



Coccidiosis in Sheep

Coccidiosis is one of the most economically important diseases of sheep. It is a disease of intensive husbandry with a direct correlation between environmental build up and severity of the disease, both in clinical signs and prevalence. The disease is caused by an intracellular protozoa parasite primarily affecting the digestive system. The most common pathogenic strains of the parasite in UK sheep flocks are *Eimeria crandallis* and *Eimeria ovinoidalis*. The parasite is host specific and therefore is not transmissible between other ruminant species.

The parasite primarily targets the cells of the large intestine; ileum, caecum and proximal colon, impairing absorption of nutrients and water. Clinical signs of diarrhoea, dysentery, dehydration, weight loss and anorexia lead to ill thrifty lambs and fatalities. The disease is most commonly seen in 3-8 week old lambs, but also in lambs up to 6 months of age and in artificially reared lambs. Ewes can act as a primary source of the infection but most infection is due to contamination of the area from older lambs. Lambs are usually protected in the first few weeks of life by colostral antibodies and they then may develop a solid immunity without any

apparent clinical signs. However in situations of high stocking densities, stressed lambs are exposed to a high environment level and succumb to the disease. The period between infection of an animal and them shedding infection themselves is 2-3 weeks. Early born lambs often contribute significantly to environmental contamination and are an important source of infective eggs to those lambs born later, although they may not have clinical signs. Clinical disease can be preceded by a stressful event such as adverse weather, weaning or sudden dietary change.

Diagnosis of coccidiosis is most commonly based upon history, and clinical signs in combination with faecal testing. Once disease has been diagnosed, treatment is disease limiting rather than preventing. However if treatment is withheld until a large percentage of lambs are ill thrifty, production parameters can be affected for months.



January 2017

- Coccidiosis in Sheep
- 2016 Review
- Interesting Case
- Regional News
- Events

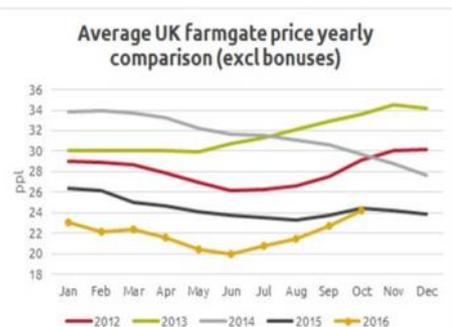
Prevention should primarily be aimed at reducing environmental build up via hygiene protocols and ensuring that appropriate stocking densities are adhered to. Additionally good nutritional management makes animals less susceptible to disease. Faecal contamination should be limited on bedding and pasture and prevented around troughs and areas of feeding. It can be a good idea to keep early and late born lambs in two separate groups, to stop infection spreading from the early group. Alternatively for lambs at pasture, frequent rotation will limit the burden of parasites. A coccidiostat can be included into creep feed to help prevent the disease but this can lead to a lack of immunity and problems when the drug is withdrawn. It is advisable to establish prevention measures and a treatment plan in the veterinary flock health plan to limit the economic effects of a coccidiosis outbreak.



Clare Eames

2016 Dairy Market Review—Reflection and Prediction

The extreme price volatility seen over the past 12 months has at least ended the year on the right note. However, the recovery has come with more of a lag than any of us would have hoped for.



The prolonged low prices have had an effect on milk production. By autumn 2016 the overall UK milk production was 8-9% lower than the previous year, which equates to roughly 4 million litres/day. The spot milk prices therefore rose sharply from 16p to close to 40p in a six-month period.

We have experienced clients switching away from year-round to seasonal calving, as available costings data in the UK indicates that year-round calving has the highest outlay. Autumn-calving herds will have had the most favourable 2016

as the increasing milk price in the second half of the year coincided with increased volumes produced.



What is the potential for 2017?

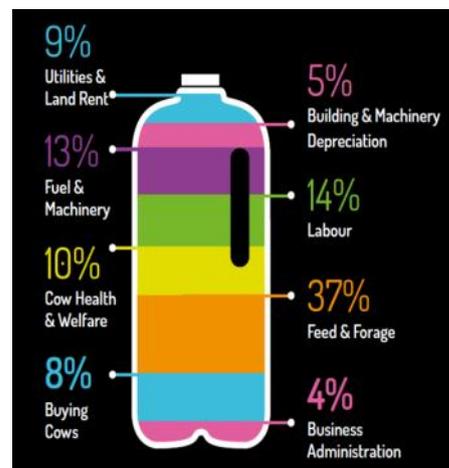
Having experienced the continued period of low milk price throughout 2015 and 2016, the difficulties experienced don't seem to be over; a projected increase of only 0.09p/litre is expected for the next 18 months. This would give an industry figure of 26.5 p/litre. We are aware that for many of our clients there is a way to go before farmgate prices reach profitable levels, if NFU cost of production of 28.5-29 ppl are anything to go by. For many, reinvestment into farm infrastructure will be very difficult, with farms having to 'make do' with machinery/buildings/cubicles that in an ideal world they would change. To repeat Alastair Hayton's words from last month, this doesn't necessarily mean

that improvement is not possible; several relatively minor alterations can make a big difference.

However, it may be a challenge for many to produce cheaper litres from forage this winter, as with the exception of maize, on the whole only average-quality silage has been made this year. This could be weather related but may also be, in part, due to the reduction in additive used this year due to cost cutting which has compromised fermentation and may lead to increased aerobic spoilage as clamps are fed.

Feed costs are also expected to rise post Brexit due to unfavourable exchange rates. Ingredient prices are likely to rise by 15%. This will form the main component of an increase in the

cost of production. It could be expected that overall UK milk yield will drop further as less concentrate is likely to be fed, with clients trying to gain more milk from grass, but feeding lower energy silage over winter.



What can farms do to take advantage of contracts?

We are also aware that for many of our clients, these headline prices don't necessarily reflect the milk cheque at the end of the month. This will largely be due to farms not receiving a volume bonus. Many others have also struggled to make an A and B Payment contract work for them. It appears that the contracts on offer and the type of farming business are not always very well suited.

Are we thinking enough about constituents vs volumes? And if we are

improving either of these, are we actually receiving an increased margin? Apart from feeding strategies are we using the herd genetics to our benefit, incorporating available Herd Genetic Reports from AHDB into our decision making? Does the calving pattern fit well with how the farm is paid for its milk? However, changing calving pattern can take considerable time and during this interim period there could be reduced income from milk to account for, or an additional need for capital. Would changing to Every Other Day Collection lead to savings in water, chemicals and

energy, or would the farm need to buy a bigger bulk tank before changing? It is important when selling milk to a buyer to understand the markets they are involved in and their future plans; this should mean you can find a buyer that suits your business. Where there is little choice of buyer, this understanding can help look at your own business to better align it with the available contract. For further information please look up: <https://dairy.ahdb.org.uk/media/1231557/back-to-basics-on-strategic-management-contracts-and-buyers.pdf>

What can Synergy do to help?

Whilst there is little we can do about existing cow numbers on farm, what we can do is ensure the remaining criteria of the contract e.g. somatic cell counts, are consistently in the best possible bracket for the contract. Many of you will be looking to implement a more selective dry cow therapy approach in the coming year. When applied correctly this has the potential to not only reduce medicine costs, but also mastitis rates. Others have reduced medicine costs for calf pneumonia by improving building design and fitting a fan and tube system. We have seen these pay off very quickly due to reduced antibiotic treatments and this is before the benefit of reduced mortality and increased daily live weight gain has been considered.

The switch to beef semen over the last 18 months has been pronounced and we would expect dairy heifers to be in relatively short supply for 2017. Have you assessed your **youngstock performance** and consulted veterinary help where you feel you are making losses? Likewise are you using the available genetic information, or genomic testing to maximise your breeding decisions?

We are fortunate to be the exclusive partner with Zoetis in bringing their **Clarifide Genomics** package to the UK and are uniquely placed to provide you with expert advice on aligning breeding decisions with herd health objectives and individual farm situations.

We know that 2017 is not going to be the year for major investment, and that the cost of production is likely to mirror with the rise in milk price. However, we also see on a daily basis ways in which farms would be able to reduce their cost of production or benefit their yields without large scale spending.

Please keep in contact with your regular vet to discuss any thoughts you have regarding your herd's health and performance.



Alasdair Moffett

Interesting case — Injection Site Abscess

This cow was presented to me with a hindlimb lameness. On closer inspection it turned out that she had marked swelling behind the left stifle, and fetlock 'knuckling' of the same limb. These two problems were no coincidence – the swelling was in fact a large abscess which put direct pressure on the sciatic nerve and thereby affected the animal's gait.

The bacteria responsible for the abscess had been introduced during vaccination a few weeks before. It may have been bad luck in this case, but this sort of condition is much more common when old and dirty needles are reused for injections.

As well as being bacterially contaminated, old needles will also be blunt (painful for the injectee) and could become clogged up.

There is also a high chance that the medicine being administered will itself become contaminated and less effective, not to mention the health and safety hazards of having sharps lying around.



Injection Site Abscess

This large swelling behind the stifle, full of pus and scar tissue, is the site of the injection

Pete Siviter



Of course procedures on farm will never be completely sterile, but disease prevention is all about making small changes to tip the balance in our favour, so here are a few guidelines:

- ✓ Remember to get out a fresh needle when giving an injection
- ✓ Never transfer needles between batches of animals
- ✓ If injecting large number of animals (e.g. vaccination), needles will start to become blunt after 5-10 injections— consider changing, even if they appear clean and sharp to the naked eye
- ✓ Never leave a needle inside a bottle — this will provide a channel for dust and bacterial contaminants to get in and spoil the product
- ✓ Always have a sharps bin handy for safe disposal

Evidence of Nerve Damage

This characteristic 'knuckling' of the hindlimb is typical of sciatic nerve damage. The sciatic nerve runs down the back of the leg and controls some of the muscles which should straighten this joint.

News from our Rounds

Tom Clarke East



A relatively dry winter so far and some bumper turnip crops has meant outwintered cattle are having a relatively easy ride of it this year.

During 2016 I saw a number of herds suffering milk drops of different origins. We had a Lepto outbreak on one unvaccinated farm which caused a large number of "flabby bags", initially thought of as a mastitis in all four quarters, and has since lead to some fertility issues as well.

Another farm had a watery scour outbreak leading to down cows in the high yielders and multiple milk drops. The down cows responded to calcium treatments and the milk drops slowly returned over a week. It was since found to be a feeding mistake where it is likely that double the amount of protein had been fed.

On another unit we have been battling with *Mycoplasma bovis*, a very contagious bacterial infection causing various signs from pneumonia and mastitis to general sickness and milk drop. We have had a vaccine specially made up at a laboratory using bacteria taken from the farm to help dampen down the effects of the disease. Pasteurizing colostrum before it is fed to calves and keeping calves away from adult cows is also very important in trying to break the cycle of infection. *Mycoplasma* should be on your minds when buying in cattle if your farm is naive to the disease, as it is spread very easily via dirty needles, milk and nasal discharges.

Paula Hunt North



The seasonal arrival of large numbers of migratory birds on the Somerset Levels is well underway. Following the recent detection of H5N8 Highly Pathogenic Avian Influenza (HPAI) in Europe and Russia, the general public are being asked to remain vigilant and report any suspected incidents of 'mass mortality' – ie the death of five or more wild birds of any species at one location – to the DEFRA helpline on 0345 933 5577.

Wild fowl, including ducks, swans, wild geese and gulls, appear to be particularly affected. There have been around 20 outbreaks in captive birds and poultry units in Europe. As well as the obvious impact on production if domestic poultry become infected, HPAI is of particular concern to health experts because of the sporadic mutations that can occur, allowing the virus to jump species and potentially trigger a new human flu epidemic. It is important to maintain good hygiene when dealing with birds.

All UK keepers of poultry and other captive birds should be aware of the clinical signs and take extra biosecurity measures as outlined on the DEFRA website www.defra.gov.uk. I have confined my hens and ducks (much to their annoyance!) and covered their pens with fine meshed netting to prevent wild bird contact for the immediate 30 day period, pending further advice from APHA. Please contact us for advice if you have any concerns.

Alasdair Moffett South



As many of you are aware, Synergy Farm Health runs a two week core rotation for the Royal Vet College final year students. Some of these sessions take place at Evershot, but there are also a lot of practical on-farm visits. All of us that participate in the teaching find it a great way to stay up to date and test our veterinary knowledge and the farms involved benefit too. Some of the on-farm sessions are at a fixed location, but others such as the mastitis session and the youngstock session are run at different farms as a way of providing some free advice. The group sizes are usually about 9-12 students and we are on farm for a maximum of 4 hours. If you are interested in being a location for a practical session then please speak to your regular vet or contact the practice – hopefully you will gain something from the experience.

£30



Get yourself organised for lambing with the Synergy Lambing Kit

Including: Synergy guide to lambing, template for flock record book, lambing protocols; 2 x 50ml dosing syringes, stomach tube, lambing snare, 2 x lambing ropes, vet lube, arm length gloves, thermometer, iodine tincture and spray, propylene glycol, all enclosed in a free tool box

EVENTS

Safe use of Veterinary Medicines for Commercial Sheep Flocks
Weds 25th Jan

2 Day Foot Trimming
31st Jan & 1st Feb

Lamb Post Mortem
Weds 8th Feb

Practical Lambing
14th Feb or 28th Feb

Practical Colostrum management Workshop
Fri 17th Feb

Visit our website for further details or email courses@synergyfarmhealth.com