

The clinical signs associated with trace element deficiencies in sheep are often gradual in onset and usually present as poorly grown lambs in late summer/early autumn. There is considerable interplay between worm burdens and trace element deficiencies and it is important to deal with both problems.

#### **Cobalt Deficiency (Pine)**

Cobalt has an important biological role as a constituent of vitamin B12 which is manufactured by micro-organisms in the first stomach (rumen.) Cobalt deficiency (pine) occurs where there are low soil cobalt concentrations which may be further complicated by worm burdens which cause diarrhoea thereby interfering with the absorption of vitamin B12 from the gut.

Clinical signs of cobalt deficiency are most commonly seen in weaned lambs at pasture during late summer/autumn. Signs include lethargy, reduced appetite, poor quality wool with open fleece, small size and poor body condition despite adequate nutrition. Cobalt deficient lambs may fail to respond well to vaccinations and be more susceptible to clostridial disease (e.g. pulpy kidney) and pasturellosis (pneumonia.)

Diagnosis of cobalt deficiency is based upon clinical signs in areas with known cobalt deficient soils supported by blood testing lambs for vitamin B12 levels.

#### **Treatment**

Treatment of cobalt/vitamin B12 deficient lambs is by either vitamin B12 injection and/or drenching with cobalt sulphate. Monthly dosing of lambs from about 3 months of age with cobalt drenches (1mg/kg bodyweight of cobalt sulphate) should supply sufficient cobalt to growing lambs in most situations. Oral cobalt supplementation costs a few pence for a 25kg lamb. Production losses from poor growth and delays to marketing may cost £10-£15.00 per lamb. We are able to make up cobalt sulphate drenches at the surgery for you or can add them to anthelmintic preparations.

#### **Copper Deficiency**

In growing lambs copper deficiency may result in a poor fleece without its natural crimp, poor growth rates, anaemia and increased susceptibility to bacterial infections. Copper deficiency is common when sheep graze pastures either low in copper or high in molybdenum, iron and/or sulphur.

If copper deficiency is suspected blood samples or liver samples can be checked to assess the copper status of the lambs and copper supplementation given if required. As well as being susceptible to copper deficiency sheep can also be prone to copper accumulation and toxicity. There is considerable breed variation with respect to copper absorption and therefore to copper deficiency and toxicity. Veterinary advice is essential before copper supplementations are given to sheep.

# CONTROLLING THE BREEDING SEASON IN SHEEP

• There are several ways we can control tupping time to increase pregnancy rates, allow earlier lambing and batching. The techniques available are all very effective but achieve slightly different goals. They also have to start several weeks prior to tupping so it is something we need to think about now even although lambing time is still fresh in many of our minds. A chat to one of the farm vets will allow you to work out what is best for your flock. Here is a quick summary of the common techniques available.



### Regulin implants

- Best for advancing the breeding season.
- These are hormones that are given to the ewes and tups. They can be used to advance the breeding season by up to 6 weeks by activating the male and female hormones The hormone can have a huge impact on the "tupping power" increasing male fertility significantly. If managed well the hormonal activity can be used to batch the ewes to lamb in a tight pattern in terms of

maximising the number of ewes that are pregnant in the first cycle but this manipulation does not synchronise the ewes to the same extent as sponges or the tup effect.

• The implant has to be given 6 weeks before introduction of the rams with peak mating approximately 60 days after implanting so you have to get tupping time organised early in the year.



#### Sponges

- Best for batch lambing and AI.
- Hormone impregnated sponges can be used to synchronise and stimulate the ewe breeding cycle. It causes the ewes to ovulate at a certain time. This allows AI and batch lambing. The tupping power required when the ewes are sponged is considerable with 1 tup not mating with more than 6-8 ewes in a day.

### The Tup Effect

- Effectively synchronises ewes for tupping and batches lambing, also advances the breeding season. Useful for controlling natural service and an additional tool for the other hormonal techniques.
- hormonal response in the ewes known as the 'tup or ram effect'. The hormones work to cause a silent heat in all ewes within 2-3 days. It is known as silent as no behaviour is seen in the ewes. This is followed by a normal fertile heat 17 days later. This phenomenon can be used to successfully bring the breeding season a few weeks earlier and synchronise the ewes to allow batch lambing.
- We can use this tup effect in a couple of ways. Use a vasectomised 'teaser' tup before introducing a fertile tup. Alternatively, two weeks before mating, bring the ewes downwind of some rams making sure the ewes



can smell, hear and see them. The fencing has to be good but if you can manage this even for just two to three days it will elicit a response in ewes not already cycling.

### Factors for a good teaser are:

- Fit and healthy with good legs and feet
- · Quarantine dosed and vaccinated
- Good libido, active and precocious
- Cross-bred tups make for the best teasers as they have hybrid vigour and are often more active than pure-bred ones. E.g. Finn X Dorset.
- Early breeding and less seasonal genetics e.g. Suffolk, Dorset, Finn X Dorset.



- The vasectomy surgery needs to be done six weeks prior to use to ensure the tup is no longer fertile and the wound is fully healed.
- Young tups will last for many seasons as a teaser.
- Top Tips for Teasers:
- One fit teaser ram should be enough for 100-150 ewes.
- Ensure the ewes have had no sight, sound or smell of tups for at least six weeks before the teasers go out.
- The teaser should run with the ewes for about two weeks at a time up to a maximum of 17 days. The minimum time is 5 days. Three weeks is too long.
- Introduce the entire tups 14-17 days after the teasers were first introduced.
- You need a lot of tupping power to achieve an acceptable pregnancy rate. The ratio depends on the system you are
  using.
- Remove the teasers from the ewes when the entire tups are loosed. This prevents fighting, avoiding unnecessary injuries.
- You can separate ewes into groups to allow batch lambing, tailoring lambing time to your available manpower and housing.

We usually vasectomise rams at the surgery and ask for them to left with us for the day. For more information about teaser rams or to book a ram in for a vasectomy please contact the surgery.

Remember that if you wish to tup your ewes at the start of October your teaser will need to be vasectomised by mid August.



# **PRODUCT NEWS**

# **Spotinor Fly Repellant**

Spot on Solution for treatment and prevention of infestation by biting and non-biting flies. Where horn flies predominate, treatment and prevention of infestations can be expected for 4-8 weeks. Cost from 50p/dose for cattle.

## **Dectomax Pour On**

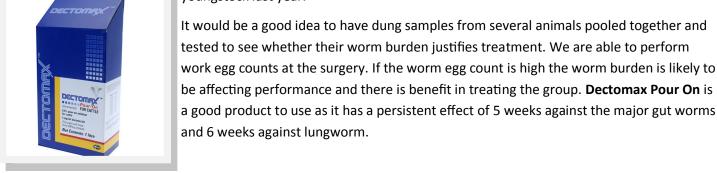
First season grazing cattle turned out in the spring may have had chance to pick up significant worm burdens by now especially if grazing pasture previously grazed by

youngstock last year.

It would be a good idea to have dung samples from several animals pooled together and tested to see whether their worm burden justifies treatment. We are able to perform work egg counts at the surgery. If the worm egg count is high the worm burden is likely to be affecting performance and there is benefit in treating the group. **Dectomax Pour On** is

and 6 weeks against lungworm.





# SHORT DATED DRUGS

#### **New Calver Drink**

We are currently stocking the Qvet New Calver Drink which is mixed with 20 litres water and administered to cows as soon as they calve to provide fast and slow release calcium salts to help prevent milk fever as well as proprionate, lactate, glucose and lactose energy sources in a palatable form that most cows will drink. Providing this in a 20 litre drink should help to stretch the rumen, prevent dehydration and promote dry matter intake which in turn helps cows to cleanse and reduces the incidence of displaced stomachs. For more information please speak to one of the farm vets.



#### Multishield DC

We have purchased a number of herd packs of a short dated antibiotic dry cow tube (Multishield) for use on cows at drying off where it is appropriate for antibiotics to be given. They are intended for use in cows which are going to be dry for over 50 days with the milk being able to go into the tank 4 days after calving. Being short dated they are available at a discounted price.

For more information and to see whether they may be appropriate for you, please contact the surgery.







