



Farm Veterinary Solutions

Special Edition—Cattle Parasites

2023

A Guide to Parasites SS23

Welcome to the Special Edition Newsletter focusing on the parasites that may affect your cattle this Spring/Summer. This edition will cover some of the most common parasites and their associating diseases that you should be aware and cautious of as well as the steps we should all be taking to support the appropriate use of anthelmintics. It is important to remember every farm is different. You may have different species and populations of parasites to even your neighbours, as well as varying grazing strategies and how that can play a role in parasite burdens. Creating an individual parasite control plan with one of the vets or SQPs will be of real benefit to your herd to control parasites in the most economical and appropriate ways.

Lungworm

Top 10 Tips for Controlling Lungworm

Identify Risk

1. Lungworm outbreaks are unpredictable, but are more prevalent in wetter weather. Younger cattle are at most risk of infection until they acquire immunity through exposure to lungworm.
2. Suspect lungworm infection if there is coughing or respiratory distress in grazing cattle.
3. Animals exposed to lungworm usually develop resistance to re-infection. Lack of exposure may result in clinical signs occurring in older cattle, including milking cows. Be aware that immunity can wane.
4. Bought-in calves or adult cattle may introduce lungworm onto a farm so all incoming cattle should be quarantined and treated.

Treat Appropriately

5. Routine vaccination should be considered for calves born into herds with history of or an identified lungworm problem.
6. Vaccination is not necessary on farms with no previous history of lungworm but the situation should be monitored.
7. Anthelmintics can be used strategically in first year grazing cattle to prevent build-up of lungworm larvae on pasture over the grazing season. However, it is important to be aware that anthelmintics may potentially limit exposure to lungworm larvae to such an extent that cattle remain susceptible to infection.
8. In animals with respiratory distress, avoid orally administered anthelmintics.
9. Severely affected animals may require additional supportive treatment which should be discussed with a vet.

Plan Ahead

10. Work out a control strategy. Lungworm outbreaks can cause severe losses and even death in cattle. This can happen at relatively low pasture infection levels. Our vets and SQPs are able to advise and help you to prevent and control lungworm.

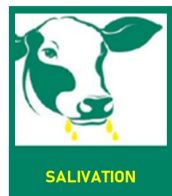
Lungworm (*dictyocaulus viviparus*), causes parasitic bronchitis commonly known as 'husk'. The life cycle is similar to that of gutworms except that larvae rather than eggs are passed out into the faeces. Heavy stocking densities and wet, mild summers can increase the risk of pastures being contaminated with large numbers of infective larvae. Lungworm typically infects young cattle during their first grazing season but all ages of cattle can be susceptible to disease.

COWS

Control of Worms Sustainably



COWS is a voluntary initiative that aims to provide the best available, evidence-based information to the beef and dairy cattle industries in relation to the sustainable control of both internal and external parasites.



"Lungworm infection is unpredictable by nature and poses a significant threat to young calves, potentially reducing growth rates by over 20% and costing £50-£100 per head."

High Risk Conditions for Lungworm

- ◆ Wet summers
- ◆ Heavy stocking density
- ◆ Lack of immunity due to low exposure



Gastrointestinal Roundworms



Ostertagia and *Cooperia*

Cattle can acquire infections with any of the several species of roundworms when grazing pastures. The most common and important are *Ostertagia*, which live in the abomasum, and *Cooperia* which inhabit the small intestine. Whilst these parasites are common, clinical disease is generally only seen in young calves during their first grazing season. Clinical signs of disease include loss of appetite, scoring and poor condition. Prior to clinical disease, infected animals experience a loss of production which can be difficult to detect without accurate observation and recording. In youngstock, growth rates can be reduced by up to 30%, even with a low level of worm challenge. Even in adult cows, which are likely to have better immunity to the worms, infections can cause up to 1kg per day drop in milk yield.

Infections are acquired following spring turnout when cattle encounter the residual overwintered larval populations on pasture. Eggs are also shed from worms overwintering in older cattle. When weaned calves in their first grazing season with limited or no immunity ingest larvae, a high proportion of worms establish in the gut and develop to adults. If possible, turn out first grazing season calves such as replacement heifers, onto low risk pastures, e.g. pastures not grazed by cattle last year. If using pasture grazed by youngstock last year, consider carrying out faecal egg counts for gut and lung worms. Do not wait for signs of weight loss and diarrhoea! Use of strategic treatment plans can be useful for preventing pasture contamination and production losses. Discuss with one of the vets or SQPs what the best control plan is for your calves. Dry summers are likely to slow down the accumulation of larvae on pastures, but this can rise rapidly following rainfall.

As a general rule:

Who to treat:

- Autumn born calves at spring turnout
- Spring dairy calves
- Second year grazers
- Dairy heifers (1st lac)

Who NOT to treat:

- Dairy cows (from 2nd lac)
- Zero grazed cattle

Unless diagnosis of clinical disease; inadequate grazing access to allow immunity to develop; treated repeatedly with LA wormers; herd history of Type 2 *Ostertagiosis*

Bear in mind that immunity in cattle can take up to two grazing seasons to develop and is never complete. Older cattle tend to have smaller burdens and rarely show signs of clinical disease, but can incur production losses. Poor development of immunity in replacement heifers can lead to high susceptibility in milking cows and the risk of production loss if they become exposed. Herds in which this occurs tend to have high levels of detectable antibodies in the bulk milk. Ask us for a bulk milk testing kit! These herds are most likely to benefit from treatment of milking cows.



Fly Control—Don't Delay!

Why Treat?

Although we may just see flies as a nuisance, uncontrolled fly populations can significantly affect your cattle:

- Reduced milk yield by up to 20%
- Increased incidence of summer mastitis
- Reduced calf weaning weights by up to 9kg
- Welfare issues



When to Treat?

Different species of flies are active at varying times of the year. This means a summer long threat is present with waves of irritants emerging all season long. Regular, frequent treatment is required throughout the period of risk to keep existing flies, as well as any newly emerging populations, under control.

If you delay treatment until significant numbers of flies are noticeable, it is already too late to adequately control fly numbers! Reproduction of the existing population will have already commenced, meaning hundreds to thousands of eggs will be lurking in the surrounds, waiting to hatch and compound the problem.

Start treatment early before a problem even arises to maximise the success!

Sustainable Use of Parasiticides in Cattle *Get Involved!*

The University of Bristol have launched a new project in which they are looking at patterns of insecticide and wormer treatments in the UK and **they need your help!**

Parasiticides are important in agriculture preventing significant economical losses from reduced growth rates of livestock. However, they can also cost the industry a significant amount of money alongside causing environmental contamination. The drugs are excreted in faeces of livestock where they can have toxic impacts on the invertebrate communities that rely on dung. The loss of these decomposer invertebrates can cause conflicting long-term affects on your farms.

"It has been estimated that the dung dwelling insects save the cattle industry £367million per year."

So how can you take part? Simply scan the QR code to sign up via the website. Participation involves farmers filling in monthly surveys with information on the type of anthelmintics and/or insecticides used and numbers of cattle treated. This will take only 2-3 minutes each month.



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