THE WOOD VETERINARY GROUP

FARM NEWSLETTER MARCH 2022

Standard for Gloucestershire!!

Many of you that border the River Severn or its tributaries are used to having very soggy fields that are either under water or water logged for a large chunk of the winter and unusable until late spring. It also makes everyday tasks slower and messier at an already busy time of year for calving and lambing, such as feeding and checking on livestock when roads are intermittently closed or gateways heavily poached.

We do need to consider what risks remain after the water returns to the confines of the river:

- Flooded pastures will be high risk for Leptospirosis infection especially to unvaccinated animals – make sure vaccinations are done well ahead of turnout
- The main contaminants will be from flood water with sewage or livestock faecal material in it such as Salmonella and Cryptosporidium
- Hydrocarbons from fuel can also be an issue from road run off. Be aware of local industrial plants that may have leached chemicals into standing water
- Where flood water has eroded the soil it can expose soil based bacteria such as Anthrax to the air causing spores
- Clostridial diseases – Blackleg vaccines are a sensible precaution where soil erosion has occurred
- Be conscious of Liver Fluke as flooding will have increased the mud snail habitat to areas that haven't previously been a risk for fluke infection

Avoid using previously flooded pastures for as long as possible. UV light and drying out help to reduce the risks from biological contaminants. This will also promote new shoot growth and root development ensuring more pasture survives into the grazing season. You may need to graze poor pastures as "sacrifice pastures" early on to protect pastures that have the potential to recover well to ensure enough viable grazing for the summer months and this year's harvest.

Mastitis Treatments – A Reminder

We have worked hard across the dairy sector towards the reduction of clinical mastitis rates through environmental management and milking routine for years to promote welfare, milk quality and economic production. An added benefit of this and our constant mission as farm vets is the reduced use of antibiotics especially in cases caused by gram negative bacteria where there is a very high spontaneous cure rate without antibiotic treatment. By avoiding the use of antibiotics in these gram negative cases, it means that antibiotics are safeguarded for when they will have a positive impact on cure rate and reduces resistance.

As we discussed in the November newsletter, part of this challenge is identifying the bacteria involved. For decades we have been analysing individual mastitis samples taken before treatment and bulk tank samples in our lab to identify what bacteria are causing issues on farms. It is vital to know what bacteria are involved to advise on the best treatment regime and develop a targeted prevention strategy. We can also quickly identify on farm whether it is a gram negative or positive bacteria using 8-14hr tests to identify whether an antibiotic tube is appropriate alongside the NSAID treatment.

With NSAIDs continuing to show major success rates in mastitis treatments, a zero-milk withdrawal version such as Ketofen/Keloprofen can be administered

immediately upon identification with external udder mint whilst the test runs in an on-site incubator to decide if antibiotic treatment is required. We would still recommend storing a sample of the quarter milk in the freezer identified with Cow I.D., Date, and Quarter affected to run periodically throughout the year in our lab giving us the exact bacteria involved. Speak to us about reviewing your mastitis protocol on farm.

As you are all aware we have also struggled to access certain mastitis tubes especially those that fall into the first line treatment category. Gamaret is now available again with a treatment regime of one tube repeated at 24 or 48 hrs as required. As it is imported it carries a 108 hr milk and 8 days meat withdrawal.

Neospora caninum - Abortions

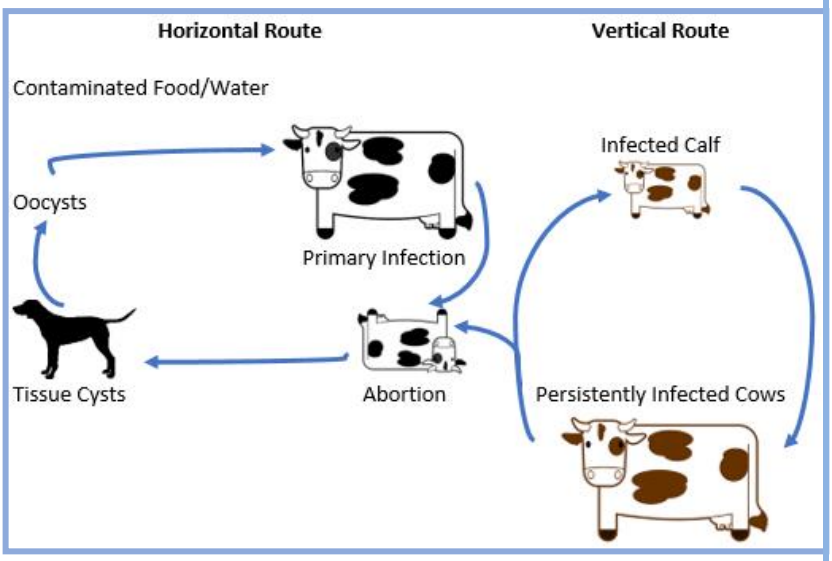
Neospora is a protozoan parasite that causes cattle abortions. It results in abortion between 3 months and full term, neurological calves, and early foetal resorption seen as infertility and increased time to conception. This results in increased calving interval and calving blocks being completely shifted.

Neospora is spread from dog to cattle and dam to offspring. It first gets onto a farm via these routes:

1. Buying in an infected cow – at some point she aborts infecting a dog when it eats the aborted placenta/calf or she gives birth to an infected live heifer calf that is kept as a replacement
2. A recently infected dog defecates in cattle drinking water, feed or fields being grazed by cattle

Dogs shed oocysts (eggs) for 7 to 21 days after eating abortion material and these oocysts can survive for up to 6 months. Rodents eating abortive material can also infect dogs so good rodent control is also vital.

Both oocyst survival and vertical transmission from dam to heifers are the main ways that infection is spread. It is also worth noting that there is no transmission between cattle other than through pregnancy or a dog intermediate. Infected cattle do not abort every pregnancy but intermittently have live calves and abortions although recent infection is more likely to result in pregnancy loss.



<u>Management Strategies</u>

The best time for testing animals is during pregnancy, directly after an abortion or a suspected new infection because the animal will have sufficient antibodies against the active stage of the parasite to give a positive test result. Testing an animal several times will reduce the risk of false negative result.

Culling out infected animals is normally not practical due to the proportion of the herd that is likely to be infected. However, breeding strategies can help to reduce vertical transmission within the herd:

- Test all cows that abort (promptly after abortion)
- Test all heifers prior to first service
- Breed positive animals to non-replacement semen i.e. beef semen for dairy units
- Do not keep any offspring from positive cows as replacements

Biosecurity plays a major role in preventing infection entering the herd:

- Closed herd or if buying in source from accredited negative herds
- Dispose of aborted foetus and cleansings in a rodent and dog proof container prior to collection
- Prevent dogs from scavenging cleansing or afterbirth material from ALL calvings
- Pick up dog faeces from farm dogs and dispose in household general waste
- Where footpaths mean local dogs are crossing land put up posters requesting people to pick up faeces explaining why and avoid calving cows in these fields if possible