



Spring Calving Sucker Herds

Now is the time to think about having your cows scanned for pregnancy. Tight calving patterns are essential for efficient and profitable suckler management.

Any animal not in calf will be costing you money in feed over the winter; without the return of a calf in spring, so it is important to know which cows are in calf. We can also use pregnancy diagnosis results to flag up any fertility issues on farm such as infectious disease or poor bull performance. Knowing what has caused a fertility issue this year will help us prevent it next year. Please speak to a member of the farm animal team about scheduling in your pregnancy diagnosis visit.

Changes to Welsh TB Compensation Rules

From the 1st of November 2018, if a TB reactor is declared as in calf there must be written proof of pregnancy diagnosis which is to be available at the valuation stage before compensation will be paid on the basis of a pregnant animal.

The evidence is in the form of a written declaration made by us. As such, any TB reactor animal which you intend to declare as in calf will need a pregnancy to be diagnosed.



Daleside

Veterinary Group

NOVEMBER 2018

Christmas Party

It's that time of year again and we'd love to see you all at this year's Christmas party. Come and join us at the Buck House Hotel in Bangor-on-Dee on the 11th December at 7:30pm

Meeting

With the long, hot, dry summer, many of us are concerned with forage provisions for this coming winter.

We will be lucky enough to be joined by Will Jones from Kite Consultancy for a meeting at 7:30pm on the 20th November at Holt Lodge to talk about how best to plan feeding over the winter. Please come and join us for the meeting and food will be provided afterwards.



Calf Pneumonia

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The bovine respiratory system is designed poorly; this makes calves prone to pneumonia which causes permanent lung damage. Compared with other animals, cattle have a relatively small lung capacity and narrow airways. The costs of real outbreaks of pneumonia have been studied and are estimated to be approximately £63 per sick calf which is a huge cost given that vaccination starts from just £7.74 per dose. It is imperative to note that costs are not just associated with treating that calf at the time of pneumonia but also the association with the permanent damage and long-term effects such as reduced growth rates and reduced lifetime milk yield in replacement dairy animals. Reduced growth rates came out as the highest proportion of the cost associated with a pneumonia outbreak. Reduced growth rate is a hidden cost; it is not as obvious as medication costs and deaths in calves, however it has a massive impact on profit margin, causes reduced time to conception, lower milk yields and makes calves more prone to other diseases. This highlights the importance of measuring growth rates. Are your calf growth rates less than ideal? Do you have a pneumonia problem you are not aware of?

A study carried out on a finishing unit demonstrated just how much of an impact pneumonia being present on farm has on future calf production; even for calves which do not succumb to respiratory disease themselves but are housed with those which do. It showed that even those calves which showed no signs of pneumonia, but were housed with sick calves, took longer to reach finishing weight. It showed that sick animals and those animals in contact with sick animals took 33 to 59 days longer to finish. So lets extrapolate that to your farms. How much longer is it taking you to rear calves to store weights or to get heifers to calve down because of the impact of pneumonia these heifers experienced as calves? Even those apparently not sick are affected by being in contact with those who are. Does this show a need to monitor calves more closely? Are we missing signs of respiratory disease?

So, pneumonia is a multifactorial disease. It is not caused by a single factor but the result of a number of different factors coming together. Pathogens, environment and the animal itself all contribute to pneumonia. Several things typically have to go wrong for pneumonia to occur. Even with bugs present on farm, if the calf environment is managed well, the calves are healthy and not stressed then they may not succumb to disease, however, tip that balance and suddenly you have a pneumonia issue. For example when causing stress (e.g at dehorning, castrating or weaning time) or if ventilation gets worse.

Calf Pneumonia...

Studies have shown that we are almost always late when detecting bovine respiratory disease. One study illustrated that calves were only detected by farmers as having pneumonia after 6 days of being on farm, however, an intraruminal temperature bolus detected that fever started from day 2. This highlights the importance of spotting signs early; signs aren't always obvious. Close monitoring such as regular temperature checks and using a pneumonia scoring system will fasten your detection rates. There are many clinical signs of pneumonia including; coughing, nasal discharge, ocular discharge, being quiet, being off food and having a temperature however, quite often they are hard to spot until the situation is severe. Using a pneumonia scoring system may well pick up problems where you didn't think you had any. Speak to a member of the team today about how you can score your calves to determine if you have an underlying respiratory disease issue. You'll be surprised how much you find that you otherwise would have missed when you look closely.

There are many respiratory pathogens. Some viruses and some bacteria. Please see below for a list of the more common ones;

- **BRSV (bovine respiratory syncytial virus) is one of the most important viral pathogens. RSV infections are common and severe outbreaks can occur. It causes severe lung damage to the lung tissues which can be fatal and can appear as sudden death)**
- **PI3 (parainfluenza 3) is widespread and although it is usually mild, it predisposes the respiratory tract to secondary infection by other viruses and bacteria, making the infection more damaging and dangerous.**
- **BR (infectious bovine rhinotracheitis) The infectious bovine rhinotracheitis virus has a somewhat different position than the other viruses in this list as it can**

cause disease in animals with an intact immune system but on the other hand also weakens the immune system, making the animals susceptible to other pathogens.

- **Others include bovine adenovirus, bovine viral diarrhoea virus and the bovine respiratory coronavirus, however these are found less frequently and mainly play a role as initiators.**

Vaccination is a key component of calf resistance. It must not be relied upon; as we have previously discussed, pneumonia is a multifactorial disease and must be addressed from all angles however, vaccination is a big thing you can do to prevent pneumonia. A clear vaccination protocol should be adopted and using knowledge of high-risk periods, timings for first and second doses and boosters should help set put this protocol

There are many vaccines available for pneumonia and there are also different ages at which you can vaccinate from. The key to knowing which vaccine to use is first to have an idea of the pathogens on your farm. The gold standard way to test in pneumonia outbreaks is to take swabs from the back of the nose or to take 2 sets of bloods and look for rising antibody levels. However, if you are looking to vaccinate against pneumonia before you experience a problem this winter and don't know which of the many vaccines to use, we can use some blood samples from animals aged 9 months of age. These bloods will show us what bugs those calves have been exposed to and therefore which bugs are on farm. The next stage is to assess how old calves are when they get pneumonia. We can then pick a vaccine that a) protects against the right bug and b) protects from the right age. One important thing to note however, is that no matter which bug originally causes pneumonia, it will then leave that calf susceptible to other pneumonia causing viruses and bacteria, so it could be argued that using any vaccine will provide some degree of protection.

Calf Pneumonia...

So, why vaccinate?

A study showed that when calves were vaccinated with a pneumonia vaccine, calves required 15% fewer antibiotics than those not vaccinated. This is a big drug cost saving and also a labour saving. Sick calves cost time as well as money! From a responsible use of antimicrobials point of view, we can show that we should be vaccinating in order to reduce antibiotic use.

Colostrum is another key component to calf resistance. Colostrum provides antibodies in the first few days of life until vaccination can help protect the calf later.

Stress is also a key contributor to pneumonia. Stressed calves are more susceptible to pneumonia. All the vaccinations in the world can't stop chronically stressed animals from getting pneumonia. Avoid doing too many stressful things all at once



Calf Club

If you think you have a pneumonia issue or if you don't think your calves are performing as well as they should, then perhaps the Daleside Calf Club is for you. Please speak to a member of the team for more details.

Winter Diseases

With winter approaching, it would be prudent not to start thinking about scour and pneumonia in calves, therefore, we will focus on these diseases over the next 2 months. This month we will focus on pneumonia. Please see next month's newsletter for a feature on calf scour.