



FARM ANIMAL NEWSLETTER DECEMBER 2018

Increased Diagnosis Of Pasteurellosis In Hogs

November and December are traditionally the months for peak incidence of deaths due to systemic pasteurellosis caused by the bacteria *Bibersteinia Trehalosi*. This year the veterinary investigation centres that we send samples to are reporting that 2018 appears to be a high risk year.

Clinical Signs

There are 2 distinct syndromes of Pasturellosis:

1. **Pneumonia:**

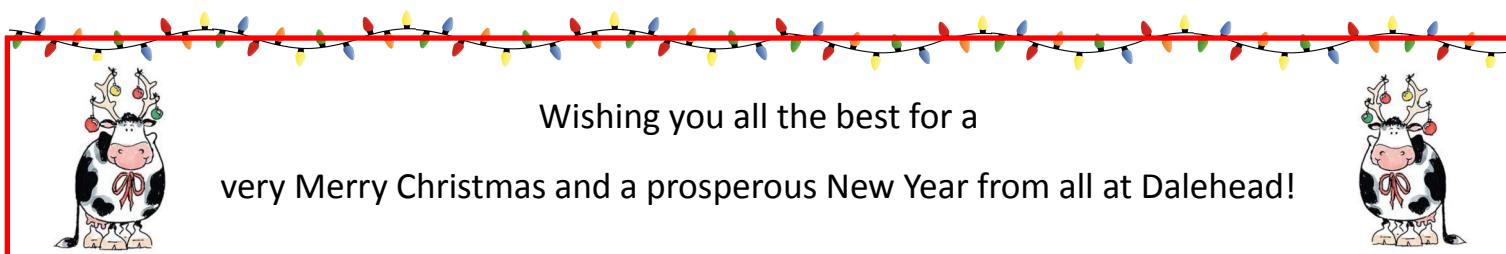
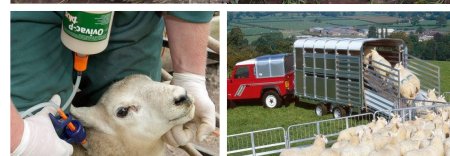
The disease is responsible for the majority of pneumonia in sheep and is a threat to sheep of all ages. Symptoms include:

- Raised temperatures (up to 42°C)
- Depression
- Raised respiratory rate
- Laboured breathing
- Loss of appetite
- Cough
- Nasal discharge
- Runny eyes

2. **Septicaemia (systemic) Pasteurellosis:**

Usually caused by *B. Trehalosi*. This condition is characterised by sudden death or finding of moribund sheep. Treatment of affected animals is rarely successful. It is this form of the disease that shows a marked increase in incidence at this time of year. All sheep carry *Pasteurella* organisms in the tonsils which are usually stopped from multiplying and spreading into the blood stream and lungs by the animal's immune system (boosted by pneumonia vaccination e.g. Ovipast, Ovivac P or Heptavac P). If the efficiency of the immune system is reduced by stressors such as changeable weather, moving to better grazing, worm burdens, trace element deficiencies etc. the bacteria in the tonsils can multiply rapidly, invade the bloodstream and cause sudden death. We often see outbreaks of systemic pasteurellosis in hogs sent away for wintering where the stress of transportation, mixing and change of diet triggers a flare up of disease.

This year high worm burdens are also contributing to the disease. If you are experiencing losses amongst hogs it is worthwhile having post mortems carried out on freshly dead animals to confirm a diagnosis, check for worm/ fluke burdens and to review vaccination protocols and antibiotic treatments.



Efficiency of Heifer Breeding (including Clarifide genomic testing)

With the cost of rearing young-stock increasing (feed, straw and housing) and replacements being consistently 20-25% of the cost of milk production, efficiency in this area has never been more important.

(A recent AHDB survey placed the cost of rearing a heifer at £1,800 with a range between £1,300 and £3,200!)

To minimize replacement costs we need to :

- 1) Keep as few heifers as possible
- 2) Keep them as cost effectively as possible (not just spend as little as possible on them)
- 3) Keep only the very best animals that will generate the most profit compared to their herd mates and the national herd.



Keep as few heifers as possible

Trying to keep as few heifers as possible seems easy enough to say but needs a serious look at how many you need.

This number comes from how many culls are projected, how many (if any) for expansion, how many to sell and how long it takes for them to get to the point of calving in. Culling percentage and number for expansion is reasonably simple to work out but the other two less so.



A good growth rate and young age at first calving will help; for every month off the age at first calving you will need to keep two heifers less for the same culling rate. How many are wanted to sell new calved is a tricky one as these animals whilst bringing in a good headline number and helping with cash flow are also one of the biggest costs in milk production, second only to feed.

Selling these animals at 6 weeks for £100 and avoiding most of the £1800 rearing costs may be more profitable at around £50 net profit, rather than a potential loss of £200 (£1600 sale price minus average rearing costs).

Keeping them as cost efficiently as possible

This almost always comes down to growth rate. With a £1.40 per day cost of rearing, reducing this by three months from 27 to 24 months at first calving, reduces the cost of rearing by 11% or £198. A much bigger impact than managing to source a cheaper milk powder, better straw deal or dropping vaccination.

Keeping the best animals that have a better chance of returning the most profit

This relies on being able to predict the most profitable animals. Those with the best growth rate will on average produce more milk, those that are served younger will have a better conception rate and those with no treatments for disease will be quicker to get in calf. Looking at the PTA's or parent transmitting abilities of the bull (AI) and (if possible) dam gives a good indication of what the heifer is likely to receive from the genetic mix. This can be done with good reliability if the AI bull has lots of daughters to back up his proofs.

Genetics is just that though, it is a mixing of the potential from both the mother and the father who will both have strong points and weak points. The genetics of the calf is a lucky dip from this pool of potential. When we test the genetics of groups of heifers looking at markers on their DNA code (known as genomic testing), we see a spread of genetic potential for profit (PLI's) in the region of £1100. So heifers with similar breeding on the same farm have a difference of over a thousand pounds of predicted profit in their lifetime. Finding one hundred of the better potential animals would be well worthwhile! Likewise, selling those at the bottom end of the scale will have a big impact on farm finances rather than selling a random selection of better and worse genetics depending on size or calving pattern as the selection criteria.

The only way to know the genetic potential of the heifer for certain is to test its DNA (Genomics)

We are delighted to announce that we have teamed up with **Clarifide** from Zoetis to offer a genomic testing service to our clients. **Clarifide** is the only independent genomic testing available in the UK and allows testing, heifer ranking both within herd and nationally, and full market bull selection based upon industry standard selections such as PLI, spring calving index and autumn calving index or a bespoke index based upon your farm's needs and priorities.



Clarifide at Dalehead Vets

Using the **Clarifide** system allows you to identify (from two months old):

- Which animals to keep and breed to sexed semen to advance your herds genetic potential for profit
- Which to breed to beef and calve in to the milking herd without keeping her genetics
- Even which to sell early avoiding the rearing costs of an expensive heifer that is less likely to pay you back
- The **Clarifide** system through a heifer audit allows prediction of the number of heifers required, as well as the number that can be generated from the best cows and heifers using sexed semen. This allows all the other animals to be served with beef semen. This increases the value of the calves (removing the black and white bull calf) and reduces the number of heifers being kept reducing the pressure on the young-stock sheds
- The **Clarifide** system through a genetic audit allows the breeding goals of the farm to be assessed and measured against current performance allowing pinch points that are stifling the benefits of genetic progress to be identified. The genetic audit also allows the genetics of the herd to be benchmarked against the national herd and so guiding breeding decisions going forward
- The **Clarifide** system allows a bespoke selection index to be drawn up between you and your vet allowing ranking and selection based upon the production and type traits that are important to you.



Please ring and speak to Ian if you have any questions or are interested in looking at the genetics of your herd.

Johnes Disease In Dairy Herds

Johnes Disease is a chronic, debilitating and irreversible disease of ruminants caused by infection with *Mycobacterium Avium* subspecies *Paratuberculosis* (MAP). Animals are usually infected as calves with 80% of infections picked up within the first month of life. Infection is usually caused by ingesting faeces from contaminated bedding, udders, teats, buckets or from colostrum or milk. Occasionally disease can be acquired in the womb or picked up later in life.



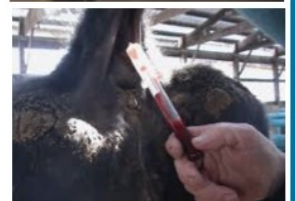
Infected animals will test negative for a variable period of time, usually several years, before the disease progresses and they become infectious to others at which time they will usually test positive by one or more of the available diagnostic tests (blood tests, individual cow milk tests or dung sampling).



Johnes disease is usually introduced into a herd by purchasing infected replacements although there are other ways that the disease could be introduced such as importing slurry from other farms or swapping colostrum between herds.

Johnes disease can seriously impact the economic performance of a dairy herd. Johnes test positive cows are twice as likely to have a cell count of over 200,000 cells/ml and are twice as likely to have milk yields 25% below their adjusted herd average. Johnes disease cost can rise to over 1-2p/litre in herds with higher disease incidences and these losses remain for a number of years until the disease is brought under control. With Johnes disease the major cost comes from increased susceptibility to other conditions, increased forced culling and the retention of cows that should otherwise be culled. Clinical Johnes cases (weight loss and scouring) are just the tip of the iceberg. International experience has shown that if a rigorous control programme is implemented Johnes disease can be brought under control. In Denmark the Johnes test prevalence (annual percentage of cows within the herd testing positive) for herds adopting the national control programme has reduced from 10% to 2% over 6 years.

In the UK processors (including Arla, Muller-Wiseman, First Milk and Yew Tree Dairies) responsible for over 80% of the milk produced have signed up to the National Johnes Management Plan and have encouraged their producers to do tests (usually individual cow milk testing or a 30 cow screening test) to find out their Johnes status and to have a Johnes control plan in place by October 31st 2018 which will be reviewed over the next 12 months.



For more information on Johnes disease, to discuss testing or control options please speak to one of our farm vets.

OOO DON'T MAKE ME ITCH

During the last month we have seen an increase in 'itchy sheep'. It is important to gain a diagnosis prior to administering treatment to ensure the drug given will eliminate the parasite. Diagnosis involves taking a sample of wool and skin scrapes from the affected sheep. These samples are then examined under the microscope to identify the parasite. A recently developed blood test may also help to indicate whether sheep have been exposed to scab.



SHEEP SCAB

Sheep scab is a form of allergic dermatitis caused by the faeces of the sheep scab mite. Sheep scab can be contracted after any contact with live mites. This is usually through sheep-to-sheep contact or via contaminated equipment or environment. The mite can live off the sheep for 15-17 days. Sheep scab is mainly a winter disease with most cases occurring between September and April, although a significant number of cases do occur in the summer months.

Clinical Signs

Early disease involves low mite numbers and very small lesions which are virtually undetectable. Sheep with early infestation may show no signs or simply be restless, rubbing against fence posts, have soiled and stained areas of wool, toss their heads or have broken fleeces. In the early stages sheep can look perfectly normal and can unknowingly be introduced to a flock. Later stages of infestation see high mite numbers and serious symptoms. The lesions spread out as scab mites cannot feed on the hardened scab so they are forced to go to the edge of the lesion. Rubbing and head tossing become more and more excessive, areas of wool loss may appear, often with open, bleeding wounds. Sheep with scab rapidly lose condition and serious cases will start fitting.

Treatment Options

Organophosphate Dips: OP dips treat both scab and lice and will kill scab mites instantaneously. However, there are safety considerations for humans dipping sheep, pollution concerns for the environment and dipping may not be an appropriate treatment for pregnant ewes. **Sheep showers are NOT effective against sheep scab.**

Injectable Treatments: There are a wide range of injectable wormers which also treat for scab but with only 3 active ingredients: Doramectin, moxidectin or ivermectin. Great care should be taken to follow the manufacturers' instructions if scab is to be treated effectively, some products requiring sheep not to be returned to the field they came from for 18 days after treatment to avoid immediate re-infestation. With all the injectable treatments, scab mites are not killed instantaneously so it is important to avoid contact between treated infested sheep and untreated sheep for at least 14 days after treatment.

LICE IN SHEEP

There are 2 types of sheep louse, sucking and biting. Lice are permanent parasites, completing all life stages on the sheep host, feeding on wool, skin debris, skin secretions and blood. Lice can survive off the host for up to 17 days. Most lice infestations occur in the winter. The clinical signs of lice can be confused with those of sheep scab so it is very important to get a veterinary diagnosis before administering treatment as this will depend on of which species of lice is found.

Clinical Signs

Sheep can carry quite significant numbers of lice without obvious clinical signs. As numbers multiply sheep become irritated by the lice causing scratching and rubbing, constant attention to the area will cause damage to the fleece and hide. Heavy infestations of lice are usually associated with animals in poor health. A lice infection can therefore be a significant indicator of underlying health problems within a flock.

Treatment

If you find one infested animal the whole flock should be treated with an appropriate ectoparasiticide. Suitable treatments would include OP dips or pour on treatments such as Crovect, Dysect, Ectofly, Spotinor. Scab injections are not effective against all lice. Please contact the surgery if you have any questions regarding itchy sheep.



DATE FOR YOUR DIARY: ANNUAL SHEEP MEETING



Date: Monday 28th January 2018
Time: 7.00pm arrival for 7.30pm start
Location: North Ribblesdale Rugby Club, Settle
Further information in January 2019 newsletter!

