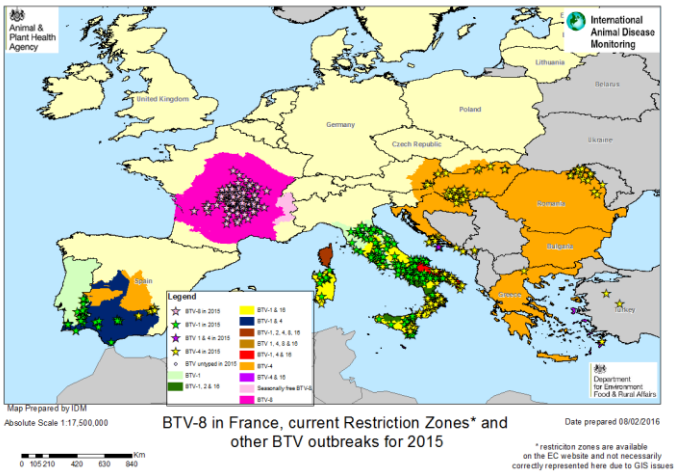
Farm Veterinary Solutions

xLvets Excellence in Practice

Summer Newsletter 2016

Well, all the calvings and lambings and BREXIT should now be out the way, other than the late calvers. One of Mike's late calving heifers lost a bull calf and he picked up a Belgian Blue X heifer calf as a replacement from a dairy. Unwittingly, he trusted the farmer to knot the calf's legs and put it in the back seat of his Landrover. As you can imagine, the calf got up and latched on to his ear whilst driving down the A47!

Blue Tongue is in the headlines again after an 8 year absence. It is a NOTIFIABLE DISEASE and is currently in central France. There have been 285 outbreaks this year but none yet in the UK. The pink on the map depicts the outbreaks in France last year.



BTV-8 in France, current Restriction Zones* and other BTV outbreaks for 2015

The latest risk assessment from the Animal and Plant Health Agency (APHA) published reveals the UK is at risk of an outbreak during the spring or summer months, with an outbreak in late summer rated the most likely. This would be the result of infected midges being blown across from France to the South East of England. BTV8 will infect ruminants but also Llamas and alpacas.

In **sheep** the main signs of bluetongue are:

- ulcers in the mouth
- discharge of mucus and drooling from mouth and nose
- swelling of the mouth, head and neck and the coronary band (where the skin of the leg meets the horn of the foot)
- red skin as a result of blood collecting beneath the surface
- fever
- abortion
- lameness
- breathing problems

Cattle

Cattle are the main carriers of bluetongue. Infected cattle generally do not show any signs of the disease, but occasionally signs can include:

- swelling and ulcers in the mouth
- nasal discharge
- red skin and eyes as a result of blood collecting beneath the surface
- swollen teats
- abortion
- lethargy

Other animals rarely show signs of the disease. If you have any suspicions please call us as a matter of urgency. We will have the vaccine available from July. It is not expensive, please contact us to discuss whether to vaccinate or not as it may affect export ability of the pedigree stock. However, the disease is a serious one and worthy of vaccinating, as we did in 2008.

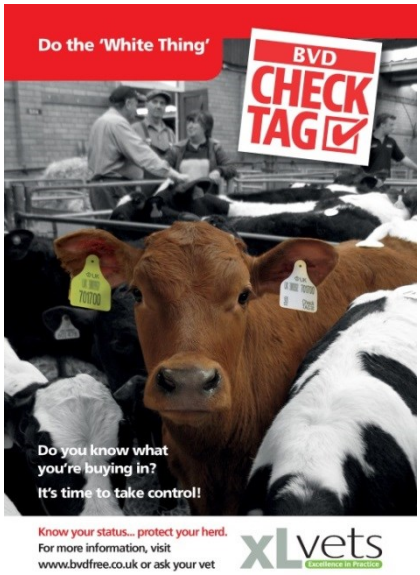
Calf Tracker

The first 'Calf Tracker' Meeting was held by very kind invitation of Lou and Nick Sercombe at Knaptoft Hall Farm and sponsored by Zoetis, providing an excellent lunch and some great goodies for the Calf Tracker members. This meeting focused on Colostrum management. As well as an informative lecture, the meeting generated some very interesting discussion and comparison of varying systems. It is this discussion, in combination with the data that the calf tracker members collect on growth and disease rates etc., that will enable Calf Tracker to improve heifer rearing in the vital first 60 days and reap the benefits in the long term from milk yield, longevity in the milking herd and general health.

The next meeting is scheduled for early autumn and will focus on the next stage of calf rearing with an emphasis on Milk Powder. If anyone wants more information, or is interested in joining Calf Tracker then please contact Harriet at the practice.

BVD Free

How aware of your BVD status are you? The XLVets initiative to make England BVD Free is in full swing and we are looking for farmers with unknown BVD status to get involved. Initial testing is a simple-blood sample from approximately 6 home bred heifers between 12 and 18 months of age. This will give us a snapshot of your current disease status and from there we can move forward with a plan to ensure you maintain a BVD free status, or eradicate from your herd. This disease has massive implications from both a welfare and economic point



of view and can have a potentially disastrous impact on your herd. Many farmers are already using the new Tag and Test, white ear tag for calves as they are born to establish disease status, and it is proving very popular. Contact Harriet at the practice for more information.

Buttercup poisoning

Buttercup poisoning occurs due to protoanemonin which is a bitter-tasting oil. It occurs commonly around this time of year, and all animals are susceptible. The buttercups are only usually eaten when there is sparse grazing, due to its bitter taste animals don't like it, therefore on some pasture there will be areas where the grass has been grazed right to the soil as animal are avoiding the buttercup areas.

Early signs: There are several indications of buttercup poisoning - ingestion can cause irritation, inflammations and ulcers around the mouth, nasal and ocular irritation and they can become depressed with excess salivation and dehydration.

Severe signs: More serious poisoning causes digestive system problems with colic signs and diarrhoea with black, foul-smelling faeces, urine can also be bloody. The most severe cases will show nervous twitching, difficulty breathing and eventually convulsions leading to death. Sheep are likely to fall suddenly, while pigs show paralysis but not much damage to the digestive system. In cattle it can also cause milk yield to drop and the milk to be discoloured or have a bitter taste. It is common for the same groups of animals to be affected each year due to the same pasture being grazed.

Prevention: In order to get rid of buttercups from the pasture, paddocks need to be drained properly and soil fertility improved.

St John's Wort

This is again only eaten when other feed is scarce. The damage is done by a poison called hypericin which enters the bloodstream once eaten and enters the vessels under the skin where it is activated causing photosensitisation of animals. Generalised signs are reduced productivity, weight loss and in extreme cases death. On sunny days when this is being grazed animals can show clinical signs within 5 hours.

Early signs: Agitation, head rubbing, intermittent hind limb lameness, panting, confusion and depression with some developing diarrhoea. They also get swelling around the eyes accompanied with a high temperature.

Severe signs: If affected animals continue to graze St John's wort, the inflammation and fluid swelling of the head and ears will worsen, affected animals then rub irritated areas until they become raw and bleeding which dry to form scabs.

Production losses are mainly associated with weight loss/failure to gain weight due to reduced intake of food, less milk production, fewer lambs and calves surviving to weaning and lower conception rates.

Treatment: Affected animals need to be placed in an area of shade as soon as clinical signs develop and maintained in there for at least 4-7 days, once signs have resolved they can graze as normal.

Pregnant and lactating animals should always be removed from St John's wort pastures as the hypericin can cross from the mother into the blood circulation of her foetus or into her milk. This can result in the birth of weak or dead animals, and poor performance in suckling young.

Sheep with finer wool will be more tolerant than medium wools due to a tighter fleece blocking the sunlight. Pigmented animals do not have as severe reactions.

DAIRY

Recent Technologies for the Dairy Industry Meeting Update

We held a dairy meeting in June at Uppingham Cricket Club with interesting talks from several guest speakers summarised here:

Imrestor – Nicola Anne Geoghegan, Elanco. The meeting date coincided with Imrestor's UK launch so attendees received "hot off the press" first insights into this novel product. Imrestor is an injection containing Pegbovigrastim, a naturally occurring chemical that improves immune function in peri-parturient dairy cows and heifers. The product works by increasing the number and function of neutrophil white blood cells. These cells make up the body's first line of defence against infections (innate immunity), such as those causing mastitis or metritis, and unlike a vaccine their response is not specific to one particular bug.

Recommended use is one injection approximately 7 days pre-calving with a second dose given 24 hours post calving. Hence targeting the period of peri-parturient immune-suppression that leads to fresh cow mastitis and infections. With huge pressure on the industry to reduce long-term antibiotic usage we see this product as a major innovation in sustainable dairy production.

Genomics – Neil Eastham, Bishopton Veterinary Group. Originating from a Lancashire dairy farm with long term interests in Holstein breeding, Neil now plays a lead role in launching

XLVets new national genomics programme through RAFT solutions. Genomic testing of pedigree bulls has been used by the AI companies for quite a few years now as a quicker, more accurate way of determining their value as breeding animals without the need for years of progeny testing. This ability to predict PLI and other heritable traits using genomics has now been shown to be around 3 times more reliable than traditional Parent Averages. With XLVets' position as sole UK provider of the Zoetis Clarifide system, this technology will now be available to test the breeding potential of heifers on your farm at a sensible cost. With better informed breeding decisions for your heifers, such as which to breed to beef or sexed semen, rapid improvements in overall herd genetic potential can then be made.

This is still completely new technology for us at Rutland Vets but we are enrolled in the training that will allow us to take samples, interpret the genomic results and provide an advisory service to our clients going forward so watch this space for more details.

Mycotoxins – Andrew Linscott, AllTech. Assessing and managing the risks to health and performance in the dairy herd from mycotoxins.

Ever present in our environment and a potential threat to the health and productivity of even the best-run dairy herds, mycotoxins produced by moulds in feed ingredients should now be on every herd manager's radar.

According to Andrew Linscott, Ruminant Nutritionist and Mycotoxin Specialist at Alltech, these moulds are likely to be responsible for a number of undiagnosed health issues in UK dairy cattle. Sometimes they might be sub-clinical and sometimes they might be responsible for production levels lower than normal expectations. In extreme circumstances they can cause abortion storms, severe scouring, and sudden drops in milk production. The symptoms can be many and varied but the outcome in all cases is reduced performance and lost profits.

Weather and climate

Already the cereal growing season in the UK has presented farmers with additional risks from Fusarium moulds which can produce a number of problematic mycotoxins which are then fed to cattle. Mr Linscott says: "Results from Alltech's mycotoxin analysis in the UK and across Europe over the last three years of both forages and other common feed ingredients has shown cows are being fed diets containing multiple mycotoxins.

"On average these surveys have found 6.7 different mycotoxins in every sample tested. However, their impact is often difficult to pinpoint, manifesting as reduced feed intake and rumen efficiency, rather than the more acute signs seen in animals consuming high levels of mycotoxins (Remember: High levels can still be only a few parts per billion!).

Mr Linscott says there's still a lack of awareness among UK dairy farmers of the presence of mycotoxins and the resulting impact of multiple mycotoxins on animal heath – including calves, growing heifers, dry and lactating cows. Young animals and transition cows are particularly susceptible to mycotoxicosis.

Assessing the real risk

Globally the knowledge base on mycotoxins and how they affect animal health and performance is improving all the time and it is now possible to test a single sample of a feedstuff and analyse for multiple mycotoxins. Currently, Alltech's 37+ mycotoxin testing service tests for over 37 different mycotoxins. The test identifies the mycotoxins present, quantifies the levels and gives a risk assessment based on the species of animal consuming the feedstuff. Additionally modern thermal imaging technology can be useful to identify risk areas on the farm, such as heating silage clamps, straights/feeds stores and also the TMR in front of the cows.

Moulds responsible for mycotoxins can originate in the feedstuffs pre-harvest or post harvest in storage and depending on the individual situation these can be a mix of Type B tricothecenes, fusaric acid, fumonisins and penicillium. Once you have a clear picture of what the level of mycotoxin risk you have on your farm you can take the appropriate actions to minimise the detrimental effect on health and performance.

Management & reducing risk

Effective mycotoxin management and control involves a three step process.

- Establish the level of risk using thermal imaging and 37+ testing of TMR and if required individual feeds and forages.
- Review the risk areas associated with feed management on the farm.
- Appropriate use of a proven broad-spectrum mycotoxin binder such as Mycosorb A+

"When it comes to managing the ubiquitous mycotoxin challenge on farms, appropriate risk assessment is the best way forward along with awareness and some extra vigilance at all times," says Mr Linscott.

The overall health (and rumen health) of our transition cows is important also, so any mycotoxin risk assessment on your farm should also include dry cows and fresh cows. In the milking herd research suggests mycotoxins can steal as much as 2.3 litres per cow per day and even increase somatic cell count by 78.5%, so it's worth assessing your risk on your farm.

SHEEP

It's coming to that time of year again when we should be planning a strategy for ewe pre-tupping vaccinations. A number of organisms can cause abortion in ewes with the two most common causes being Toxoplasma and Chlamydophila. As a general rule, a two week interval should be left between different vaccines, however Toxovac and Cevac Chlamydia can be given at the same time but on different sides of the neck. Depending on the health status of the flock, and the risk of exposure to the various diseases, some farms might need to protect against multiple diseases. Therefore they need to have a detailed plan in place, which can be executed well before tupping to ensure full protection is provided. Furthermore many of the vaccines have to be administered a certain number of weeks before mating.

Unfortunately it is not always possible to immediately identify which diseases newly purchased replacement ewes are infected with. We always advise to quarantine animals on arrival to look for signs of disease and to minimise the risk to the rest of the flock they will be joining. Individual protocols should be discussed as part of your flock visit, but if unsure please contact the practice.

Below is a brief outline of the common diseases which farms should be considering vaccinating against pre-tupping, especially if previously diagnosed on the farm, but also to protect your flock from the unknown health status of replacement ewes.

Toxoplasmosis:

This is a protozoan parasite that causes poor fertility and abortion in sheep. Its life cycle is dependent on a number of intermediate hosts (including sheep and rodents). Cats are the definite host shedding many Toxoplasma oocysts around the environment. Sheep then ingest these oocysts from contaminated feed, bedding or water.

The outcome of infection depends on the stage of gestation:

Early pregnancy = early embryonic death/resorption leading to high barren rate.

Mid pregnancy = foetal death and mummification or foetal retardation due to compromised placental nutrition and foetal infection.

Late pregnancy = abortion of freshly dead lambs or high mortality rates of newborn lambs. Litter mates may be affected to different degrees.

Affected ewes generally remain clinically normal and may not be diagnosed until scanning or lambing time when they appear as barrens.

Toxovax is a live vaccine to reduce the effects of toxoplasmosis; a 2ml vaccine which must be given at least 3 weeks prior to tupping.

Chlamydophila:

This is caused by the bacteria *Chlamydophila abortus* which is found in many sheep rearing countries. *C. abortus* is excreted by infected and aborting ewes in large amounts in the placenta, uterine discharges and faeces. Unaffected sheep probably acquire infection at lambing time by ingesting the bug. Infection causes abortion or results in full term lambs which are stillborn or weak. It is not uncommon to have one dead lamb and one live lamb born to the same infected ewe. Some live lambs are reared successfully, but these generally carry *C. abortus* and go on to abort their first pregnancy. Placentas aborted due to *C. abortus* have a characteristic reddish-yellow thickened appearance.

Cevac Chlamydia must be given at least 4 weeks prior to mating to help provide protection to ewes. It is a 2ml dose and can be given at the same time as Toxovax (on opposite sides of the neck).

Campylobacter:

The main source of infection is purchased carrier sheep. The common presentation is abortion during late gestation although some lambs are carried to full-term and are born weak and die soon after birth.

We have seen Campylobacter causing problems in some of your flocks this year and therefore vaccinating with Campyvax may be indicated.

Dosage

1ml dose by subcutaneous injection into the front half of the neck. Two doses, 4 - 8 weeks apart are required in the first year, with an annual booster in subsequent years. It is recommended that vaccination is completed before mating.

Glanvac 6

Glanvac 6 provides protection against Cheesy Gland (CLA) and the five main clostridial diseases; black disease, black leg, malignant oedema, pulpy kidney, and tetanus.

Inject 1ml subcutaneously on the side of the neck just behind and below the base of the ear. In previously unvaccinated animals of all ages, give a 1ml dose and repeat 4 weeks later, thereafter an annual booster should be given. Pregnant replacement ewes: Give previously unvaccinated animals 1ml at the time of joining the vaccination programme; repeat at up to

4 weeks before the expected date of birth. Omit the dose at joining in previously vaccinated animals.

Vaccinated pregnant ewes will pass immunity onto their lambs in the colostrum; lambs should be protected for the first 6 to 8 weeks of life.

Please call the practice if you require any further advice or information regarding a vaccination programme to protect your flock.

STAFF NEWS

As many of you are now aware Mike is away working in Victoria Falls, he has kindly been sending us pictures keeping us updated, we are not jealous at all! He is planning to do this more regularly so Max or Henry should now be your point of contact at the practice or on their mobiles.

We have welcomed another new vet to the practice, Marcos Porras, who will join William and Alvaro in the TB testing team, below Marcos and Fiona (who joined us in February) introduce themselves:

Hi Marcos, would you like to introduce yourself? I graduated in 2015 from the University of Extremadura in Spain and came straight to the UK to work. I worked as a slaughterhouse vet for 9 months, which wasn't for me as I would rather work with live animals! I then worked part time in a small animal practice in Norfolk.

What do you like to do in you spare time? I am a keen runner and have just completed a half marathon in Liverpool.

What are you looking forward to about working here? Working with live animals and gaining in experience in farm animal veterinary work.

Tea or Coffee? Coffee but I prefer beer!

Rugby or Football? Football – Barcelona FC!

Where would you like to visit if you could go anywhere in the world? Brazil, to practice my Portuguese.

Fiona, please introduce yourself. I graduated in 2015 from the Royal Veterinary Collage and started work almost immediately in a mixed practice in Stratford upon Avon, as you will be able to tell from my accent I am a Northern Lass!

Hobbies? I like to swim and take my 2 dogs for a walk.

Why Rutland Vets? I wanted to join a forward-thinking farm team and increase my skills in farm animal veterinary medicine.

Tea or coffee? Tea with milk and 2 sugars.

Lager or Beer? Gin and Tonic (full fat please, no slimline!)

Where would you like to visit if you could go anywhere in the world? South Africa, to go on Safari.