke Killed
Triclabendazole	Oral	Sheep - 2 days Cattle - 2 weeks
	Pour-on	Cattle - 6 weeks +
Closantel	Oral	Sheep - 5 weeks +
	Injectable	Cattle - 7 weeks + Sheep - 7 weeks +
	Pour-on	Cattle - 7 weeks +
Nitroxynil	Injectable	Cattle - 8 weeks+ Sheep - 7 weeks+
Clorsulon	Injectable	Cattle - Adult
Oxyclozanide	Oral	Cattle - Adult Sheep - Adult
	Oral	Cattle - Adult Sheep - Adult

Table 1: Active ingredients licensed for treatment of liver fluke in sheep and cattle*

* Refer to the SPC data sheet for the product you intend to use to ensure you can satisfy the stated withdrawal period and to check the dose required as it may differ from a 'worm' only dose.

Along with other control options such as drainage or fencing off of all wet land, this can have massive benefits to herd health and can help prevent high fluke challenge in the autumn and winter, as well as chronic fluke the following spring.



The targeted approach will also help prevent over-reliance on triclabendazole-based products in the autumn. Triclabendazole-based products are the only flukicides to cover all three stages of liver fluke and are needed to treat and prevent acute fluke disease caused by immature fluke in the autumn, particularly in sheep. Due to increased fluke levels, triclabendazole has been used more frequently and resistance to it has been detected on some UK farms. Therefore targeting mature fluke in the spring with an active ingredient which targets only adult fluke has not just a positive effect on livestock for the summer but can also have positive benefits for preserving the efficacy of other classes of flukicides and for preventing losses in the autumn.

Remember that after treatment with a flukicide, eggs can take up to three weeks to be shed from the bile duct so using a product which also kills eggs, such as albendazole,

may be advantageous if the animals will be moved straight to pasture.



Rachel Mallet

Rachel Mallet is a Veterinary Surgeon, who now works as a Professional Services Vet providing technical support to vets, SQPs and farmers in the UK. Rachel is passionate about animal health and about promoting best practice and preventative medicine amongst farmers.

Email: rmallet@bimeda.com