



July/August NEWSLETTER!

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Welcome to the July/August newsletter of 2023!

In this issue we look at Colostrum Management in calves, and ways of ensuring they remain healthy and productive in the long term by protecting them from infectious diseases.

In addition, we also look at Blowfly Strike in sheep and ways of optimising the health and welfare of flocks under our care by identifying, preventing and treating cases of Strike.

Please let us know what you think of these topics and any others you would like us to cover in upcoming newsletters.

Get in touch at reception@trandcfv.co.uk

See you next time,

The team at Chapelfield & Three Rivers Vets

In this issue:



Colostrum Management in calves

Current research shows that 26-50% of new-born calves don't get enough colostrum, putting them at a much higher risk of disease or early death. However, good colostrum management can help give calves the right start and protect them in the future.



Blowfly Strike

Blowfly Strike affects over 80% of flocks in the UK and it is estimated that between 500,000 and 700,000 sheep are struck each year and of these 3% of cases are unfortunately fatal. That's why it is important to identify, treat and prevent cases, to optimise the health and welfare of flocks under our care.

Colostrum Management in calves

Making Sure Your Calves Get the Good Stuff

Continued ➔

Protecting each new-born calf from infectious diseases is a major priority for every dairy farmer, as well as ensuring they are healthy and productive in the long term.

Current research shows that 26-50% of new-born calves don't get enough colostrum, putting them at a much higher risk of disease or early death.

Diseases that threaten new-borns

Calf scour and pneumonia pose real threats as soon as the calf is born, but good colostrum management can help give it the right start and protect it into the future.

Antibodies that the dam has built up in her immune system can't pass through the placenta to her calf. But she can pass enough antibodies through her colostrum to her new-born. Not only will this help improve the calf's immune system, but it will help ensure its future health and growth.

Guidelines suggest that each calf needs 3-4 litres, or 10% of their bodyweight, of colostrum should be given at birth with a follow-up feed of a similar size within the first 12 hours. It can get this by suckling or via a stomach tube, but suckling is preferable.

Speed is of the essence though. The calf's ability to absorb the good stuff from the colostrum decreases rapidly after birth. Within 6 hours, it can only absorb 66% of the antibodies and within 24 hours, this reduces to zero.

Avoiding calf scour

During peak calving times or an outbreak of calf scour, how can you make sure your new-born calves are getting the best protection? The answer is utilising a variety of different management options and diagnostic aids that can prevent it:

- Isolate, test and treat any calf showing clinical signs
- Make sure all calves ideally get 3 litres colostrum within the first 6 hours of life. If there are any doubts, use a stomach tube
- Clean and disinfect pens regularly. Leave to dry fully. If you have issues with cryptosporidiosis, specific disinfectants need to be used
- Bed daily
- Remove afterbirths as soon as possible
- Don't give mastitic milk or pooled colostrum
- Don't mix different age groups of calves
- Tend to healthy calves before dealing with sick calves
- Clean feeder, feed/water troughs, passageways etc. regularly. Clean and disinfect any equipment regularly
- Making sure milk replacer is fed at the correct concentration/temperature and mixed properly
- Halofuginone is licensed to prevent cryptosporidiosis
- Toltrazuril and Diclazuril are both licensed to prevent coccidiosis
- Vaccines are available for Rotavirus, Coronavirus, E. coli, BVD and Salmonella – calves must receive adequate volumes of good quality colostrum for passive transfer of antibodies

Making sure your calves get the best start in life is as simple as talking to your vet.

Book a call in to have a chat with us about the best options available. We can help make sure your calving season runs smoothly and is as productive as possible.



Blowfly Control

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Blowfly Strike, also known as Struck, is a result of flies laying their eggs (Blow) in the fleece of sheep which then develop into larvae/maggots, which then cause damage to the skin (Strike).

It affects over 80% of flocks in the UK and it is estimated that between 500,000 and 700,000 sheep are struck each year and of these 3% of cases are unfortunately fatal.

Identify, Treat and Prevent

We need to ensure we can identify, treat and prevent cases of Blowfly Strike to optimise the health and welfare of flocks under our care.

In addition to being a potential welfare concern, there will also be negative impacts on the performance of our flocks if we leave them untreated.

Productivity of our flocks will be impacted as affected individuals will have reduced grazing and therefore have reduced weight gain, weight loss and ewes will have reduced milk yields.

As with any disease on farm the control plan will be costly in terms of product purchase, time/labour to treat individuals/flock, deaths and potential production losses as discussed above. Figures from 2015 have shown that blowfly costs the sheep industry £2.2 million per year.

Clinical presentation

Blowflies thrive in warm and humid environments and less so in extreme temperatures and areas where it is windy or dry.

They actively seek soiled or wounded areas on alive and dead animals to lay their eggs. They can lay up to 250 eggs at once and if the conditions are right these will hatch into larvae (also known as maggots) and as they mature, they feed on living skin (Strike) secreting enzymes and using their mouthparts to damage the skin which in turn leads to production losses and welfare concerns.

Therefore, to control the fly population we need to reduce opportunities for fly breeding by limiting available areas to lay eggs.

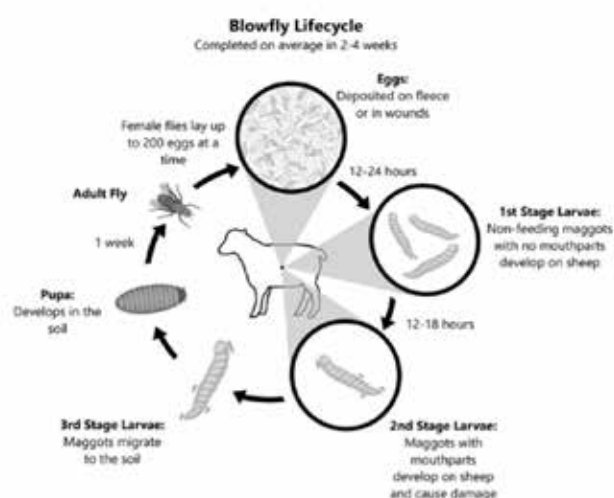
Fly activity is at its greatest from March to November. Once the conditions are optimal, adult flies can lay up to 3,000 eggs over 3 weeks. So, it is vital we can anticipate this and act accordingly.

- **Temperature** – spring temperatures will determine when the overwintered larvae hatch and as temperatures increase the area under this combined with humidity will create a microclimate in the fleece which attracts adult flies
- **Rainfall** – heavy rainfall will aid humid conditions in the fleece

Lifecycle

There are 3 species of flies that can cause Strike but the most common one is the Greenbottle fly (*Lucilia sericata*). The lifecycle of the blowfly is as follows:

1. Fly deposits eggs in dirty or damp areas e.g. fleece



2. Eggs develop into 1st larval stages (no damage)
3. 1st larval stages develop into 2nd and 3rd, mouthparts are very active and feed on living tissue
→ Clinical sign: patch of discoloured wool and agitation
4. Pupation
5. Flies emerge and then lay eggs

Significant damage can occur within as little as 24-36 hours after eggs are laid.

Clinical Signs

Early signs:

- Discoloured wool
- Agitation, kicking or nibbling at the affected area e.g., Tail or head
- Tail swishing
- Disturbed grazing

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Severe signs:

- Individual sheep isolate themselves from the rest of the flock
- Discoloured wool
- Fleece loss
- Sick animals – toxins released by damaged tissue and ammonia from maggots are absorbed into bloodstream causing septicaemia and toxemia
- Death
- Rapid diagnosis and treatment are therefore essential in avoiding severe results.

Diagnosis:

- Visual inspection of flock at a distance – it is a legal requirement to inspect all sheep daily during the highest risk periods of Blowfly Strike
- Individual inspection of sheep/lambs – part the fleece/wool and look for evidence of adult flies, maggots, discoloured fleece with maggots, putrid smell

Treatment:

- Shear/clip the wool away
- Physical removal of maggots
- Clean and disinfect wound
- Supportive care prescribed by a vet – NSAID's, antibiotics, fluids

Prevention

The first part of prevention is the application of preventative treatment – prior to the main risk period of flies and therefore, blowfly season.

- Insect growth regulators – prevent larvae development, and can provide protection for between 8-16 weeks
- Cypermethrins – treat existing strike but also provide further protection from further strike for 6-10 weeks
- Deltamethrin – only used to treat

There must be an effort made to reduce optimal egg laying conditions. As we know, flies are attracted to warm, humid and dirty environments so the following strategies aim to reduce faecal contamination and create fewer desirable conditions for flies to lay their eggs.

- Daggging or crutching
- Shearing
- Tail docking – especially in lowland flocks
- Gastrointestinal worm control planning – control of parasitic gastroenteritis will reduce diarrhoea and faecal contamination of the fleece (and maximise health and productivity of flock)
- Early detection and treatment of wounds and foot lesions

There should also be an attempt made to reduce the fly population – this should be done throughout the year to reduce challenge even at times when flies aren't around

- Fly traps
- Prompt disposal of dead stock
- Graze pasture with a lower fly burden during riskier periods

A useful tool that aids the timing and application of preventative products is the NADIS (National Animal Disease Information Service) "Blowfly Alert". Blowfly populations are greatest during summer months although due to changes in the climate the risk period can vary.

- Met Office data to predict the emergence of blowflies, the risk of clinical cases and therefore we can use these alerts to guide the timings of our treatments
- The met office records daily temperatures and rainfall, and this combined with the knowledge of the fly's lifecycle and sheep susceptibility, can predict the pattern of strike incidence



Note: Strike is more likely to occur in warm, humid weather (9+ degrees), but as the climate in the UK and Ireland varies, the Blowfly Season is harder to predict and has been reported to start earlier and last longer!

In summary, Blowflies seek soiled or wounded areas on live or dead animals to lay their eggs. Therefore, to minimise the fly population we need to reduce opportunity for breeding by limiting available areas to lay eggs. We can achieve this using a variety of methods, as discussed above, because prevention is easier than treatment with Blowfly Strike.