



The magazine of Cambridge Vets

treating all animals large and small

April 2016

Alan Bremner Memorial Farm Customers' Golf Day!

Friday 6th May 2016

At Cambridge Golf Club - 9 holes only

(\$5 Green Fees Apply)

Tee off from 9:30am until 1pm

This is not a tournament, just a really fun social occasion for farm clients.

- Multitude of prizes, not just for the golf!
- Catch up with friends!
- All day BBQ and liquid refreshments!
- Alan Bremner Memorial trophy!

Book at the clinic now



Lameness Seminar



We were fortunate enough to host Neil Chesterton last month, and he did a great job of educating us all about lameness in cattle (Figure 2). The morning session covered the lesions seen with different causes of lameness (white line disease, sole penetration, axial groove, foot-rot and how to treat them, finishing up with a discussion on track design. Figure 1 shows Digital Dermatitis - this is a new disease to NZ, an infection, so

please call us if you see it on your farm!

The evening session was a bit more social, with pizza and beer! We had a series of videos and talks on cow flow, human behavior, and how our actions can impact on lameness. If you missed the seminars, or want a team member to catch up, we include a lameness component in our Spring Seminars, and have two Healthy Hoof advisors who can assess and help fix any issues on your farm.



1.



2.



NITRATE!

Just a quick reminder to be on the lookout for nitrate poisoning as we have been seeing some high nitrate levels in pasture. The main risk factors are new grass, growing fast (ie spring or autumn flush) and cloudy days which slow down photosynthesis.

Signs to look out for include sudden death in a number of animals, and multiple cows wobbling and down, gasping. The blood is chocolate-brown instead of bright red as the oxygen is displaced off haemoglobin, which is what causes the whole problem. Eyes and mucous membranes may look brown, grey or blue instead of pink. This is an emergency, and we treat it as such; please phone the clinic if you suspect this and we will dispatch vets with the antidote to be given intravenously.

LEAD!

Talking of poisoning, there was an interesting article in the Vet Script looking at lead poisoning in adult dairy cattle. They were grazing a property adjacent to a clay shooting range in the dry period, and the case presented as several sudden deaths. This expanded to multiple cows showing nervous signs such as blindness, circling, walking through fences, dullness and recumbency. There are several things this could be due to, such as listeriosis, low magnesium, acidosis, B1 deficiency, nitrate poisoning and acetonemia. However, a post-mortem revealed lead shot lodged in the honeycomb structure of the reticulum (2nd stomach). The lead levels were high in blood, tissue, soil, grass and beet.

I have seen lead poisoning before in calves that were chewing wooden sheds painted with lead paint, and they responded reasonably well to several injections of the chelating agent calcium EDTA. Unfortunately, this was expensive and impractical for a large mob of adult cattle, as were most other treatment options. These cows were given magnesium (sulphate to bind the lead to the less soluble lead sulphate) and vitamin B. Sadly, the lead contamination of the tissues meant that there was significant health risk from consumption of meat and milk, so the exposed cows had to be humanely culled. Ongoing testing revealed that the lead levels were high for many months, both in milk and tissues, exacerbated as the shot kept releasing lead. The farm was put under surveillance notice by MPI and milk and meat levels monitored until it was confirmed safe.

Beat the Beet: Feeding Fodder Beet!

More and more fodder beet is being fed out across NZ, one of the crazy English things I grew up with in the 80s, that has transferred across fairly recently! So "FB" in this article refers to Fodder Beet, not Facebook! The main risk with fodder beet is if cows gorge themselves they can go down with rumen acidosis, as a sudden hit of starch is converted in the rumen to lactic acid. There are several attributes of FB which make this possible:

- High yields
- High soluble carbohydrate level, low fibre
- High bulb: leaf ratio (bulb is high in sugar, low in fibre)
- Very palatable, leading to rapid, high intake



It is therefore essential to transition cattle onto fodder beet, slowly introducing them, to allow the rumen microbes, and feeding behavior of the cows, to adapt. Fibre supplement is also necessary; this gives rumen fill (to reduce hunger and gorging on FB), and promotes rumination and saliva (containing bicarbonate) production to buffer the rumen against acidosis.

Jim Gibbs recommends starting cows and R2 heifers at 1-2kg DM fodder beet, then increase 1kg every 2nd day for 14 days. The supplement inputs are 8kg DM on day 1, dropping to 4kg by day 14, then 2-3 kg at day 21 and after. From this point the break is moved a bit each day until ad lib intake (they are leaving some behind).

The supplement should be fed out early in the morning, and cows given at least 3 hours to eat enough. Generally cows won't eat enough straw, so this needs to be offered with grass, grass silage, baleage or hay to increase intake. On day 1, only 2kg of the 8kg fibre should be straw. Although fibre is essential, and we don't want to add extra high starch feed into the mix, it is important not to feed poor quality supplement particularly in the beginning of transition, as the cows may simply not eat it. We also don't want them going backwards in condition and energy.

Allott and McIntosh highlight a few other common problems:

- Using ring feeders for the fibre restricts cow numbers / intake, so break feed this in the transition period
- Ensure the right amount is fed for long enough (>3 hours before opening up the FB)
- Don't feed supplement on top of the crop
- Inaccurate crop allocation – check crop yields, paddock dimensions and your calculations! Crop yield can vary across a paddock, so make sure the transition area is sampled.
- If the crop is sown right up to the fence, it is hard to restrict access by area. Consider lifting part of the crop so they have a blank area, leave a grass headland, or drop the fence to the adjacent grass paddock. Giving a large area and limited time access risks some of the mob gorging themselves.
- Lifted beet may leave some in the ground – this can significantly increase the amount available!
- Cracking beet open (with a tractor wheel) leaves pieces that may cause choke – keep an eye open for bloating cows!
- Mixing experienced and cows / heifers that have not seen FB before, may result in some cows eating far more than their share!
- Low phosphorous levels (DCP may need to be supplemented with the crop to prevent hypophosph down cows at calving)
- Bloat (more susceptible with a frosted crop)
- Oxalates can bind calcium, but gradual transition will reduce the risk of this causing milk fever

Ad-lib FB may not be desirable. Intake may need to remain restricted if there are concerns about excess condition gain and fatty liver or metabolic disease. Crop samples will enable accurate feeding and phosphorus supplementation.

ANTIBIOTICS AND DRY COW THERAPY

There was an interesting TV programme recently "Peak Antibiotics" on 4th April. It highlighted the growing concern over antibiotic resistance, and what a devastating impact it would have on us and our children if more bacteria developed multiple resistance (superbugs). The programme very much focused on the need for all of us to reduce our usage of antibiotics through not taking them unnecessarily, and by improved health and hygiene. They briefly touched on the use of antibiotics in agriculture, and the concept that bacteria exposed to drugs in a cow (& therefore potentially resistant) could get into us via faeces, meat etc. Various articles in the veterinary field have expanded this point, examining the global concern about food safety, and how public perception can impact on market regulations (and access). There is a call for the NZ agricultural industry to take a leadership position on food safety and reduction of antibiotic usage. In particular we are being asked to examine the use of dry cow therapy, ensuring a judicious strategy is implemented. Additionally, improved herd management and disease prevention will reduce the need for antibiotics. It will be interesting to see what resources, research, and requirements we will receive!

Fortunately, we already have the knowledge, experience and tools to both help formulate an optimal dry cow strategy, and to design herd health plans and protocols to minimize disease in the first place.

OSH

The new OSH regulations underline the legal requirement for us to manage work place risks. If your farm, or a particular visit, holds hazards, please inform us. We are used to dealing with animals, cowsheds, yards and inclement weather, but it is always good to mitigate any risks to you and us! For example, we could sedate an aggressive or fractious animal, or adapt the facilities.

Alpaca Newsflash:

"Bovine xenograft used in nonunion fracture in alpaca!"

In other words, an alpaca was presented to an Italian university for a non-healing break in its hind leg.

They used metal plates plus bone from a cow's femur to successfully fix the problem!

The cow's bone was obtained from an abattoir and cold-shocked to avoid rejection by the host; then it was inserted into the fracture site to stimulate bone healing in the different species!

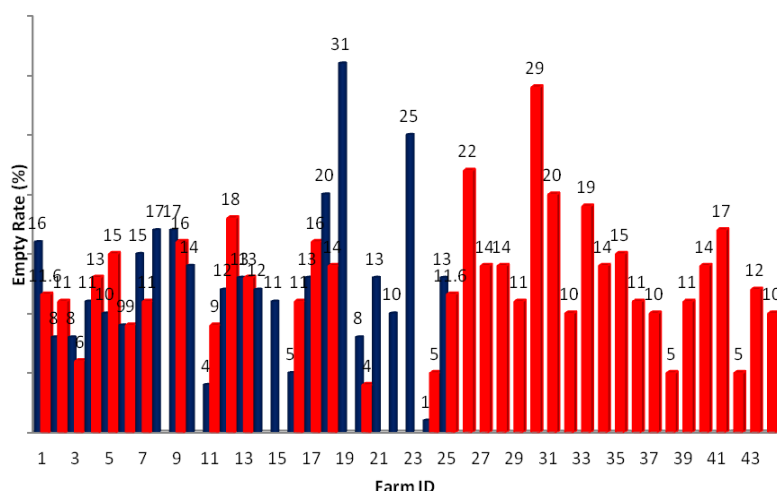


On-Farm Empty Rates

As the current season progressed and the results from herd scanning came in there was much speculation in the local farming community as to why empty rates were higher this season. With the help of Infonet we analysed the empty rates from the 2014-15 season with the current season to see just what was going on. The average empty rate for the 2014-15 season was 12.4% and that of this season was 13% - not a significant increase however, as the graph demonstrates on an individual farm level some did experience a significant increase in their empty rate.

As a result of the low pay out some opted to reduce the length of the AB period and reduce feed and non-cycler/intervention inputs, which may have contributed to some of the increases.

Client Empty Rates Season 2014-2015 (Black) & 2015-16 (Grey)



HUMERAL FRACTURES IN DAIRY HEIFERS

Whilst this is not a brand new phenomenon (it was first noted in 2008), there has been a bit of publicity recently about heifers getting broken legs just below the shoulder.

These seem to be spontaneous fractures that tend to occur within 2 months after calving, in 2 and 3 year olds.

It has been estimated that 1 in 8 farmers have experienced this, with about 5000 animals affected annually.

Although there has been some link with copper deficiency demonstrated, this is not the whole story because not all cases had low levels, and the fractures are a new phenomenon seen only in NZ, unlike copper deficiency. It is believed that during periods of under-nutrition less bone is laid down. Then when calcium mobilization occurs with lactation, the bone is further weakened.

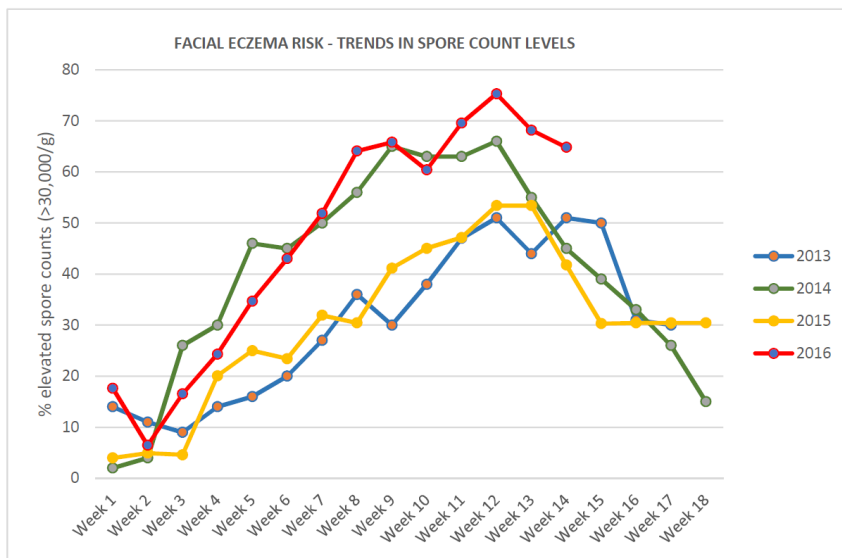
More data is being sought by Massey, and if you see a case of sudden extreme lameness in a heifer after calving, please call us.



FACIAL ECZEMA

Facial Eczema was really bad this year. Multiple properties had to dry off mobs early, and of course there is a growth check on sheep and beef properties. Although zinc is not a 100% guaranteed full protection, a lot of farms we sampled had not got blood levels high enough to be in the protective zone. I strongly recommend getting some cows blood sampled in the early summer every year to make sure the levels are high enough but not toxic. Pasture samples should also be submitted for spore counts so zinc can be started promptly but not too early!

FE Risk -National trends in spore count levels (% elevated above 30,000 spg)



WELCOME BACK SHALLY

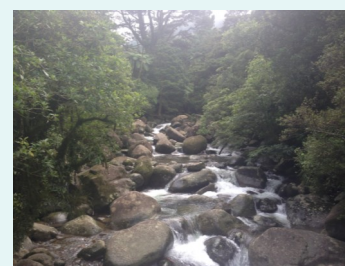
We are delighted to welcome back Shally to the front counter team after a six year period of leave to raise her young family.



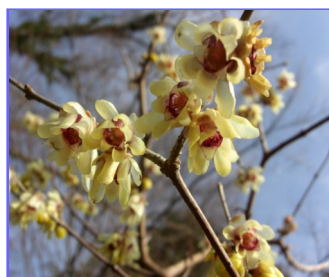
Prior to leaving in 2010 Shally had worked with Cambridge Vets for 12 years, so it is fantastic to have a familiar face back in the Cambridge Vets family.

TAKE TIME OUT

Time out – Getting out for a walk in the local countryside can be a great way of putting the everyday stresses into perspective! I recently walked up the trail to Wairere Falls with my family, and would thoroughly recommend it as a beautiful walk in an enchanting environment. It only takes about 90 minutes round trip, and was great for blowing the cobwebs out!



Dr. P Briston



Wintersweet toxicity has been reported in goats (NZVJ May 2016). This common garden shrub contains calycanthine, which can cause incoordination, hyperaesthesia and convulsions. Take care that goats can't eat garden clippings.



1 LITRE FREE WITH EVERY 5.5 LITRES

NO.1

POUR-ON

recommended by vets.

ECLIPSE® NO OTHER POUR-ON IS MORE EFFECTIVE AGAINST PARASITE RESISTANCE WHICH IS WHY IT'S NEW ZEALAND'S NO.1 COMBINATION POUR-ON.

Edited by Peter Briston

(07) 827 7099

0800 226 838

facebook

www.cambridgevets.co.nz