South Wales Farm Vets

Living And Working In Your Community

April 2023

Hello and welcome to the April Newsletter

Last month's Newsletter sparked a lot of interest and questions as we went around our calls – what had happened to our vets, how had it happened etc. We also had several clients on the phone asking if their facilities were up to scratch and if there was anything that we expected them to do. Needless to say, these people have nothing to worry about!

Mini Morgan is currently on a phased return to work following her concussion – which has kept her off work for over a month. Her incident occurred due to a self locking yoke springing open as she was trying to test, banging her on the head. You can imagine the force of a 500+kg animal managing to bust that open.

Russell was in the wrong place at the wrong time with his incident – a design fault on a crush leading to parts flying when tested by an unwilling animal. As Russell said, if it had been a shorter member of staff, it would have missed them!

Some accidents cannot be foreseen or guarded against but we will continue to assess the risks as we go around and avert any problems. It is always a risk working with animals, they are so unpredictable. Thank you to all of you that think about our safety.

This month, Tuesday 4th April, we are having a dairy meeting about Johne's disease, online, with the head of the National Johne's Management Plan team – all dairy farms need to have a bespoke plan in place for their status and management of Johne's disease. All dairy farmers are welcome to join us from the comfort of your own homes.

Now that the clocks have gone forward, we can all enjoy lighter evenings and hopefully warmer days. I hope that you all have a very Happy Easter.

Mary

Fat is your friend – the role of the digital cushion in cows' feet

The digital cushion is a fat pad, located under the pedal bone in a cow's claw. It plays a vital role in cushioning the corium (or the quick, which produces horn) as the cow walks, preventing damage. Where the corium is damaged, a claw horn lesion (CHL) develops – sole bruising, haemorrhage or ulcer, along with white line separation.

The digital cushion develops and thickens as heifers grow, becoming thickest around 8 weeks before calving. Development of the digital cushion is greatest in heifers that walk the most – more exercise leads to more padding for the foot. After this, the cushion thins rapidly across calving becoming thinnest a week after calving. Part of the thinning is due to increased movement of the pedal bone in the claw, which compresses the cushion. After this, the cushion gains fat during lactation until drying off, when the cycle begins again.

The picture on the right is an image of a normal cow's foot showing the digital cushion as the green highlighted area

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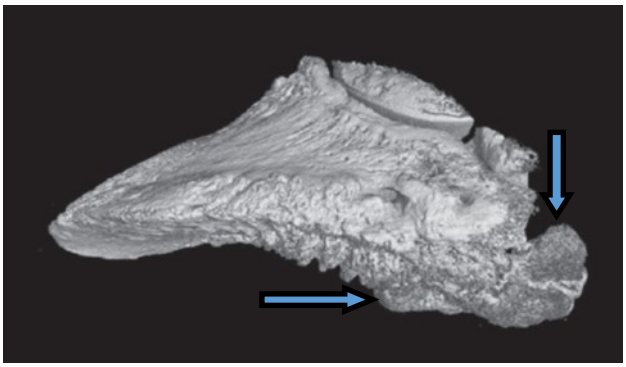
However, with each subsequent lactation, the digital cushion never fully recovers, meaning that it becomes thinner with each lactation. The loss of protection for the corium is seen in lameness and foot trimming data. The percentage of lame cows increases with parity, as does the incidence of claw horn lesions.

This is further compounded by the effect of body condition score (BCS), as a thinner cow will have a thinner digital cushion. Research work monitoring thousands of cows for BCS and lameness suggests that the key figure is BCS 2.5 (on a scale of 1 to 5) in dairy cows. Cows with BCS <2.5 are at increased risk of lameness from CHL over the next four months by a factor of between 3 and 9 times. This comes with additional costs of a reduction in milk yield, beginning the month before the CHL is diagnosed, and averaging 300kg of milk over a 305d lactation.

Efforts have been made to measure the thickness of the digital cushion. This shows huge variation – with some cows having only 2mm of padding, whilst others have 6mm. In real terms, a group of cows with the thickest cushions will have 15% less lame cows than a group of cows with the thinnest cushions.

MRI image of a normal cow's foot



MRI image showing bone spurs: see arrows

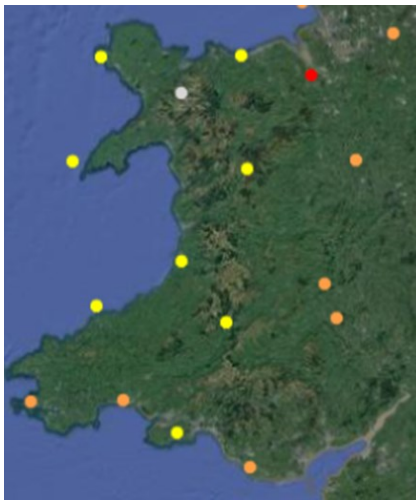
Lameness due to CHL comes with long term effects. The loss of protection of the pedal bone generates localised inflammation on the surface of the bone. The bone responds to this insult by producing new bone, often seen as spurs. These in turn increase pressure on the digital cushion, which is transferred to the corium, causing more CHL, and the vicious cycle continues. On farm, this means that once a cow has had a CHL, of any severity, she is significantly more likely to suffer another CHL than a previously unaffected herdmate.

Therefore, lame cows need identifying and treating as soon as possible by trimming, fitting a block and injecting with anti-inflammatories, this doubles recovery rates when compared with trimming alone. Also the question 'do thin cows go lame, or do lame cows go thin' has now been answered – the digital cushion has showed us that cows go thin, then they go lame.

This month's author Russell Fuller has an interest in dairy cow health and production and would be happy to answer any questions you may have on his article or lame cows generally.

Nematodirus Risk Forecast

As the weather is warming up, we see the online parasite forecasting starting. This was the Nematodirus forecast on the 1/4/23 from the closest weather station to us; St-Athan area classed as MODERATE RISK - Hatching is predicted to start within 7-14 days if good weather continues.



Negligible risk Low risk Moderate risk High risk Very high risk

Check updates regularly. Contact the surgery for advice or see: Nematodirus Forecast | SCOPS
Please refer to SCOPS guidance on strategies to avoid and treat infection at www.scops.org.uk
Important:
There will be variation from farm to farm and even field to field. Sheep famers are urged to assess their risk based on the history of the field (lambs last year a high risk for example). South facing fields will tend to have an earlier hatch. Altitude is also important. As a guide, every 100m increase in altitude will delay hatching by about 7 days (for example if the nearest station is at 200m a.s.l and the farm is at 300m a.s.l, hatching will be delayed by around 7 days beyond our forecast).

Office opening hours	**Emergency out of hours service**
Monday – Friday (Except Bank Holidays)	Weeknights 5.30pm - 8.30am
8.30am - 5.30pm	Saturday & Sunday all day