THE LIVESTOCK PARTNERSHIP
SUCCESS THROUGH HEALTH

NEWSLETTER October 2014

What a wonderful month we have had – a true Indian summer, although I have heard a few people muttering about wanting some rain! The lovely sunshine has resulted in the maize harvest nearly finished and with some very good crops. Thankfully this means there are a lot of full clamps of both maize and grass going into the winter which is very good news for all the beef and dairy herds.

Calving is well underway in all our autumn calving herds and is generally going well with a few caesareans all in the past week. The year is flying past and the service period will be soon upon us, heat detection is starting to appear in people's lists of things to do. We have run a few on farm meetings on 'Management of the Calving Cow' and the associated problems which have gone down well with all that attended and have more planned for calf management and heat detection at the request of individual farms. Ben is running cattle lameness courses in a couple of locations within the practice for those that may be interested please get in touch with one of us in the practice. *Sally*

'Five point plan' for lameness in sheep (*Sarah*)

Following on from the target set by the Farm Animal Welfare Council in 2011 to reduce lameness in the national sheep flock to less than 5% by 2016 and less than 2% by 2021, I thought it would be useful to summarise the plan, as well as the benefit that it has had on test farms.

So to start off, here are the five points:

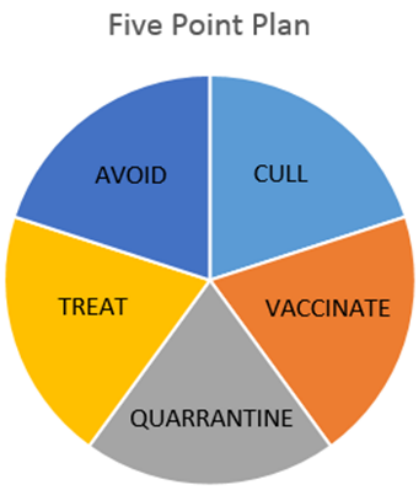
1 – **CULL** – this should be applied to badly or repeatedly infected animals, with a 'two strikes and you're out ' policy. Ewes with misshapen feet should also be added to this category. These animals are likely to be acting as a constant source of infection in your flock and so commiting to this in the first year will make a difference to both resilience in the flock and the level of disease spread.

2 – **QUARANTINE** – this is as much to protect your current flock, as well as to protect newcomers. A robust approach should be applied: Lame/misshapen feet on animals should not be accepted, newcomers should be quarantined for at least 4 weeks, animals should be vaccinated and footbathed on arrival, every foot should be looked at and promptly treated for early stage footrot or CODD if identified.

3 – **TREAT** – a prompt approach here is vital, by implementing a scoring system to grade lameness to ensure that mild cases are identified alongside the more severe cases. Even the mildly lame sheep can transmit disease to other animals. It is imperitive that you use the correct drug, at the correct dose and for the correct treatment time, and avoid routine trimming of non-lame animals.

4 – **AVOID** – perhaps an obvious point, but avoiding spread of infection during handling, gathering and whilst in the field is shown to reduce overall lameness. The focus is on identifying wet and soiled areas in handling systems and in the field, and addressing these by using gravel, wood chip or lime to improve underfoot conditions. Mobile handling systems can be of some help if animals are regularly gathered up, although minimising the number of handling events should also be a key consideration. Footbathing is useful, but only if the correct (fresh!) product is used for the recommended standing time, with the provision of dry standing afterwards.

5 – **VACCINATE** – initially this is recommended as biannual for all breeding ewes and rams. The timing of vaccine should correlate with high risk periods such as housing and late summer, in order to avoid excessive handling the timing of this should coincide with other handling events where possible.



The published results from the trial farms were as follows:

In year 0 lameness prevalence was 7.4%, with a seasonal peak of 19.1%

This was reduced to 2.6% in the first year of implementation of the plan and less than 1% in every month in years 2 to 4

In year 0 the mean number of monthly lameness treatments was 3.8 per 100 ewes

This decreased to 1.4 treatments per 100 ewes in in the first year and to less than 0.3 in years 2 to 4.

NOTICE BOARD

THE LIVESTOCK PARTNERSHIP
SUCCESS THROUGH HEALTH

the liVEsTock partnership Ltd
Market Square, Petworth
West Sussex,GU28 0AH

Tel: 0845 3138434
info@livestockvets.co.uk

Cost of Lameness *(Maarten)*

Most of you will be aware of the treatment costs and increased culling risk of lame cows, but these account only for about 35% of total costs associated with a case of lameness.
Fertility costs are responsible for **40%**. This is mainly due to increased calving to conception interval, but also due to increased incidence of ovarian cysts and increased culling because of failing to conceive.
Milk losses account for **25%** of the total cost of lameness. Studies have shown that lame animals produce less milk 4 months before clinical signs are detected until 5 months afterwards! This is around 570kg for a sole ulcer and 370kg for a white line lesion. A cow with a mobility score of 2 produces 4.5L less per day and a score 3 cow produces 6L less per day. Getting on top of the score 2 cows quicker and preventing them becoming score 3's by regular mobility scoring quickly pays for itself! Feel free to speak to one of us about tackling lameness in your herd.

Update on Cattle Lameness *(Sally)*

Some new research discussed at a lameness course recently has put doubt over some of the views on laminitis – it is now NOT thought to be linked to ruminal acidosis or acute toxic conditions and the term "laminitis " does not correctly describe the pathology – there is no inflammation of the laminae. So we need to revisit the aetiology and pathogenesis of these "laminitis" lesions.

Claw horn lesions (white line lesions and sole ulcers) occur when there is disruption to the natural weight bearing of the foot – ie disruption to the suspensory apparatus, the supportive digital cushion and claw shape.
The suspensory apparatus is made up of collagen fibres between the pedal bone and claw/horn capsule that suspends the whole weight of the animal. The supportive digital cushioning system is a fat and connective tissue pad under the pedal bone. Both of these act as shock absorbers and prevent/limit compression of the sole and soft tissues. Recent research suggests that "Sub clinical laminitis " is thought to be due to a disruption in the performance of these two structures leading to unnatural weight bearing and damaging pressure on the foot.
Disruption of the suspensory apparatus occurs during the period around calving when the suspensory apparatus relaxes resulting in decreased stability of the pedal bone and a reduction in the force required to tear the fibres holding the pedal bone to the claw capsule. This is a natural phenomenon and cannot be altered however we can limit the strain on the cow's foot at this time when we know the ligaments are going to be weaker than at other times during her lactation. By ensuring good lying times, good underfoot conditions, short standing times, good cow flow etc.
The digital cushion also plays a vital role in the normal weight bearing of the bovine foot. The digital cushion alters in size with BCS of the cow and with age only developing fully by the 2nd lactation. BCS (body condition score) is positively associated with the thickness of the cushion so weight loss in early lactation is a risk factor for lameness and claw horn lesions as are thin cows at calving.
Claw shape needs to be monitored as prolonged exposure to concrete flattens and increases the width of the lateral claw altering the weight bearing of the 2 claws and transferring more weight to the central part of the sole. Overgrowth of the outer claw further increases pressure in this area as does prolonged standing on hard surfaces. All these will lead to further disruption to normal weight bearing.
The diagram below illustrates the aetiology of claw horn lesions – we can have positive effects on two of the circles by reducing weight loss during lactation, calving cows at an appropriate BCS and improving environmental factors that have a negative effect on lameness and regular foot trimming to maintain a health claw shape. The timing of trimming is important, ideally 2 trims/inspections per year, one pre drying off (and all heifers approx 30 days pre-calving) and one 60-100 days post calving (as soles are thinner in the first 60 days). These should be mainly "modelling" to ensure the best hoof shape for normal weight bearing of that foot.