

June 2009

## Sheep Worming

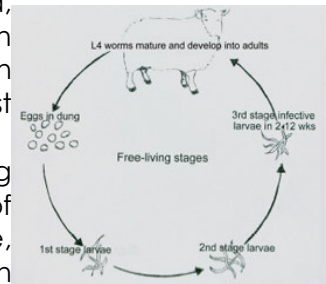
Sheep are susceptible to various gut worms (*Trichostrongylus*, *Teladorsagia*, *Haemonchus*, *Nematodirus*) as well as lungworm and tapeworms. Although a small number of worms is good for the sheep's immunity, a high burden can cause ill thrift, poor growth rates and in the worst scenario; death.



Most of you will already have an established worming protocol, but with an increase in resistance to all groups of wormer in the UK, diligence is essential. For example, *Teladorsagia* resistance to levamisole was found in Buckinghamshire as long ago as 1982. And now cases of triple resistance are starting to emerge, though ivermectin (clear wormer) resistance is still rare.

The best way to avoid the build up in your flock is to adhere to the SCOPS recommendations:

1. Quarantine
  - Dose all incoming animals with levamisole and ivermectin to remove resistant worms
  - Keep them off the pasture for 48 hours to allow the eggs to pass
  - Turn them out on dirty pasture to dilute any resistant worms
2. Weigh and drench to the heaviest animal in the group and drench correctly
3. Test for resistance by sampling before dosing and again 10-14 days after
4. Look to use grazing management wherever possible
5. Use faecal egg counts (FECs) to only worm when necessary
  - In house FECs in our lab cost just £8.18 – much less than drenching a flock!
  - Adult sheep should not need worming as they will have built up their own resistance
6. Preserve susceptible worms
  - Only treat adult ewes around lambing to prevent the periparturient rise
  - Leave some animals untreated to maintain a susceptible population
  - Treat a few days before moving to clean pasture to allow the resistant eggs to pass



FEC pot

A new product: Cydectin 2% LA (moxidectin – clear wormer) for sheep has just come on the market. It is the only product to provide persistent activity of 97 days against worms and 60 days against scab. Meaning fewer treatments are needed and better weight gain.

When bringing in faeces samples, please make sure they are in the right containers, as the lab staff may refuse to test bags of faeces! Please ask for appropriate pots in the office. Only a small amount is needed for faecal egg counts, slightly more for fluke counts.



## Colostrum

We all know how important it is for calves to have colostrum in the first few hours of life. This is because calves are born without any immunity, and the only way it can be given is the passive transfer of antibodies from the calf's mother's colostrum, through the gut wall. Unfortunately, the permeability of the gut wall steadily decreases after six hours, stopping completely at about 24 hours. So the more antibodies you can get into the calf in the first six hours of life, the better primed it will be to fight off infections.

There are 3 options to ensure that calves get the required 5% body weight of colostrum in the first 6 hours:

1. Suckling from the cow
  - There is no guarantee how good the colostrum is from the cow. Any illness or drop in energy during colostrum production could reduce its quality.
  - The best way to test the value of a cow's colostrum is with a colostrum densimeter, which measures the specific gravity of the colostrum.



- There is also no guarantee of the quantity the calf is getting so it is always best to supervise the first suckling
2. Feeding the cow's colostrum
    - Again, there is no guarantee how good the quality will be of the colostrum. It is always best to test it with a densimeter
    - When a cow with good colostrum is sourced, extra can be milked and frozen for future use. If this practise is to be used, ensure that the cow is Johnes and Salmonella free
  3. Feeding powder colostrum
    - Using replacement colostrum guarantees the quality and antibody quantity as well as allowing you to be able to ensure the calf gets 5% of its body weight.
    - It prevents transmission of diseases such as Johnes, Salmonella and mycoplasma.



We have a new colostrum powder on our shelves that is made from natural bovine colostrum. "Calf's Choice Total" guarantees to contain more than 100g of antibody protein, which is greater than a good quality fresh colostrum. Each bag provides sufficient colostrum for a one calf in the first 6 hours, making it easy and convenient to use.



## Backyard Chickens

We have recently noticed an increase in the number of backyard poultry we see. Hens are easy to keep and look after and can be very rewarding – especially if children are involved, however a few points on husbandry should be noted.

A healthy chicken has a bright red comb. Its feathers are sleek and glossy, and its legs and beak are smooth and clean. The crop should be filled with gravel and its vent should be clean. Behavioural signs of good health include scratching at the

ground, dust bathing and sun bathing (with its wings out-stretched). Hay, straw, shavings or paper provide good bedding material in a house with nest boxes and a perch. The run should be fenced with chicken wire, at least 6 ft high and dug 6 inches into the ground to prevent predators. Laying hens need a good quality feed specifically for laying chickens, although they can be given scraps as a treat (please note, legally you are not allowed to feed any food producing animal household waste – especially meat products). There is a question to the ethics of clipping wings of chickens as it may not be necessary. Please speak to a vet if you have any queries regarding this.

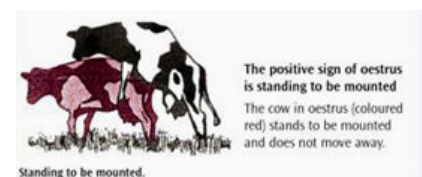
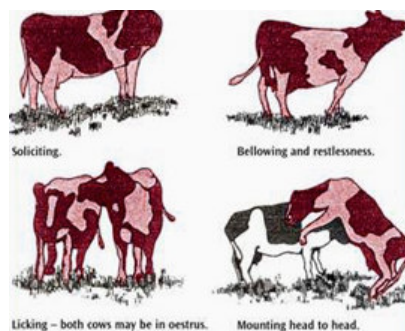
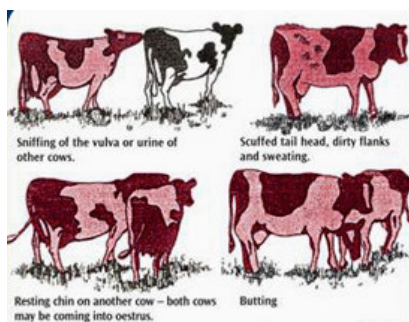
The main health problem in free-range chickens is worms. As with any animal, small numbers will not be harmful, but a high burden can cause poor egg quality, poor egg production, reduced growth and in severe cases, death. Flubendazole is the only licensed wormer in small enough quantities for backyard chickens and is active against gapeworm, roundworm, caecal worm, hairworm and gizzard worms.



## Heat Detection

Heat detection is possibly the most important factor affecting your herd's fertility. It is also the easiest factor to improve upon. Where artificial insemination is used, accurate heat detection is essential. Missing a cow's heat and therefore missing a 21 day cycle, can cost you up to £65 (presuming you lose £3 per day for every day over a 365 day calving interval).

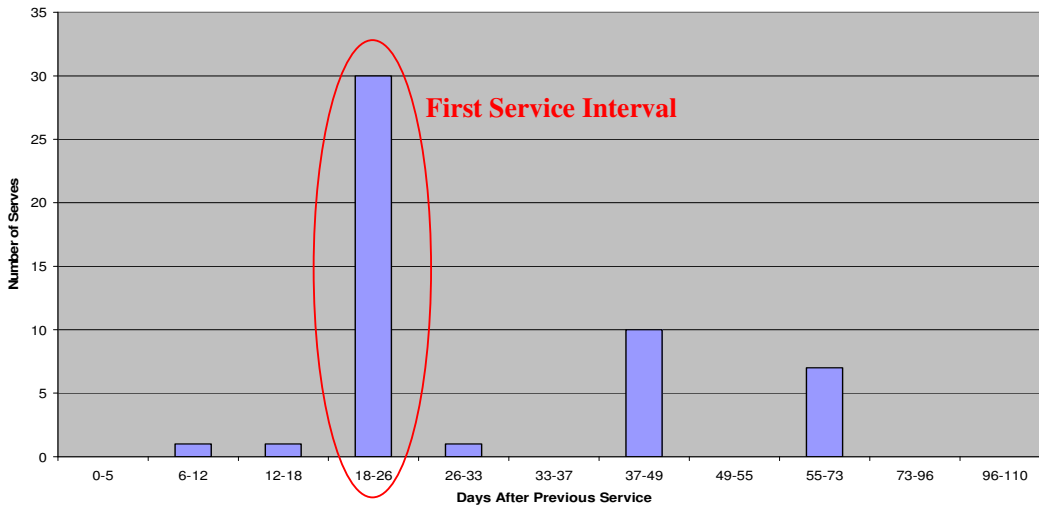
To be accurate with your heat detection, it is important that you are able to recognise the signs:



Standing to be mounted is the most reliable sign of heat – with the cow underneath that is bulling. This, in addition to vulval swelling and a bulling string is an indication of when a cow should be served. If she is restless but has blood on her tail or in her bulling string, she has probably already ovulated and you're too late to serve her.

The accuracy and efficiency of your heat detection obviously affects the number of cows you get in calf. A cow's oestrous cycle is approximately 21 days, meaning that if she does not get in calf with her first service, her return should be approximately 21 days later. We can use this presumption to assess your heat detection efficiency and accuracy:

**Good Heat Detection Efficiency/Accuracy**



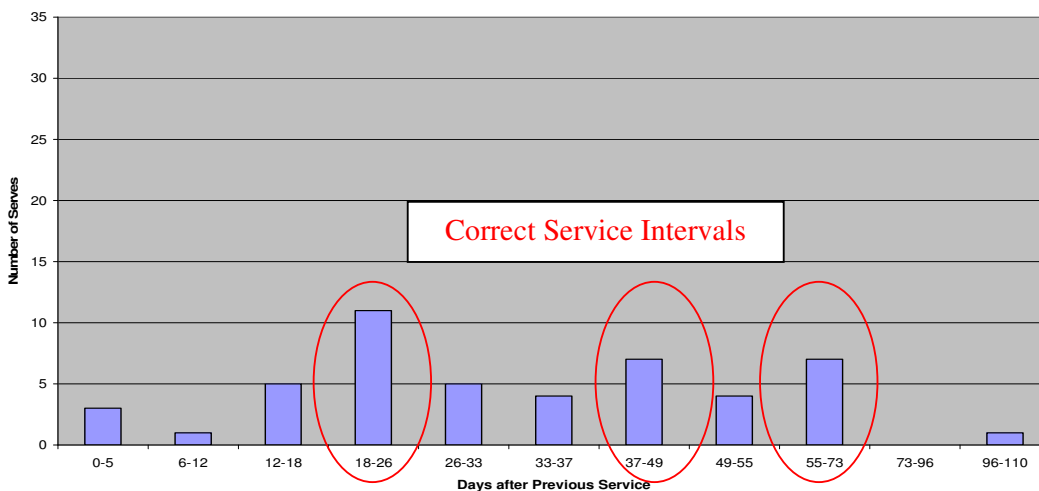
This graph shows good heat detection

- 30 out of the 50 serves (60%) are in the first service interval: 18-26 days.
- Of the remaining serves, 10 are in the 2<sup>nd</sup> service interval and 7 are in the 3<sup>rd</sup> interval.

This means that the accuracy of heat detection is good as 94% of the serves are within the correct intervals.

The efficiency is not quite as good as only 60% of services are in the first service interval, indicating that 40% of the cows have missed at least one heat before their second service.

**Poor Heat Detection Efficiency/Accuracy**



This graph shows poor heat detection.

- Only 11 out of 50 serves (22%) are in the first service interval
- Of the remaining serves, only 28% are in the correct heat intervals

The heat accuracy is poor as only 50% of serves are at the right intervals. The efficiency is also poor as only 22% of serves are at the first service interval. Serves that take place outside the intervals indicate that either the first serve, or the repeat have been at the wrong time, so heat detection technique should be reviewed.

### Improving Heat Detection

#### *Observation*

Although a constant look out should take place as you go about your jobs, specific times during the day should be set aside to sit and quietly watch the cows. The average interval between mounts is 20 minutes, so at least this amount of time should be spent, especially last thing at night and first thing in the morning as more cows come bulling at night time. Any activity, such as moving the cows, feeding or milking will reduce the signs of heat so avoid these times.

Any illness, reduced energy or lameness will decrease the signs of bulling. So keeping your animals healthy and well fed will aid heat detection.

There are often specific places in your yards which bulling cows will congregate, especially if you keep a bull nearby, so keep an eye out for these areas. Good floor surfaces are also required. If cows feel unsteady on slippy services they are much less likely to mount other cows.



#### *Veterinary Visits*

Often, the cow mounting the one on heat is also getting near to come on herself. So, if there are no others in the group coming near bulling, you may miss the one that is already on heat. For this reason, synchronisation of cows will increase the bulling activity and strength of bulling in that group.

Having routine veterinary visits to check cows that haven't come bulling and injecting them with a prostaglandin also produces stronger heats, especially if a few are jabbed at one session. Also, the fact that these cows will come onto heat sooner could save you up to £3 a day from shorter calving intervals.



#### *Records*

Keeping records of when animals should come on heat is very helpful as you can watch them for a few days before they are due to come on. You can also distinguish the cows that need watching in a bulling group.

#### *Heat Detection Aids*



Kamars®, tail paint, Already® stickers are all used to detect oestrus, with varying success: any low bars or uprights in the wrong place may rub them off so giving a false positive. Therefore, any of these devices should be used along with observation.

New devices, such as pedometers and Heatime® are being increasingly installed with good reports so far. Both rely on the movement of the cow increasing as she comes onto heat. However, at certain times of year movement may be greater anyway, for example going out to grass or moving groups, so again, this data must be used along with observation and your own records.

## **IBR**

Infectious Bovine Rhinotracheitis is a highly contagious disease caused by Bovine Herpes Virus 1. It manifests in both respiratory and reproductive forms, though we mainly see the respiratory form in our area. The classical respiratory form presents with fever (106-107°F), conjunctivitis and streaming eyes, coughing, nasal discharge and scabbing at the end of the nose. More often than not, an outbreak will occur in yarded beef, 6 months – 2 years old, but outbreaks can also occur in naïve adults. If dairy cows are infected, there is a significant milk drop and abortion. Because it is a herpes virus, IBR can become latent, reappearing under stressful conditions, e.g. calving, bulling, overcrowding, moving groups etc. This form may only present as poor production and poor fertility or become full blown disease.

In an outbreak, an average of 50% of animals will be affected with clinical disease (though this can reach 90%) of which, on average 10% will be fatal.

Approximately 60% of UK dairy herds have now been exposed to IBR, often resulting in chronic infection, which can be picked up on your routine bulk milk sample. Although the cows may not appear to be unhealthy, the drop in fertility can cost you up to £3 a day per cow and milk drop has been estimated to be up to 14 litres a day. Also, the introduction of any naïve animals into your herd may result in them becoming seriously ill.

The best control measure for IBR is vaccination. There are two types of vaccine: live and inactivated types. For naïve animals (i.e. heifers coming into the herd) one dose of live vaccine is sufficient to



provide immunity. Infected cows require 2 doses of the inactivated vaccine 3-5 weeks apart. This is followed by 6 monthly boosters to maintain immunity.

N.B. Never vaccinate bulls destined for AI stud with IBR vaccine, as blood antibodies will mean they are rejected from stud.

## Drugs Orders

To save you waiting at the counter for your drugs order, feel free to ring us beforehand so that it's ready and waiting for you when you arrive. Also, we place our order with the wholesaler on Mondays and Wednesdays, to arrive Tuesday and Thursday respectively, so if you have a large drug requirement, vaccines or special items please bear this in mind. Thanks!