

## Fly Control



In this article we will discuss the importance of fly control in increasing productivity and reducing the incidence of diseases such as New Forest Eye, as well as the different options for treatment. Although aimed at our dairy clients, fly control is an important issue for all of our farms, and so much of this information will cross over!

### TYPES OF FLIES

#### *Nuisance Flies*

These flies are found around the face and wounds of all livestock. They breed in faeces or rotting vegetation and cause irritation to your animals, as well as transmitting bacteria, which can result in eye infections, such as New Forest Eye.

#### *Biting Flies – e.g. stable, midges, mosquitoes, horse*

These flies breed in dung, around water or damp and muddy areas. They cause intense irritation to livestock and can be significant vectors for disease transmission.

#### *Myiasis Flies – e.g. blow, bot*

The larvae of these flies, maggots, feed on host tissues causing 'fly strike' also known as *Myiasis*. Some of these larvae can migrate, such as the nasal bot fly larvae which burrow into the nasal sinuses

### PRODUCTION LOSSES

Although fly control is used to prevent or treat conditions such as *fly strike* or *New Forest Eye* high fly burdens are associated with significant production losses due to the 'hassle factor' of flies. Cattle will become irritated by the flies and so spend less time resting or eating resulting in reduced Daily Live Weight Gain (DLWG) and milk production.

In one study it was found that milk production in dairy cattle was reduced by 0.52kg/cow/day<sup>1</sup>. Another estimated that milk loses of 139kg per animal per season<sup>2</sup> which, depending on milk price, equates to up to £40 per animal!

DLWG of youngstock is also impacted by fly infestation. One study reported a loss of 0.28kg/head/day<sup>1</sup>. Another found that an average loss of 26kg over the season<sup>2</sup>. Both of these represent a potential significant financial loss.

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### CONTROL METHODS

*Synthetic pyrethroid* pour on products are the most common used. These work by disrupting the fly's nervous system, ultimately killing them. Products that we have currently available include *Spotinor*, *Dectospot* and *Flypor*. These products often need re-applying throughout the season.

Ear tags impregnated with *synthetic pyrethroids* can also be used in order to reduce fly numbers. They will be effective for the whole season, however they tend to work better at reducing cases of New Forest Eye, than combating all nuisance flies.

The pupa of *Pteromalid wasps* are now also a commercially available product. These wasps are natural parasites of flies and usually live for 10-30 days producing 30-60 eggs each. Regular release of these pupa have been shown to reduce stable flies by 25-50%<sup>3</sup>.

It has been suggested that garlic licks act as a fly repellent. However there is no evidence that they work and it has been reported that they can taint milk.

Managing your paddocks is another essential component in good fly control. Fencing off water sources as well as managing water troughs to prevent standing water and poaching of ground around them will help to reduce the fly burden.

**Below are some disease transmitted by flies;**

“New Forest Eye” – Infectious Bovine Keratoconjunctivitis (IBK)

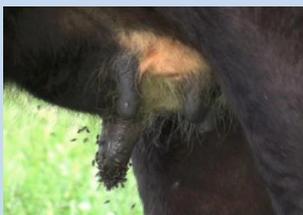
A disease we commonly encounter. Nuisance flies act as a mechanical vector in



transmitting the bacteria responsible for IBK, *Moraxella Bovis*. It is highly contagious and can spread rapidly during the summer months. Infection is first seen as tear-staining on the face of cattle and progresses to a conjunctivitis and corneal ulceration. The eye will go cloudy and will be painful, particularly when exposed to direct sunlight. The above picture shows a very severe case and animals should be spotted and treated before they get to this stage. Treatment with a topical eye cream and pain relief is indicated, the use of an injectable antibiotic may also be indicated. For severe cases a vet may elect to temporarily suture the eye closed (known as a temporary tarsorrhaphy) in order to promote healing and prevent further damage by direct sunlight.

Summer mastitis

Usually seen in the summer months, this is a disease of non-lactating cows and heifers caused by bacteria such as *Arcanobacterium pyogenes*. Summer mastitis is transmitted by nuisance flies. Affected quarters and teats will become gradually enlarged with large numbers of flies around the affected area causing irritation to the cows who kick at the flies. As the swelling progresses cows become more generally sick, isolating themselves from the group and eating less. Milk from the affected quarter is thick, clotted and foul smelling. Treatment usually involves intramammary antibiotics, pain relief and systemic antibiotics if the cow is clinically sick. In addition, frequent stripping of the affected quarter is also vital; this should be undertaken at least twice a day, or even more frequently.



Schmallenberg Virus (SBV)

Present in the UK since the 2012/13 outbreak, the virus is spread by biting flies such as midges.



SBV can cause acute clinical disease in adult cattle, usually presenting with very vague clinical signs such as a fever and reduced milk yield. However, the biggest problem we see is foetal deformities. SBV can cross the placenta affecting the growing foetus, which is most susceptible at 62-180 days in calf. SBV damages the foetal nervous system resulting in brain and spinal cord abnormalities causing secondary problems with the muscles and skeleton. Common deformities include bent limbs and fixed joints. These calves commonly cause problems during calving and frequently require assistance.

Thankfully, the incidence of SBV has been much reduced this year, however it is still an important disease to consider.

**SUMMARY**

A good fly control strategy is an important part of preventative healthcare for dairy cattle, as well as all livestock. Not only does good fly control have the potential for improving productivity in your herd, but it also prevents diseases such as those mentioned above. There are many options for fly control and our team is happy to discuss and advise about which method will suit your herd the best. For any more information on this subject please phone 01722 333291 and ask to speak to one of our vets.