FARM ANIMAL NEWSLETTER - JUNE

EARLY LAMBING IN EWES—REGULIN IMPLANTS

Although we are still seeing the occasional late lambing ewe requiring assistance at the surgery it is already time for early lambing flocks to start thinking of preparing ewes for the tup.

Regulin ear implants can be used to bring forward the natural breeding season by up to 2 months. In a treatment regime tups are kept away from the ewes (out of sight, sound and smell of the ewes) for at least 1 week prior to inserting the implants in the base of the ear until 5 weeks after implanting.

Peak mating takes place 60-70 days after implanting the ewes. To begin lambing at the start of February Regulin should be administered at the start of July. We would recommend a tup ewe ratio of 1:20 but we can also implant the tup to improve the quantity and quality of semen produced.

The advantages of using Regulin over sponging include:

- Conception rates are as good as to a totally natural service with no increase in multiple births .
- Sheep that don't conceive to their first mating will continue to cycle normally and not return to anoestrus .

For more information about Regulin please speak to one of the farm vets.

TOXOPLASMA VACCINE TOXOVAX EARLY ORDERS

Toxovax is the only vaccine available to protect ewes against Toxoplasma abortion. The vaccine should be administered at least 3 weeks prior to tupping and needs to be ordered on a special prescription by us from the manufacturers stating the approximate date that the vaccine will be required. Once the vaccine is delivered to us it needs to be used within approximately 7 days. September is the peak month for vaccination and MSD Animal Health, the manufacturers of Toxovax have advised us that they are likely to reach maximum capacity in this month and may not be able to process 100% of the product ordered in certain weeks and hence there may be delays in supply.

In order to spread our Toxovax orders MSD are offering an additional 5% discount on Toxovax delivered in June, July and August (approx 25p/dose discount per dose).

Even if you are not able to take delivery of your Toxovax until September/ October because you are buying in replacements we would advise you to order as soon as possible so that you will be at the front of the queue for the orders being processed in those months.

CLOSTRIDIAL DISEASE IN LAMBS

Clostridial diseases (pulpy kidney, braxy, blackleg, lamb dysentery) are caused by bacteria found in the soil as well as in the gut of healthy animals and usually require a 'trigger' to cause clinical infection eg. weaning, adverse weather conditions, moving etc. Almost all cases are fatal with very few being successfully treated. Finding a dead sheep is often the first sign of a problem!

Lambs acquire immunity from their mother's colostrum which protects them for up to 10-12 weeks assuming the ewe herself is vaccinated and the lambs have taken sufficient colostrum. So, with March/April born lambs now is the time to think about vaccinating replacement ewe lambs and lambs intended for fattening.

We recommend using Heptavac P Plus for replacement ewe lambs and Ovivac P Plus for lambs intended for slaughter. The 'P' part of both vaccines gives protection against Pasteurellosis, the most common respiratory disease of sheep.

Covexin/Bravoxin can be used to protect against clostridial disease but gives no cover for pasteurellosis. Whichever vaccine is used, 2 doses 4-6 weeks apart are required to give full immunity.

More furher information please speak to one of our farm vets.

Plan NOW And Avoid Fly Strike In Sheep

- The risk of fly strike is greatest from May to autumn
- Blowfly strike affects around 80% of UK sheep flocks each year
- Female flies are attracted by the odour of decomposing matter such as wounds or soiled faeces
- Shearing reduces the risk of blowfly strike in adult sheep but treat all cuts to prevent strike
- Active maggot infestations can be treated using cypermethrin pour on products (Dysect, Crovect, Ectofly), spot on products containing detamethrin (Spotinor) or by dipping diazinon dip baths.

For more information please contact the surgery on 01729 823538.

Product	Meat Withhold	Protection (Blowfly)	Treats established blowfly strike
CLiK	40 days	16 weeks	✗
Clikzin	7 days	8 weeks	✗
Dysect	49 days	8-10 weeks	✓
Crovect	8 days	6-8 weeks	✓
Ectofly	8 days	6-8 weeks	✓
Spotinor	35 days	4-8 weeks	✓

Parasites in Lambs Part 2
Planning, Prevention and Pharmacy

Last month in Part 1, we discussed how nematodirus and coccidiosis have adapted to cause disease in lambs. We are seeing both these parasites causing disease now at the end of May when writing this. There are other worms that cause production loss later in the summer, the roundworms Teladorsagia (used to be named Ostertagia) and Trichostrongylus being the most troublesome in our part of the country.

Teladorsagia and Trichostrongylus have a very clever adaptation of surviving inside the sheep's gut overwinter, unlike nematodirus and coccidiosis they will die on pasture in the temperatures we encounter in winter. Adult sheep have an immunity to worms which suppresses these hibernating worms most of the time. The immune system of a pregnant ewe dips in the period 2 weeks pre-lambing to 4 weeks post lambing, the hibernating worms take advantage of this period and shed eggs. This is the reason why worming pregnant ewes at the point of lambing is important, we are aiming to reduce the number of worms shed by the ewes to minimise the contamination of pastures.

In recent times, we are increasingly finding that these gut worms have developed resistance to the anthelmintic drugs we use to control disease, we have seen worming resistance causing severe production losses on several of our farms in the last few years. A recent study into the extent of resistance on sheep farms showed quite startling results.

- 94 % resistance to white drenches
- 68 % resistance to yellow drenches
- 51 % resistance to ivermectin
- 19 % resistance to moxidectin
- 43 % resistance to all 3 groups
- 15 % resistance to all 3 groups & moxidectin

When you read these results you can't help but realise that we all need to address the issue on every sheep unit.

The practices we have been using in worm control of rotation of wormers and dose and move to clean pastures are not sufficient management tools to achieve adequate worm control. It is possible to slow down resistance. The principles we recommend you adopt are:

Target the worms likely to be present

As different parasites are a problem at different times we are best to use products to kill the parasite present at any one time. Blanket treatment speeds up resistance We can identify the correct time to dose when the specific parasite is present at a high enough level to time the dose correctly by doing a faecal egg count (FEC).

Monitor for resistance

Leaving resistance to develop to a point where production loss is noticed is too late to prevent devastating gut damage in lambs. It is best to identify the resistance early to minimise the problem. This is done by post drench testing to ensure the drench has been fully effective.

Dose efficiently

Calibrating your dosing guns, weighing lambs and not under dosing are all fundamental in getting the dosing right.

Allow immunity to develop in the sheep

When the sheep is exposed to worms, it develops its own immunity. This means the adult flock is not diseased by worms but the immunity drops if they are wormed too often. We achieve this by not dosing too often and using long acting products cautiously. It is sensible to only worm adult sheep at the point of lambing.

Quarantine dosing

Treating bought in sheep and sheep grazed on other farms with products that will kill all resistant parasites means you are not introducing another population of troublesome parasites onto your holding. We can recommend a programme suitable to your flock management.

Ok if you are still reading you are probably thinking where do I start in all this with my flock. Phone the surgery and speak to one of the farm vets or Anne or Anna our SQP advisers and we can put a plan together for your flock.

WHO IS DR. GREEN?!

Finally a bit of sunshine to help things along and those animals waiting for Dr Green to do his/her work are feeling the benefit of turnout, but how does this work? There are the obvious benefits of space and air: Decreased stress, lower competition for feed/ water and improved air quality compared to buildings, especially if older and full. So does the Dr Green comment still ring true? Fresh green grass is very high in B vitamins which stimulate appetite, improve health and are used in energy production. Some of these vitamins are lost in the preserving process. As a consequence, silage has a lower content than grass followed by haylage, then hay, with straw having the lowest level. Supplementing one of (biotin, B7) or all of these B vitamins have been shown to increase the milk yield of dairy cows without changing the fat or protein content of the milk presumably due to better energy production. This has been in the region of a 5% increase in most studies.

Biotin (vitamin B7) has been shown to have a significant role in hoof formation improving the rate and quality of the hoof horn by improving the differentiation of skin cells at the coronary band and increasing the tensile strength of the horn proteins. This results in stronger more resilient feet leading to both less lameness from all causes (37% - 50% less white line, solar ulcer and digital dermatitis etc.) faster healing lesions and the associated health benefits of not being lame. So whilst Dr Green via biotin has been shown to improve energy and feet, and these will in turn help with health and fertility there has never been a proven link between fresh grass and fertility. Fresh grass with its high levels of phyto-oestrogen is well known to drop conception rates to the extent that it is recommended to feed silage based diets to embryo recipients for at least six weeks before and after implantation. So where is the lift in fertility that people experience at grass coming from?!:

Melatonin is well recognised as the controller of fertility cycles, indeed we talk about Regulin implants for both advancing the breeding season in ewes and increasing tups 'stopping power' in this newsletter. Melatonin is produced in response to darkness and so is used by animals as a 'year clock' mechanism. Sheep become fertile in response to increasing melatonin as this would naturally indicate shortening day length at the end of the year giving a due date five months later in the spring. In cattle, with a longer gestation period of nine months, low melatonin from long day length (and bright blue wavelengths of light) increases fertility.

A recent project using LED Daylight Wavelength lights in a cattle shed **increased milk production by 9% within six weeks!** This was due to an increase in lying times and a calm demeanour of the cows increasing the rumination and therefore energy extracted from the diet. This increase in milk was deemed unwanted due to the A and B prices paid, and so the amount of cake fed was reduced to bring down the milk to the original yield. The feed rate was dropped from 0.35 to 0.31 kg per litre of milk produced, a decrease of 11.4%. This **saved £9800 over the two month trial or 1.9 pence per litre!** This was a total payback of installation costs (on this 200 cow, 31 litre average, 5.5 million litre herd) within 4 months. So Dr Green has been taking credit for Dr Sunshine's work for a long time!

But the good news is that we now have the ability to get some, if not all, of the benefit of turnout all year round by looking at diet and housing.