

XLVets is a novel and exciting initiative, conceived from within the veterinary profession aimed at supporting UK agriculture as it faces challenges in the 21st century.

We are a group of farm animal committed veterinary practices, and as such our policy is to work together, alongside commercial research and manufacturing companies, to share best practice on advice and disease prevention initiatives so providing the first point of call on health management and consultancy advice and facing up to the plethora of current on-farm consultancy advice other than from the veterinary surgeon. We are interested in the development and creation of markets for the economic advantage and support of our clients' long term future and prosperity.

The aim of the group is to put veterinary surgeons at the heart of their clients' farming enterprises, offering independent and high quality advice alongside other specialist advisers. We are dedicated to the survival and growth of the livestock farming industry and wish to work with like-minded, committed professionals.

We are constantly seeking cost-effective preventative medicines and consumables and looking to advise on best practice.

Our primary aims are 4 fold:

1. To be a primary source of on-farm advice and the central co-ordinating consultant for other farm services for our clients.
2. To be committed to the sharing of current best practice advice to our clients through direct XLVets newsletters and client training, associated with our own high levels of Continuing Professional Development (CPD).
3. To be highly competitive in the health and medicines market with not only Prescription Only Medicines (POMs) but also re-establishing the vet as a primary source for on-farm Pharmacy and Merchants List (PML) and other medicinal and consumable products supported by impartial professional advice.
4. To improve our own efficiencies and reduce our costs by economies of scale over a wide range of practice needs and requirements.



For further Information, please contact your local XLVets Practice.

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Committed to UK Farming
EXCELLENCE IN PRACTICE



FACT SHEET 07

LIVER FLUKE IN CATTLE

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Liver

IN CATTLE FLUKE

Fluke infection has been recognised for generations, but evolving problems in cattle demand we look afresh at how liver fluke might be undermining herd performance. Over the past years there has been an alarming increase in the incidence of liver fluke. This has coincided with a greater geographic distribution beyond the traditional at risk, high rainfall areas.

The main signs are: a reduced growth rate, a gradual depression of milk yield, and stock that are generally not thriving.

Sheep are particularly susceptible to fluke and infection can cause serious illness and death. However fluke is often overlooked in cattle because the signs are very subtle and clinical disease is rare. But just because there are no signs or the farm has never traditionally had fluke, it does not mean that cows and youngstock will not benefit from a fluke control strategy.

In fact, a low grade infection of just 100 fluke has been shown to reduce milk yield by 400litres/cow/lactation. For a 100-cow herd at 18ppl this equates to £7,200 p.a. Fluke also has a detrimental effect on butterfat. Research has shown untreated animals can produce 10% less milk solids.

Also, the heavily pregnant dry cow in poor body condition can experience a fluke-associated nutritional challenge in late pregnancy. Calf birth rates on fluke-infected cows can be 10% lower. Youngstock will experience poorer growth rates giving reduced efficiency for the rearing of replacement heifers.

Fluke infection can reduce feed conversion and depress appetite (DM intakes reduced by as much as 11%). This nutritional stress depresses fertility and compromises the cow's immune status. In essence fluke infection will reduce lifetime performance.

Fluke infection can also precipitate other infectious disease such as the Clostridial infection Black disease or it can compound outbreaks of Salmonella.

Many farmers see the need to treat for fluke infection in sheep where symptoms can be more graphic, yet fail to recognise the production loss in cattle.

Liver fluke life cycle

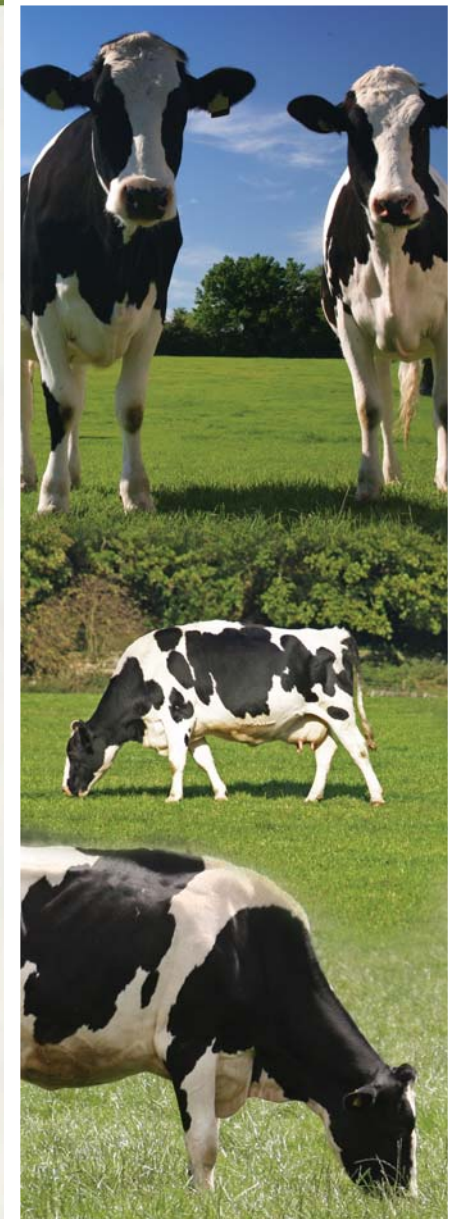
'Liver Fluke' (*Fasciola hepatica*) is a flat leaf-like (3.5cm) parasite found in the liver of grazing animals. Eggs from adult female fluke pass in the dung to contaminate pasture. When conditions are suitable - damp and warm (above 10%) - the eggs evolve and hatch to form mobile larvae that seek out mud snails to complete their life cycle. The presence of the amphibious mud snails determines the distribution of fluke. So the highest risk grazing are wet areas and rutted pools of water.

The larvae multiply in the snails and emerge to attach to the grass as cysts. The grazing animal ingests the cyst where it breaks out as an immature fluke to make its way to the liver. The fluke tunnel through the liver which if conditions favour, then the mass hatch and infection can cause severe and permanent damage.

The adult fluke live in the bile ducts of the liver where they feed on blood. This can amount to half a millilitre per adult fluke per day explaining the anaemia exhibited by infected animals.

Diagnosis

Fluke diagnosis is not straightforward and needs careful interpretation so speak to your vet. Fluke egg counts from faecal samples indicate infection but egg production is sporadic. Blood sampling a random group (often young homebred stock are a good



indicator) can reveal the foot-print of fluke infection. Post mortem/slaughterhouse feedback provides a direct report of fluke level in condemned livers. Many more abattoirs are doing this now.

Treatment

Treatment is very effective but needs to be targeted to the fluke season and to recognise the variable efficacy of product for the different stages of fluke (early immature, immature and adult). Also the milk withhold must be considered and often means treatment is targeted in the dry period.

Fluke treatments come as drenches and injections, and are also available in combination with wormers. The recognition of fluke and a strategic approach to treatment should be a component of herd health plan reviews. A little investment in health will go a long way to alleviating the production loss which is the hidden cost of fluke infection.