Selective Dry Cow Therapy

Selective dry cow therapy is fast becoming a requirement of several milk buyers in an effort to reduce antibiotic usage through improved dry & calving cow management.

It involves setting a farm-specific protocol whereby lower risk cows are dried-off with a teat sealant alone, with only higher risk cows receiving antibiotic tubes +/- a teat sealant.

Farms may need to look at ways to improve dry & calving cow environments before selective therapy can be safely instigated without increasing mastitis or cell count risk. Farms already using selective therapy may be able to further reduce antibiotic tube usage with some tweaks to dry & calving cow management.

The added bonus is that you save around £8 for every cow that doesn’t require antibiotic tubes.

We have helped several of our farms make large reductions in their mastitis rate by carrying out a detailed mastitis “audit” aided by the DairyCo Mastitis Plan. The graphs below show the results we have achieved on two farms; Farm 1 required a modest investment in dry cow facilities which quickly paid for itself through reduced mastitis costs & improved new born calf health. Farm 2 required no investment at all to reduce their mastitis rate, just a few changes in the way dry cows were grouped and calving cows were managed. Both farms now successfully use selective dry cow therapy.

Key: Dry Period Origin (1st), Dry Period Origin (recurrent), Lactation Period Origin (1st), Lactation Period Origin (Recurrence), Other Period Origin (1st), Other Period Origin (Recurrence).

Please talk to your routine vet to see how we can help you save money and reduce mastitis through selective dry cow therapy.
Liver Fluke – High risk for 2015/2016

Unlike last year the risk of liver fluke infection is considered to be high for 2015/16. The heavy rainfall and lower than average temperature levels this summer has ensured this. We are urging all cattle and sheep farmers to contact your vet to discuss Liver Fluke management and treatments. With this high environmental risk, if there is any chance of fluke infection in your beef or dairy herd or sheep flock, it is important to consider which treatment should be used and at what time it should be administered. The fluke will be developing through its life cycle at different times of year so it is vital that the right treatment is used to target a specific age of fluke. If the wrong treatment is selected it will have no effect. No products are long acting so unfortunately we can’t use them as a preventative.

Triclabendazole is the only product that will treat very young immature stages of fluke. When used at grazing repeat treatments will likely be required 4-6 weeks later. Please refer to the table below as to when each fluke drug is effective and at what stage.

As many people are starting to house, product selection should be planned to make sure: the right drug is used at the right time, to target the right stage of fluke.

<table>
<thead>
<tr>
<th>Active ingredient</th>
<th>Administration route</th>
<th>Stage of fluke killed</th>
<th>Best time for treatment after housing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Triclabendazole</td>
<td>Oral</td>
<td>2 weeks onwards</td>
<td>From 2 weeks</td>
</tr>
<tr>
<td></td>
<td>Pour-on</td>
<td>6-8 weeks onwards</td>
<td>From 6 weeks</td>
</tr>
<tr>
<td>Closantel</td>
<td>s/c injection or pour-on</td>
<td>7 weeks onwards</td>
<td>From 7 weeks</td>
</tr>
<tr>
<td>Nitroxynil</td>
<td>s/c injection</td>
<td>8 weeks onwards</td>
<td>From 8 weeks</td>
</tr>
<tr>
<td>Clorsulon</td>
<td>s/c injection</td>
<td>Adults only</td>
<td>From 12 weeks</td>
</tr>
<tr>
<td>Oxyclozanide</td>
<td>Oral</td>
<td>Adults only</td>
<td>From 12 weeks</td>
</tr>
<tr>
<td>Albendazole</td>
<td>Oral</td>
<td>Adults only</td>
<td>From 12 weeks</td>
</tr>
</tbody>
</table>

Risk factors include: grazing wet or muddy pasture, previous fluke history on farm or farm of origin and abattoir feedback reporting fluke. However measures should be taken to manage these risks and avoid infection in the first place. Mud snails play an integral role – hosting the fluke internally as it develops inside the snail. These snails are active summer/autumn so it is important to prevent as many liver fluke eggs reaching the pasture as possible to avoid invasion of the snails in the first place. This can be achieved through treatment of adult liver fluke late spring/summer; resulting in fewer infected snails maintaining the fluke population. Snail numbers can also be reduced through field management: topping rushes, improving drainage, avoiding poached areas and high risk pasture at high risk times of year.

Please contact us at the practice to discuss testing and treating for fluke, especially with regards to milk producing animals as **not all products are licensed for use in dairy cattle**. If you wish to treat with a combination wormer product please contact us for further advice.
Pre-breeding soundness examination

• Rams and ewes should be inspected 10 weeks pre-tupping. This gives time to rectify any problems that may be diagnosed. For example; it takes 8 weeks to gain a BCS so checks at 10 weeks will allow time to supplementary feed ewes and rams to achieve target condition. It takes 7 weeks for semen production, so rams should have large, firm testicles at least 7 weeks pre-tupping to ensure the semen is optimal for serving early, in the first 3 week cycle.

• Physical Examination of all breeding stock should be carried out now if you plan to lamb in April onwards. We follow the five ‘T’ protocol to methodically inspect the whole animal. Any unfit ewes should not go to tup.

• Examination of the testicles will identify more than 90% of the problems that can reduce ram performance. But we can carry out semen sample analysis for further reassurance, especially if ewes are synchronised or a ram is with more than 60 ewes. But one poor semen test doesn’t necessarily indicate infertility and a re-test should be carried out. The five ‘T’s:

  • Teeth – check for missing teeth, molar abscesses, and under/ over-shot jaws – all will affect feeding capability.
  
  • Toes – locomotion scoring should be used to identify any lame animals, further feet inspection for infection & arthritis should be carried out – problems will reduce ram libido & serving capability.
  
  • Tone – BCS 8 weeks before tupping: ewes should be BCS 3-3.5 & Rams = 3.5-4.
  
  • Testicles/Teats – look for signs of chronic mastitis. Testicle size is a good indication of a ram’s sperm-producing ability. Testicles should be firm (feel like a flexed bicep). Palpation of the epididymis is useful for determining capacity of sperm reserves. Look out for ‘Epididymitis’ = Brucella ovis, ‘Pizzle rot’ = Corynebacterium renale and Cryptorchidism = retained testicles. For scrotal circumference see table:

<table>
<thead>
<tr>
<th></th>
<th>Questionable</th>
<th>Satisfactory</th>
<th>Exceptional</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ram lambs, 8-14 months</td>
<td>&lt; 30</td>
<td>30-36</td>
<td>&gt;36</td>
</tr>
<tr>
<td>Mature rams, &gt; 14 months</td>
<td>&lt; 32</td>
<td>32-40</td>
<td>&gt;40</td>
</tr>
</tbody>
</table>

• Treatments – avoid heat stress (the production of viable sperm will be affected if temperatures rise too high, developing sperm are particularly vulnerable.) Rams should be shorn 6-8 weeks pre-breeding – including the scrotal sac. Ensure free access to water & shade. Also consider parasite control & vaccinations – Enzootic, Toxoplasmosis & Clostridial.
Metabolic profiles – pre-breeding

Please contact us if you are interested in monitoring the protein and trace element status of your ewes and rams pre-breeding and your weaned lambs. These late summer/autumn profiles will indicate whether ewes and rams are in optimum condition for tupping and whether any deficiencies or disease problems could be reducing growth rates.

Protein analysis includes: **Albumin & Globulin** – levels reflect disease problems such as liver fluke, gut worms and Johnes’ disease.

The trace element profile includes **Selenium, Copper and Cobalt**.

Selenium – if low at mating time this may result in early *embryonic mortality* & thus significantly impact on ewe productivity.

Copper – low copper levels result in poor *wool growth* in all ages of sheep & may be accompanied by poor *growth rates, anaemia & fragile bones* in growing lambs. Copper deficiency can also lead to *reduced immune* system function.

Vitamin B12/Cobalt – vitamin B12 is produced in the rumen from dietary cobalt. It is required by the enzymes which regulate energy metabolism. Cobalt deficiency in ewes is implicated in increased *stillbirths & neonatal mortality*.

We recommend sampling a minimum of 10 animals (at least 5 from each management group).

Metabolic profiles – pre-lambing

For those of you due to lamb, blood samples can be taken from ewes 2-3 week before lambing. We analyse energy, protein, mineral and trace element status to allow assessment of ewes and their nutritional status. This still allows time for adjustment of pre-lambing rations if a problem is identified.

We recommend sampling 20 sheep. Groups of no less than 5 sheep in each category should be sampled (triple, twin and single carriers).

Date for the diary: Wednesday 4th November. 7pm.

**Practical Calving Workshop and Care of the Downer Cow** – Alice & Matt.

Please join us at Longthorns Farm, Wareham, BH20 6HH. (Next to Monkey World).

For further information or to book a place please contact our office.