

Farm news



Rob Howard BVMS MRCVS

Rumen Fluke – *Calicophoron daubneyi*

For the past couple of years there have been increasing reports of a new parasite which is infecting Britain's grazing livestock.

Rumen fluke in low numbers will not cause any significant disease, but if many fluke larvae are eaten by cattle or sheep in a short space of time then disease is possible. The disease, which can be fatal, often presents with the following clinical signs:

- Rapid weight loss
- Watery scour with or without blood
- Bottle jaw
- Pale mucous membranes
- Quietness/lethargy
- Dehydration

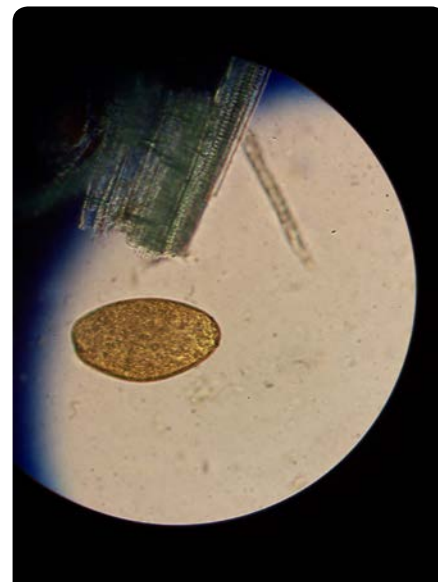
These signs are not specific to rumen fluke though, and can also be seen with gut worms, liver fluke and Johne's infection amongst other things.

Oxyclozanide (Zanil) is the only drug that will successfully treat rumen fluke. The disease is still rare, so seek veterinary advice before treating. As there is only one treatment available, we must be very careful not to treat when it is not necessary.

To aid diagnosis we can send a muck sample to the lab to check for eggs, but the disease can be present even if there are no eggs in the faeces.

Rumen fluke, in the same way as liver fluke, lives for part of its life cycle in a small mud snail. This means that all areas where snails will thrive, i.e. waterlogged fields, boggy areas or ditches are all high-risk areas for cattle grazing. The risk of fluke infection is increased in years with warm, wet summers.

Rumen fluke affects sheep and cattle in the same way and can easily be spread between the two species. If you are concerned about rumen fluke, have a chat with your vet next time they are on farm or call the practice on **01332 294929**.



Microscopic view of a rumen fluke egg
(image courtesy of XLVets)

For more information call our practice on **01332 294929**
or email farmandequine@scarsdalevets.com



Chantal Bryant BVM&S BSc MRCVS

Housing ewes for winter

It is important to prepare your housing properly to prevent any potential problems. Housing ewes over winter helps prevent damage to the grass sward, but adequate space is required to limit nutritional and disease issues. In straw yards ewes need between 0.9m² and 1.4m² each. Shearing ewes at housing can reduce the amount of space required by 25%, as well as improving lamb birth weight.

Ewes need to be fed fresh food, so the troughs should be easily cleanable, and they should be placed at a height so that they are not fouled in. An adequate trough length is important to allow all stock to eat at the same time. Long narrow pens maximise feeding space. If you haven't had your silage or hay tested you will not be able to produce an appropriate diet, since the dry matter, protein content and metabolisable energy can vary greatly from field to field. The decision as to whether concentrates are required, and in what quantity, should be based on forage quality and expected crops. Group ewes first on expected lambing date, using raddle marks as a guide, then by litter size so they can be fed appropriately. Each ewe will require 9 litres of water per day pre-lambing, and more afterwards.

Set up a hospital pen for sick or injured sheep, away from the lambing areas to prevent disease spread. Provide plenty of dry, clean bedding to keep feet dry and minimise foot-rot issues. Good ventilation without being draughty is important. Set up lights to make checking stock late at night easier.

Treating ewes for fluke at, or shortly after, housing will still be important this year for those of you that have fluke on your farms. Even though the summer was dry, the wetter weather we have recently had will mean there is still a fluke risk.

Not everyone will house ewes due to increased cost of feed, straw and labour. If leaving the ewes out for winter, it is vital to rotate their grazing to ensure grass re-growth is possible.

Highest Priority Critically Important Antibiotics (HP-CIAs)

It's been great to see so many of you engaging with the issue of antibiotic resistance and successfully reducing the use of HP-CIAs – i.e. those antibiotics that are critical for human health - on farm.

Make sure, though, that you're familiar with the standards and recommendations provided by the certifying bodies that you're part of, as they do differ slightly.

Red Tractor Assurance, for example, states that HP-CIAs must only be used as a 'last resort under veterinary direction'. They use the European Medicines Agency's definition of HP-CIAs, which includes 3rd and 4th generation cephalosporins, fluoroquinolones and colistin. They also say that the use of these products must be supported by a vet report outlining sensitivity test or diagnostic test results.

Other certifying bodies or milk buyers also include macrolides in their HP-CIA list (e.g. Tylan and Draxxin). Some say no HP-CIAs are allowed at all, and some (like Red Tractor Assurance) say they can be used when culture and sensitivity demonstrate that they are the most appropriate option. Do read your small print, and do ask us if you need any help interpreting it!

Changes to MV/CAE Accreditation Scheme rules

If your sheep flock is MV/CAE accredited, please make sure you're aware of the recent updates to the rules of the scheme. In short, these are as follows:

- It will now be mandatory to test all animals added to accredited flocks/herds between 6 and 12 months after arriving. The PSGHS also strongly recommends that added accredited animals are tested at the time they are added to the flock/herd. These tests are designed to address the risk of adding accredited but infected animals.
- There will now be a requirement for members with non MV/CAE accredited animals on the same holding to perform a cull ewe screen of 12 non MV/CAE accredited animals at the time of RPBT. If infection is found in the non accredited flock or the cull ewe screen is not performed the accredited flock/herd will be classified as high risk and revert to one yearly testing.

The updated rules will be **enforced from 1st January 2019** and failure to comply will lead to flocks reverting to one-yearly testing. Do contact us if you have any questions.



Upcoming FarmSkills Courses at Markeaton

These will be practical, small group workshops. Courses are taught by Carolyn Baguley, Rose Jackson and Emily Payne from our team.

All sessions are small group sessions with plenty of practical advice. Feel free to attend all three or to pick and choose. Different members of your team may be interested in different sessions.

Sessions start at Markeaton and all modules take place between 10am-3pm. Modules 1 and 3 will include an afternoon session on-farm (venues to be announced). Please bring clean wellies and overalls with you for modules 1 and 3.

We continue to keep the price of our training low this year in response to the ongoing challenges facing the dairy industry – we still hope that you will value these courses as much as in previous years.

Limited spaces – don't miss out

Each module is £75 plus VAT or £210 plus VAT for all three modules. To book or for more information call our practice on 01332 294929 or visit bit.ly/2QV2sYr

Top-tip – You will receive maximum benefit if you attend all modules. If this is not possible, please contact Scarsdale Vets on 01332 294929 to discuss which modules would be the most benefit to you and your farm.



Module 1

Take Control of Mastitis: Selective Dry Cow Therapy and Beyond!

Wednesday 7th November 2018

Presented by Carolyn Baguley

Mastitis is a costly and time-consuming disease with many contributing factors. In this module, we offer plenty of practical advice using real farm case studies. The session also includes tips on how to make the most of your records, take sterile milk samples and optimise your drying off technique.

Module 2

Getting Ahead with Genetics and Genomics: A Practical approach to Improving your Herd's Potential

Wednesday 14th November 2018

Presented by Rose Jackson

This module aims to unravel the myths surrounding bull selection plus practical advice to select the most appropriate genetics for your herd. Learn about the interactions between genetics and farm management/environment. Find out how genomic selection of your heifers can help to maximise your herd's potential.

Module 3

Heifer Rearing from Calving to First Service: Keeping Track of Your Progress

Wednesday 21st November 2018

Presented by Emily Payne

After feed costs, heifer rearing is the second biggest cost on farm; however, tracking calf progress is still too often overlooked. For maximum longevity and milk production, heifers need to calve in at 24 months. This module aims to discuss all aspects of heifer rearing from birth to that vital first service at 13-15 months.

Poisonous plant of the month: Hellebore

Chantal Bryant – BVM&S BSc MRCVS

There are several species of the Helleborus genus; Christmas rose, stinking hellebore and purple, all of which are poisonous to mammals. Part of the buttercup family, they flower shortly after Christmas, and the flowers are creamy white tinged with green.

Hellebores contain three active ingredients: glycosides, which can cause bradycardia (slowing of the heart); saponin, acting on the nervous system causing narcosis; and helleborine, a purgative found in the roots of the plant. The clinical signs seen in cattle include inappetance, vomiting, slow heart rate, difficulty breathing, coma and death. Milk from affected animals will cause vomiting and diarrhoea in people.

These plants can grow in pastures, grassland and gardens. Historically the roots were used to make people vomit to treat poisonings, although this is now known to be harmful!



Image of the flower Christmas rose



Rose Jackson BVSc DBR MRCVS

History of Artificial Insemination (AI) and new AI technologies

Sperm was first discovered in 1678, although the scientist who first saw it under a microscope thought it was a parasite! It took a further 100 years of research to work out that sperm were actually the agents of fertilisation, and another 100 years to clearly understand the detailed events that are necessary for fertilisation.

Sexed Semen

In 400BC, before they even knew about sperm, it was thought that the right testicle produced male offspring and that the left produced females so by tying up the left testicle, you were guaranteed a boy! Sexed semen technologies have been around for over 30 years; it was first successfully carried out in rabbits in 1989. Flow cytometry is the technology that made sexed semen commercially available in cattle and is still in use today. Because the X chromosome (female) is bigger than the Y chromosome (male), it takes up more of the fluorescent dye. This then enables the sperm to have a different electric charge applied according to how much they show up the dye. X sperm have a positive charge and are pulled in one direction when an electric charge is applied; the male Y sperm are pulled in the opposite direction and they are sorted into separate collection tubes.

This process damages the sperm to some degree so, on average, pregnancy rates are around 25 % lower than conventional semen. This is why we generally recommend using it on maiden heifers as they have better fertility than cows. This damage is not compensated for by increasing the number of sperm in the straw. Sexcel™ is a new sexing technique that has been launched recently. It still uses flow cytometry but instead of applying an electric charge, the Y sperm are disabled using a laser. This technique should be less damaging to the female sperm as everything ends up in the same collection tube. Initial results from the USA look good but it will be nice to see data from the UK as that starts to come in.

Benefits of using Sexed Semen in the Dairy Herd:

- Helps to expand the herd without the need for buying in.
- Fewer 'low value' bull calves produced – also reduces society's concerns over bull calves being a 'waste product'.
- Reduced risk of dystocia (difficult calving) which leads to reduced risk of retained placenta and uterine infection.
- Increased rate of genetic gain when used on maiden heifers (particularly if combined with genomic testing)
- Increased milk – heifers that give birth to heifers at their first calving give +445kg milk in their first lactation compared to those that have bull calves.

1780	First AI carried out in dogs by an Italian scientist, Spallanzani
1887	First equine AI
1949	Semen freezing technique developed
1960	PVC straws invented for storing frozen semen (previously in glass vials)
1963	First cattle AI using frozen semen
1965	Cattle AI becomes commercially available
1970	Embryo flushing and transfer developed
1996	First cloned sheep born - Dolly
2000	Sexed semen becomes commercially available for cattle
2008	Genomic Selection for bulls in the UK
2016	Genomic Selection for heifers in the UK

Adapted from Lonergan, P (2018), UCD

Farm and Equine Centre
 Markeaton Lane, Markeaton, Derby DE22 4NH
 01332 294929

Allestree
 01332 554422

Pride Veterinary Centre
 01332 678333

Duffield
 01332 841700

Shelton Lock
 01332 700321

Hilton
 01283 732999

Stapenhill
 01283 568162

Mickleover
 01332 518585

Stretton
 01283 565333

Oakwood
 01332 666500