The GEORGE Farm Vets

JUNE 2022

FLYSTRIKE

Blowfly strike results from the opportunistic invasion of living tissue by the larvae of greenbottle flies, blackbottle flies and bluebottle flies. Primary flies such as greenbottles initiate strike on living sheep with soiled fleece or wounds, while secondary flies such as bluebottles and blackbottles only attack areas which are already struck or damaged.

This is usually a condition seen in the summer months, however due to climate change the risk period can be from March to December in lowland areas. The entire life cycle from egg to adult can occur in less than 10 days in optimal conditions so it's something that can develop pretty quickly!

Adult female flies deposit eggs on dead animals or soiled fleeces and eggs hatch into first stage larvae within about 12 hours. These larvae feed on skin and faecal material, becoming mature third-stage maggots in as little as 3 days if temperature and humidity are at optimum levels. Third-stage maggots then drop to the ground and pupate; mature flies emerge after 3 to 7 days between May and September. Flies can over-winter in the soil as pupae and emerge as soil temperatures rise during the spring.

Maggots are active and feed voraciously, causing skin and muscle damage by secreting enzymes. Secondary blowflies are attracted by the smell of decomposing tissue. Toxins released by damaged tissues and ammonia secreted by the maggots are absorbed through the lesions into the sheep's bloodstream, causing illness and death in severe cases. Secondary bacterial infections are common and may also cause death if untreated.

Blowfly strike is a major animal welfare concern: an average of 1.5% of ewes and 3% of lambs in the UK may be affected each year, despite preventative measures undertaken by most farmers. This number will be much higher if no control measures are adopted. At least 75% of sheep farms report cases of blowfly strike each year. Flystrike of foot lesions causes severe non-weight bearing lameness, compounding the welfare implications of lameness alone. Death can result in neglected cases, with mortality associated with fly strike estimated at 5% of affected animals.

Footrot lesions like the ones seen above will become even more painful if maggots also invade

Adult flies are attracted to areas of soiled fleece surrounding the tail or breech, and less commonly to wounds, footrot lesions and urine scalding around the prepuce. The main **clinical signs** include:

- Isolation from the flock
- Discoloured wool
- Agitation and kicking or nibbling at the affected area
- Disturbed grazing
- Tissue decay
- Toxaemia
- Death

Diagnosis is based on visual inspection: large numbers of adult flies are seen on the discoloured fleece with maggots on the blackened skin once the surrounding fleece has been lifted clear. There is an associated putrid smell. Skin which has been previously damaged by flystrike may grow black wool.

Treatment of individual affected sheep involves physical removal of maggots, cleaning and disinfection of wounds and supportive treatment such as antibiotics, fluids and non-steroidal anti-inflammatories. Use of an insecticide will deal with any areas that might be missed and prevent any further flystrike occurring.

There are various strategies that can be employed to reduce the risk of blowfly strike in the flock:

- Use of the NADIS blowfly alert to identify the periods of highest risk and take preventative action.
- Shearing ewes prior to the onset of the high-risk period
- Control of parasitic gastroenteritis caused by roundworms in lambs to reduce diarrhoea and therefore faecal contamination of the fleece
- Dagging or crutching of fleece around the tail area to reduce fleece soiling
- Use of pour-on chemical formulations to prevent strike or inhibit larval growth
- Correct disposal of carcases in order to minimise suitable areas for flies to lay eggs
- Ensure all wounds and footrot lesions are treated promptly

Faecal contamination of the fleece due to scouring increases the risk of flystrike

Products to Fight Flystrike

CliK, Clik EXTRA and CliKiZin are pour-on insect growth regulators. They do not stop flies laying eggs, but do stop the larvae developing to the harmful 2nd and 3rd stage maggots. These are used for **prevention** not treatment**.** The three products vary in duration of action and meat withhold so hopefully one of them should meet your needs.

Product	Duration of action	Meat withhold
CliK	16 weeks	40 days
CliK EXTRA	19 weeks	40 days
CliKaZin	8 weeks	7 days

Crovect is more a broad spectrum insecticide pour-on which will also cover for lice and ticks. The duration of action is 10 weeks and the meat withhold is 8 days. This can be used for **treatment and prevention**, however due to this being a broader spectrum insecticide this will have a greater negative impact on other insect populations so the CliK products are recommended for prevention.

Spotinor is a spot-on product (smaller volumes used compared pour-on products which absorb into the skin layer) containing a broad spectrum insecticide. This will also protect against lice and ticks as well as flystrike. This is best used as a **treatment** established flystrike however will provide 4 weeks of protection when used. The meat withhold is 5 weeks.

These products are available to buy from our shop at competitive prices! We can advise on the most suitable product for your application hopefully saving you time and money.

The information on flystrike within this newsletter was taken from the national animal disease information service (NADIS) website, www.nadis.org.uk. This is a great source of information for diseases in sheep and cattle and they also produce parasite forecasts hopefully giving you a heads up for the main risk periods.

Wishing you all well!

Will S

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