

WENSUM VALLEY VETS NEWSLETTER

New Ovacyte Worm **S** Egg Counting Machine

The practice has invested in a state-of-the-art worm egg counting machine which can identify all relevant species of worm present in sheep and cattle in the UK. This will allow us to target our treatment to groups most at risk of disease and diagnose the cause of problems such as diarrhoea, poor weight gain, weight loss and listlessness.



Adult fluke in sheep Ten to twelve weeks before eggs produced Five weeks to a few months, depending on temperature and moisture Encyst on herbage Miracidium Enter the snail Sporocyst Redia Multiplication up to 500 times or more in snail

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

Liver Fluke

The Disease

Liver fluke disease (fasciolosis) is caused by a trematode parasite, Fasciola *bepatica*, which spreads through small snails during its complex lifecycle. The disease can result from the migration of large numbers of immature fluke through the liver, or from the presence of adult fluke in the bile ducts, or both processes together. Liver fluke can infect all grazing animals but mainly affects sheep and cattle, with sheep being more susceptible and affected by all forms of the disease.

Forms of the Disease

Liver fluke disease in sheep occurs in three main clinical forms – acute, subacute and chronic fasciolosis. Which form occurs is dependent on the numbers of infective metacercariae (a young/larval form of fluke) ingested and the period over which they are ingested. Recently, milder Winters and wetter Summers have changed parasite epidemiology and the acute form of the disease has been reported earlier in the season than previously. In cattle, chronic fasciolosis is the



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most common form of the disease and it is thought to cost the UK cattle industry around £40.4 million annually. In youngstock this disease can cause poor growth rates due to lowered feed conversion, leading to poor carcass weights and reduced profits.

Testing in Winter, Spring and Early Summer:

SCOPS/COWS recommend Faecal testing in Winter, Spring and Late Summer, during the chronic disease risk period every 4-8 weeks. However a more achievable approach would be to do Faecal Testing at housing, followed by a Faecal Egg reduction Test (FERT) if positive results are detected, and then to test again 2 months following turn out to look for reinfection from the pasture. This will identify the chronic fluke risk and we can recommend treatments based on these results. Ideally these samples will be fresh faeces from multiple individual animals from each field, which we will pool for you. Age of animal and location/conditions of field will vastly alter fluke risk in each



Figure 2. Liver fluke life cycle. (from SCOPS Technical Manual For Veterinarians and Advisors: Liver Fluke, 2013).

group, so multiple samples are needed across a whole farm to diagnose fluke problems. In small groups, such as small holdings, individual faecal samples can be taken and tested separately to allow more targeted treatment.

Testing in Late Summer and Autumn:

During the acute disease risk disease period of late Summer and Autumn it is possible to antibody test first season lambs and calves, and a sample of animals from each risk group across the farm. This allows for targeted treatment and reduces risk of acute disease and of future development of chronic disease. However, testing during Winter/Spring should be prioritised.

Treatment

The appropriate product to treat fluke changes with the time of year and form of the disease present, this is usually an oral drench, but the active ingredient varies between products. We can advise on products following faecal or blood test results and would advise a Faecal Egg Reduction Test (FERT) following treatment, where eggs present in faeces are counted to identify whether treatment has been successful.

Prevention

Control strategies need to be farm and weather specific, however the main prevention method is to avoid high risk wet pastures, which contain high snail populations. Dryer pastures should be used where possible, and improving the drainage in wet pastures will also reduce the risk. Regular testing prevents the spread of liver fluke and can reduce the long-term effects if infection is spotted and treated early. Newly bought in stock are a big risk for introducing fluke in a low-risk herd, so it is important to quarantine, test and treat any bought-in animals.

Please contact us on 01328 864444 to discuss the fluke status of your flock or herd.



Figure 2. Liver fluke life cycle. (from SCOPS Technical Manual For Veterinarians and Advisors: Liver Fluke, 2013).