

Coccidiosis is a problem found in intensively reared lambs, occurring primarily indoors where stocking densities are high, but may also occur in lambs at pasture where there is contamination around feed troughs in creep areas during warm, wet weather. The ewe is the initial source of the infection although coccidial oocysts (eggs) can survive on pasture or in buildings from one year to the next. Coccidia are species specific therefore the coccidial species that affect cattle or poultry do not affect lambs.

#### Life cycle of Coccidia

- Lambs take in coccidial oocysts (eggs) by mouth.
- Inside the gut the oocysts hatch, invade the gut cells and multiply rapidly with two results— damage to the gut lining as the coccidia emerge by bursting the cells and dramatic increase in number of oocysts in the lamb's faeces.

#### **Symptoms**

Damage to the intestinal tract results in diarrhoea which may contain mucus or blood and be accompanied by:

- Straining
- Pain
- Weight loss
- Possible death of the lamb.

Even in animals that show no obvious clinical signs sub-clinical disease can lead to reduced weight gain as the gut loses its ability to absorb nutrients from food.

Clinical coccidiosis is most often seen in lambs aged 4-8 weeks old however, the knock on effects of subclinical disease such as poor growth rates may be apparent in older lambs. If you have a history of coccidiosis on the farm from previous years or are a high risk flock, it is ideal to treat lambs after they have had a chance to pick up oocysts but before they are causing significant gut damage. In this way, the coccidiosis is killed off and the lambs are left with a residual immunity without suffering consequences of the infection.

This usually entails treating lambs at 4-6 weeks of age. There are two licensed drenches available with one having the advantage

Source of coccidia oocysts:

• Ewes pass low numbers
• Some overwinter on pasture

MULTIPLIER EFFECT

Lambs shed millions more oocysts than they sat

LAMBS

Immunity Increases with exposure. Naive lambs at risk of severe disease.

Figure 1 shows the source of coccidia oocysts & how lambs increase the levels of

of a persistent action for approximately 3 weeks after administration, providing a larger window over which lambs can be successfully treated.

### **NEMATODIRUS ALERT - HIGH RISK PERIOD**

#### PARASITE FORECASTS

We have recently subscribed to a parasite forecast service provided by NADIS. Temperature, humidity and rainfall all have a major impact on 3 of the problematic parasites we have in livestock, (Nematodirus, blowfly and fluke). Local weather stations can be used to predict the high-risk periods and allow us to strategically medicate to control disease. NADIS has monitoring points all over the UK and can forecast to a locality of 40 km². We will make these forecasts available in our monthly newsletters, on our website (www.daleheadvetgroup.co.uk), our Facebook page (Dalehead Veterinary Group Farm Animal) and via email. If you wish to receive an email, please ensure you have completed your GDPR verification form and ticked to receive emails.

## YOUR PEAK HATCH PREDICTION - 01/05/2018

Prediction is based on the altitude of your nearest weather station. If your farm is at a lower altitude, the peak hatch will be before the predicted date (100m lower will be approximately 1 week earlier, www.scops.org.uk), or later if higher. South facing fields will

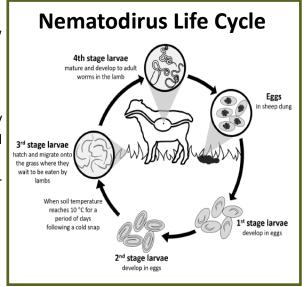


#### Local Weather—How It Affects Nematodirus

- Nematodirus battus has a unique life cycle as the larvae develop on the pasture within an egg. With most parasitic worms of sheep, eggs are passed out by infected sheep on pasture, they then undergo development into larvae within the sheep's gut once it has been ingested.
- The Nematodirus larva stage is very resistant to extreme temperature and survives even harsh winters on pasture within the egg.
- Larvae will hatch in large numbers after a period of cold exposure followed by a temperature exceeding 10°C over a period of days. This is predicted to occur within the next week in your local area.
- In wet and cool conditions, the larvae can survive for months on the pasture.
- This mass hatch occurs annually on permanent pasture, but the level of disease depends on it coinciding with grazing activity of young susceptible lambs.
- The cold spring this year has resulted in a delayed hatching of the larvae.
- If lambs are 6-12 weeks old at the time of the hatch, they are likely to experience problems.
- Lambs typically become immune to the effects of Nematodirus from exposure by about 3 months old and so are less

## **Signs To Watch Out For:**

- Only lambs are affected by Nematodirus; ewes do not show disease.
- Sudden onset of profuse watery diarrhoea in young lambs.
- Dirty 'back ends'.
- Lambs are dull and depressed, stop sucking, and rapidly develop a gaunt appearance with obvious dehydration and condition loss.
- Death from dehydration (early in an outbreak death can occur suddenly and without obvious signs of scour).
- Weight loss in the remaining lambs.



#### **Prevention & Treatment**

- If possible, move lambs to clean grazing (i.e. Pasture that has not been grazed by lambs in the previous year)
- If lambs can't be moved to clean grazing, treat all 'at risk' lambs
- Repeat treatment 2 weeks later may be required. (Speak to one of the vets to help make this decision)
- White (1-BZ) wormers are still the recommended treatment of choice unless other worm species are present and resistance is confirmed. We will advise you of this if you are carrying out faecal egg counts on your farm
- Some other commonly used wormers aren't as effective as white wormers against Nematodirus.
- Take a Faecal Egg Count 14 days after treatment to monitor if it has been effective. This will also tell us about your coccidiosis and other worms infection level.

#### **Other Facts To Remember**

Many white drenches have cobalt in them which is a valuable supplement in lambs to maximise growth rates. We can add more cobalt to white drenches to make oral drenching as effective as possible. If necessary, on farms where growing lambs are likely to be stunted by cobalt/vitamin B12 deficiencies, we also have a long acting vitamin B12 injection which, due to its micro-encapsulation technology, lasts 3-4 months when 0.5 mls is injected into young lambs. It is ideal to supplement growing lambs from 1 month of age. It costs in the region of 40p/lamb so it's an extremely cost effective and effective supplement! Ask the farm vets for details.

Carrying out a post drench test to ensure the drug is working and to check there are not any other gut worms or coccidiosis present is always worthwhile. It is very common for lambs to scour at this time of year due to cocci and

#### **DATES FOR YOUR DIARY**

#### **FLUKE DISCUSSION GROUPS**

Numerous sheep flocks in our area have been badly affected by fluke last winter. So many units are having issues controlling fluke that we have decided to host a series of meetings in different areas of the practice. We aim to 'thrash out a plan of action for fluke' on your individual farm during an evening meeting in a local pub over a pint. The course will be limited to 10-15 places, possibly your neighbours who are all in the same boat! We have secured some funding to allow us to do some local testing in your area, so we can help tailor the parasite control to your individual circumstances. The meetings are available to all Flockclub members who have already subscribed through their membership - please let us know if you are attending. If anyone else is interested in attending please contact the surgery to book a place. For non Flockclub members there will be a charge of £25 for the meeting but this fee can be redeemed against Flockclub membership or a full health plan if you wish to use these services this year. We are planning 3 meetings at 7pm on the following dates:

Thursday 17th May - Hark to Bounty, Slaidburn BB7 3EP
Tuesday22nd May - Marton Arms, Thornton in Lonsdale LA6 3PB
Thursday 31st May - The Knight's Table, Knight Stainforth BD24 0DP

#### **BEEF AND SHEEP RED TRACTOR MEETING**

The Red Tractor Scheme has recently announced that from 1<sup>st</sup> June all beef and sheep units **must** have an antibiotic audit

and that staff **have** to attend a course on antibiotic usage. The dairy, pig and poultry industry are already a few years into adjusting antibiotic usage to slow down resistance and preserve the critically important drugs so they remain effective against bacteria in the future. Now it is the turn of the beef and sheep industry to catch up! This is a very hot topic at the moment and really is an issue we must address so we have drugs that kill bacteria in both human and



veterinary medicine and we don't end up with superbugs that are a risk to human and animal life.

We will bee running a course on antibiotic usage and explaining the audit procedure in June; venue and time will be confirmed in next month's newsletter.

# Winner! Veterinary Nurse Of The Year Award 2018

We are incredibly pleased to announce that Anna Ashworth (RVN, R-SQP) is the winner of the Veterinary Nurse of the Year Award 2018! Anna was nominated by colleagues who recognised that her passion and commitment in her role as a veterinary nurse went above and beyond the call of duty.

As well as her dedicated companion work, Anna is the practice's Farm Vet Tech and has helped to drive forward our health planning services in the farm animal department. She has been integral in setting up the Flock Health Club for sheep farmers, is an AMTRA qualified R-SQP, MSD Lameness Advisor, registered mobility scorer and continues to develop her skills and knowledge professionally through ongoing training.

Anna was shortlisted to one of three finalists from over 22,000 nominations and was invited to attend the glittering awards ceremony at Birmingham Town Hall in April. This is a prestigious award with the winner being selected by a panel of experienced veterinary professionals and leaders from the industry's governing bodies. Judges said that Anna stood out due to her education in large animal welfare and that she was a great example of how a RVN can make an impact both in large animal practice and in the rural community. Well done Anna!



## **KETOSIS**

As the long winter draws to an end, the combination of a reduction in the amount and quality of silage stocks and a total change in diet as the cows finally go out to grass can increase the pressures on transition cows. One such problem is ketosis which affects around 30% of all dairy cows causing losses due to a reduction in health, fertility and milk yield.

Whilst clinical ketosis is usually low at around 3%, subclinical ketosis ranges from 29 to 59% of all the cows in the herd.

Affected cows may have reduced conception rates, longer calving intervals, produce significantly less milk (1.9 litres less) and go on to develop clinical ketosis (slow fever).

Cows with ketosis are at higher risk of having a displaced abomasum (4 times more twisted stomachs), retained placenta (3 times more cleansings), metritis (six times more whites) and cystic ovaries with the resulting higher culling risk.

Whilst the answer is to give transition cows more space, better bedding and better quality but lower energy transition feeds this is not always possible or the whole problem. Lame, fat or cows carrying twins will always be under more pressure to eat enough than their herd mates, and so can be expected to suffer more.

We have rumen boluses available which, when given at 3-4 weeks before calving, have been shown to reduce the incidence of subclinical ketosis by 74% and increased milk yield by 1.22 litres per day for 120 days after calving. Please speak with on of our AMTRA qualified staff or the farm vets for more details.

The bolus achieves this by altering the rumen bug populations, moving away from milk fat production towards energy production. This eases the cow's transition into full milk production by increasing the amount of glucose available whilst limiting the number of circulating ketones in the blood which have detrimental effects on both immune cells and the developing ovarian follicles.

Whilst there is a movement away from butterfat production in the first 100 days of lactation, because the cows tend to be in better ruminal health and body condition as they pass peak lactation, there is an increase in milk constituents which more than compensates for the initial dip ensuring no net loss in milk constituents over the lactation.

Whilst the initial cost of £36 pounds per bolus seems high the increase in milk yield of around 200 litres goes a long way to covering this cost (200 x 15p= £30) without considering the main benefits of lower risk of diseases around calving and their consequences.

**MAY 2018** 



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