

## Cattle Parasites and Worms | Type II Ostertagiosis

With a lot of information available on the control of worms in young cattle one situation which can be overlooked is Type II Ostertagiosis. Ostertagia, one of the major worms affecting cattle, has a slightly more complex life cycle than many of the other worms such as Cooperia.

In the case of Ostertagia, infective larvae on the pasture are eaten and then invade the glands which line the abomasum (the cow's 4th stomach). There they complete the rest of their life cycle and return to the surface of the abomasum. This can take as little as 18 days with eggs from these worms able to be found as soon as 21 days after initial ingestion from the pasture. This is the basic lifecycle of the majority of intestinal worms.

However under certain conditions the larvae can remain in the glands within the tissue of the abomasum for quite long periods – up to 4 months. Importantly these inhibited larvae, which tend to develop over the winter, produce no eggs since they are not yet mature, and will not cause disease until they emerge from the abomasal wall. This situation is referred to as Type II Ostertagiosis.

Quite what the trigger for emergence is a matter of some debate but in our climate the worms tend to overwinter in the host and emerge in the spring. Removal of adult populations, such as with a conventional or combination oral drench, may signal more larvae to appear, or it may be related to feeding levels.

Whatever triggers the worms to emerge, the fact is that these emerging larvae, especially if in great numbers, can cause severe damage to the stomach lining. This can cause sudden severe illness and even death.

Early in the disease process there will be no eggs present in the dung, making diagnosis by faecal egg counts difficult, but the presence of worms may be detected on a blood test.

Affected stock will range in appearance from normal, scouring and not eating or even very sick and down. Other conditions, such as trace element deficiency and bacterial enteritis may also be involved.

The most commonly affected animals are 12 month old animals coming out of winter, but the disease can be seen in 2 year-old animals also coming out of winter.

Prevention of Type II Ostertagiosis is reliant on having a good preventative drenching programme in place for young animals. Of particular importance with respect to Type II Ostertagiosis is that the ML type drenches (such as Ivermectin, Eprinomectin, Doramectin, and Abamectin) are effective at killing the inhibited larvae, whereas Levamisole and Benzimidazoles (Oxfendazole, Albendazole) will not.

This is an important point, as due to a lot of documented resistance in Cooperia to the ML type drenches the use of a combination product containing Levamisole and Benzimidazoles (which controls Cooperia well) is often recommended through late summer and autumn when calves are at the most risk of infection from Cooperia. The use of these Levamisole/Benzimidazole products going into and coming out of winter may lead to poor control of Ostertagia and the potential of being affected by Type II Ostertagiosis.

From what we know about Type II Ostertagiosis, the use of an effective drench in the winter/early spring period is very important to prevent this disease occurring.

Failure to address any potential infection will have long term consequences as animals with badly damaged stomachs will not make the best use of available dry matter and may take longer to get to target weights and finish than unaffected stock.

## Farmer Seminars

This year we are running two winter seminars

### **LAMENESS** *DATE CHANGE* now on **Wednesday the 6<sup>th</sup> July.**

This covers costs of lameness, what is normal, how to trim overgrown toes, causes of lameness and how to treat them, cowslips, leg restraint, knife sharpening and farm problem areas.

A practical session on hoof trimming is included.

This course is aimed at farmers who would like to learn to do their own lame cows.

### **SPRING FIRST AID** on **Wednesday the 29<sup>th</sup> June (limited places left)**

This covers calvings, retained cleanings, prolapses, downer cows, sick cows and calf care. Practical sessions on calving cows and general procedures like injections, milk sampling and calf drenching are included. This course is aimed at new entrants to farming or people who would like to brush up their skills.

Both seminars will be held at the clinic and will start at around 9.30 and go until 3-3.30. The cost is \$175 including GST and includes lunch and a comprehensive folder of notes. If you are interested, please ring the girls at reception to put your name down.



## Control calf scours before they control your life

As we approach another calving, it's worth reflecting on one of the challenges of rearing calves. Scours is something most dairy farmers have experienced at some stage, and anybody that has been through the hell of a severe outbreak will know it is one of the worst experiences in farming. And it can happen to anybody – often even the most careful farmers have experienced a scours outbreak.



For the first month of life, calves that encounter high levels of “bugs” (viruses, bacteria or protozoa such as rotavirus, coronavirus, *E. coli* or cryptosporidium) have an increased chance of going on to develop scours. With about 70% of farms positive for rotavirus alone, it's quite likely they will come into contact with at least some of these bugs. During this time, their only real defence is from the immunity passed through colostrum from their mothers.

Calves are the most genetically valuable animals on your farm, so every death or reduction in growth rate will reduce your chance of reaching your full dairy potential. When death rates are high the financial effects can be severe, but even surviving calves often have long-term damage to their gut that will reduce their growth rates, so costs can be ongoing. A severe outbreak can also put strain on the whole family – from the partner who rears the calves to the children, or even grandchildren.

Unfortunately “damage control” is about all you can do in the midst of an outbreak, so it makes sense to focus on prevention. Good hygiene and facilities will help to limit the number of bugs calves are exposed to, but it's just as important that calves have good enough immunity to cope with what bugs they do encounter.

The most important factor in calf immunity is colostrum. Calves must get 2 – 3.5 litres of colostrum from the first two milkings within 6 – 12 hours of birth to maximise their intake of protective antibodies. If they miss out on the full amount or the quality of this colostrum is poor, they will have little chance of fighting off infection.

*So how can you improve the all important protection calves get from their colostrum, and reduce the chances of scours further?*

Vaccinating the herd with Rotavec<sup>®</sup> Corona stimulates the cows to produce extra antibodies to rotavirus, coronavirus and *E. coli*. These antibodies then pass into the colostrum at much higher levels than in unvaccinated cows. The result is colostrum that provides far greater immunity to calves, increasing their chances of dealing with any challenges. Of course, it's still crucial that calves get enough of this colostrum at the right time to maximise their protection.

A single shot of Rotavec Corona to the herd 3 weeks before the start of calving will increase the levels of antibodies to rotavirus, coronavirus and *E. coli* in the colostrum of cows calving in the first 9 weeks.

In conjunction with good hygiene, housing and colostrum management, Rotavec Corona will significantly increase the protection your calves have against the major causes of scours. Talk to us about vaccinating to maximise your calf health and income, and reduce the stress on you and your family.



## LADIES ONLY CALF REARING NIGHT

A fun evening with a focus on calf rearing  
Tuesday 14th June 7pm @ the Eltham Fire Station (*note venue change*)  
Please RSVP now

### *Little Johnny*

*One day, Little Johnny's dad asked him if he knew about the birds and the bees.  
"I don't want to know!" little Johnny said, bursting into tears.  
Confused, the father asked Little Johnny what was wrong.*

*"Oh Dad," Johnny sobbed: "At age 6, I got the 'there's no Santa' speech. At age 7, I got the 'there's no Easter bunny' speech. Then, at age 8, you hit me with the 'there's no tooth fairy' speech!  
If you're going to tell me now that grown-ups don't really have sex, I've got nothing left to live for!"*

