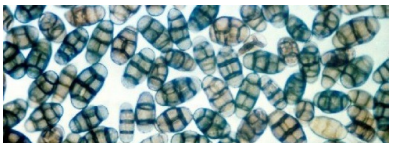
Cambridge VETS

the Vet Advisor

The magazine of Cambridge Vets *treating all animals large and small* December 2016

FACIAL ECZEMA



Emma Cuttance, a vet from Te Awamutu, recently did a FE study on 1000 cows across 100 NI herds. She found that 79% of cows and 33% of herds had high GGT levels (i.e. liver damage). When they tested zinc levels, 53% of cows were below protective levels, 44% were in the ballpark, and 3% were high (and potentially toxic).
Cows supplemented with zinc in water were 5.5 times more likely to have blood zinc levels below protection, compared to cows being drenched. Furthermore, dose rates of zinc were low on 42/68 farms.

The next thing they checked was 160 cows in 16 Waikato farms feeding zinc oxide mixed with supplements in-shed or on a feedpad. They found that 44% of cows had low zinc levels, 46 % were at protective levels and 10% were too high (risking toxicity). The feedpad systems yielded more variable zinc blood levels, presumably due to differing DM intakes.
The team also trialled applying lime to paddocks in November or March; it had NO effect on the spore count.
So we can still improve our FE protection programs:

- double-check your zinc dose rates to avoid underdosing or poisoning.
- check levels in blood and feed to see if you need to alter your program.
- zinc sulphate in the water on its own may not give adequate protection in a high challenge year / farm. Alternatives include drenching zinc oxide or mixing it with feed supplement, administering zinc bullets, or applying fungicide spray to pasture. I would add that CRV are also focusing on breeding FE resistance, and various summer crops have a lower risk of spores, such as fescue or chicory.
- monitor spore counts on your farm specifically by dropping in pasture samples. This will allow you to start and stop zinc supplementation at the correct time of risk, or to avoid high risk paddocks.

FACIAL ECZEMA – BACK TO BASICS

Facial Eczema (FE) is essentially a liver disease of ruminants (but alpacas are very susceptible), although the most obvious signs are photosensitivity and peeling skin. As the temperature and humidity climbs over summer and autumn, the fungus *Pithomyces chartarum* sporulates.
It particularly likes paddocks with dead matter in the base of the pasture.
As they are eaten with the pasture, these spores release the toxin sporidesmin, which damages the bile system of the liver. This has a big impact on growth, milk production and health – the obvious signs are only the tip of the iceberg!

Prevention options include avoiding grazing high risk paddocks with susceptible stock, spraying paddocks with fungicide before the spore counts rise, or using prophylactic zinc.

Regional **risk levels are published on our facebook page / website**, and in the newspapers and online media.
Generally zinc is started in January for a February risk. Blood tests will check the zinc levels are protective but not toxic – excess zinc damages the pancreas, causing weight loss and even death. Consider checking soil zinc levels, as we have seen one farm with problems there. Zinc can be provided in water, by drenching, or as a long-acting bolus.
Recommended dose rates can be found on our webpage. Treatment of affected animals includes offering shade, zinc cream, and vitamin supplementation (vitamin E is a good anti-oxidant).

Welfare

There has been a bit of publicity again regarding animal welfare on farms. The 2014 Dairy Welfare Code outlines both minimum standards and best practice recommendations and is a cracking good read at only 40 pages!
All welfare codes are available online at: https://www.mpi.govt.nz/protection-and-response/animal-welfare/codes-of-welfare/
As a profession we are passionate about both animal welfare, and farmer welfare!
We understand the realities of the farming environment and we are available to tailor a Welfare Policy for your farm and talk through the requirements with your staff. Some interesting points of note, in response to the media coverage:

- Bobby calves must be fed, kept in suitable shelter, and handled with due care. As of next year, a ramp must be available for them to walk up to the truck.
- Euthanasia by blunt force trauma is not allowed. Personnel must be trained and competent to use a firearm or captive bolt.
- Hip lifters are to be removed if the cow cannot promptly support her own weight.
- Cows must not be transported where her weight is taken entirely by the hip clamps/vehicle.
- Cows supported in a sling must be able to breathe freely, not suffer unnecessary discomfort, and be lowered if they are not supporting their own weight within one hour.
- If they are still recumbent after 48 hours, a vet examination is recommended - we can check for dislocated hips or other diagnosis, give a prognosis, or feedback on welfare.
- Animals must be fit for Transport. Calves must be at least 4 days old, healthy, able to stand with a dry navel and fed within 2 hours. Adult cattle must be bearing weight evenly on all 4 legs; if they are lame or have any health issue, a vet may issue a certificate only if they meet certain criteria.
- Milk letdown must not be stimulated by insertion of water or air into the vagina.
- It is best practice to have an Animal Health Plan written in consultation with your vet. This provides an opportunity to go over husbandry skills, to plan ahead, and formalize decision trees for mastitis, lameness, calvings and recumbent cows for example.

There are also a set of codes for painful husbandry procedures; I would advocate for following Best Practice guidelines here, such as always using pain relief for disbudding/dehorning.

Merry Christmas and a Happy New Year to all our farmers and their animals!

Clinic Hours for Christmas & New Years 16/17

Duty Vets will be available through our after hours service
Ph: (07) 827 7099 or
0800 226 838
FOR EMERGENCY CALLS

There will be Large Animal Veterinarians on duty at all times.

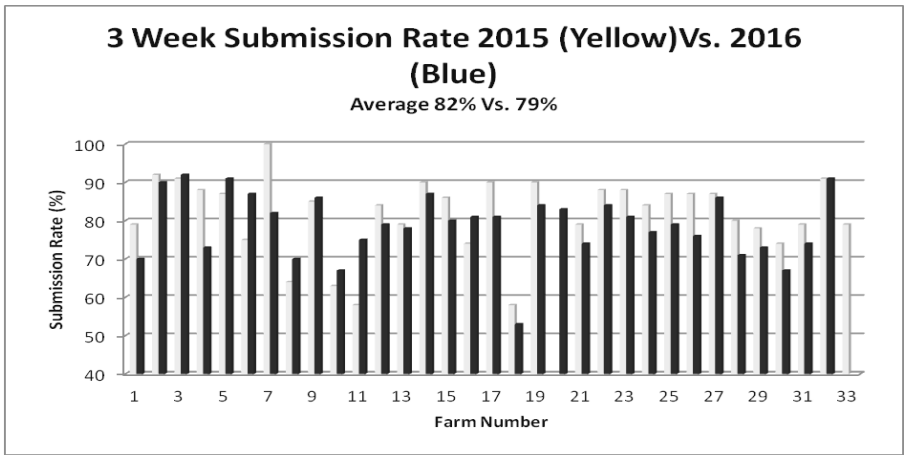
For Small Animal emergencies outside of opening hours, please ring the clinic phone number (07) 827 7099 which will direct you to the appropriate after hours contact.

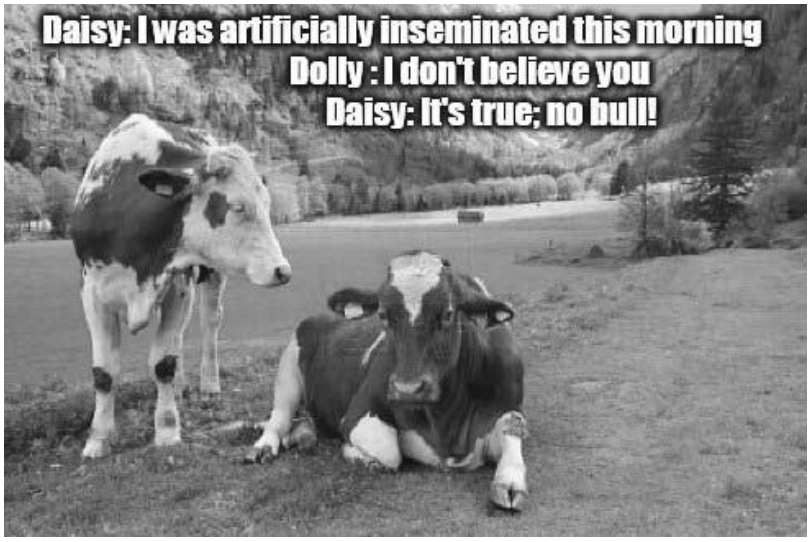
Resumption of normal hours (incl. late nights, Saturday & Sunday mornings) from Sunday the 8th!

Saturday 24th Dec	9am-12.30pm
Sunday 25th Dec	CLOSED - Merry Christmas
Monday 26th Dec	CLOSED - Boxing Day
Tuesday 27th Dec	CLOSED - Stat Day
Wednesday 28th Dec	8am-5pm
Thursday 29th Dec	8am-5pm
Friday 30th Dec	8am-5pm
Saturday 31st Dec	9am-12.30pm
Sunday 1st Jan	CLOSED - New Years Day
Monday 2nd Jan	CLOSED - Stat Day
Tuesday 3rd Jan	CLOSED - Stat Day
Wednesday 4th Jan	8am-5pm
Thursday 5th Jan	8am-5pm
Friday 6th Jan	8am-5pm
Saturday 7th Jan	9am-12.30pm
Sunday 8th Jan	9am-12pm

Benchmarking Repro Performance with Infovet

In response to the anecdotal feedback from farmers to LIC that submission rates have been trending lower than anticipated, I have analysed our Infovet data and compared last season's 3-week SR with this season.
In general, 57% of the Infovet farms have seen a decrease in their SR with 24% seeing an improvement. The average trend however has demonstrated a decline in 3-week SR this season down from 82 to 79%.

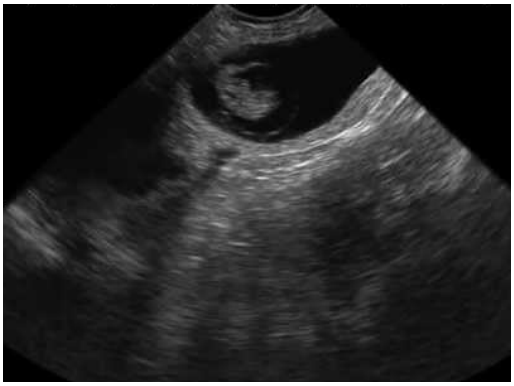




SCANNING

Early scanning will give you good and accurate feedback for your repro management, with pregnancy rate and calving dates confirmed for AB. The best time to do this is 5 weeks after the end of AB. The final empty rate, and identification of late calvers can be confirmed with a herd scan at 6 weeks after the bulls have left the herd.

A recent study of 83,000 NZ cows showed that 90% of scans aged by vets were accurate to within 10 days of calving. However, the accuracy drops if the foetus is older than 13 weeks due to increased variability of its size.
The other impact on accuracy is having a greater number of AI dates and unrecorded matings. So scanning at the right time, and having the mating dates to hand (which we do when using Infovet), helps us be more accurate for you.

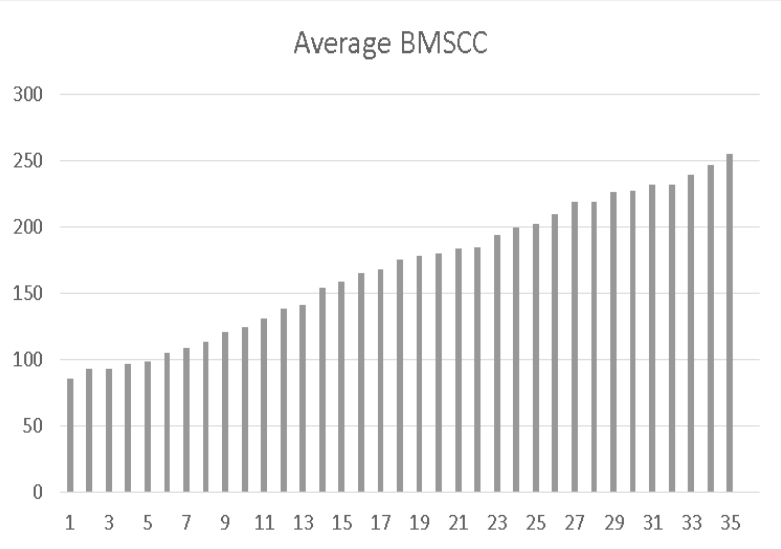


Our Infovet system is a great way of uploading your scan data straight onto minda, with the results recorded straight onto our tablet. It also gives us mating dates at scanning, and calculates pregnancy rate and other useful KPI data for you. *Now is a good time to sign up!*

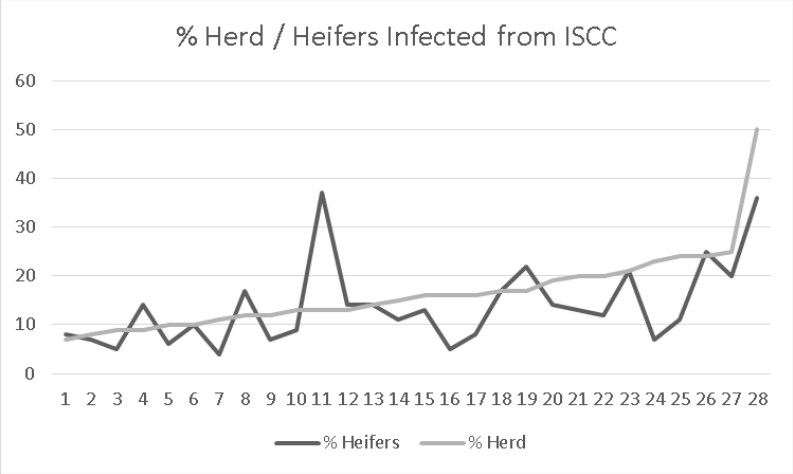
We get pretty busy with scanning, so please remember to book us in with plenty of notice.

Benchmarking farm performance with Infovet

INFOVET is a great tool for assessing herd health performance, especially repro and mastitis. With 28 farms signed up, we can benchmark your farm against our district performance. Recent analysis shows that the average BTSCC is 169 to date, but with quite a range as you can see below. Infovet will also alert us if you are having grading problems.



Looking at herd tests early in the season, we can see the level of infected cows in the herd (SCC >150) and heifers (SCC>120) across our Infovet farms. A black spike shows that farm has a high % of infected heifers, so we may want to consider teat seal next year for example.



Infovet also adds value to our PAR and DCT consults through quick access to more data. It is also invaluable for analyzing any issues with mastitis or repro, as well as allowing us to store scanning or BCS results using our tablet.

Please phone us to sign up while it is still free!

Coliform Mastitis

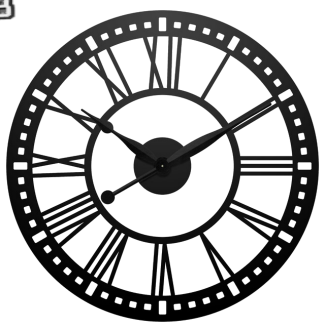
We have seen quite a few coliform grades and coliform clinical mastitis cases this year. E.coli is a very common bug in faeces, and if the udders are contaminated then it can enter the tissue causing a mastitis.
The very wet winter/spring we had will have increased the risk of dirty udders.

Generally a coliform grade is due to part of the plant not getting cleaned and sequestering some organic matter and hence allowing the bugs to proliferate, or due to dirty teats contaminating the milk lines. Coliform mastitis rarely causes grades, but there is often a common factor causing both. Thorough plant cleaning (check hot wash temperature, check acid/alkali wash, check all parts reached, check milk cooled quickly) and minimizing udder contamination are critical, but just washing udders may leave a bacterial soup. If they really need washing, they will need drying too with fresh paper towels (not the same dirty rag!) before putting cups on. Often a better, drier option is to trim the tails and address any dirty areas on the farm.

The classic coliform mastitis has a watery milk quality plus a very sick cow as the gram negative bacteria release toxins. We are treating these with anti-inflammatories, injectable antibiotics and fluids. If they do require antibiotics; milk culture and sensitivity have been showing frequent resistance to penicillin and cloxacillin, so other products need to be considered. However, we have also been seeing coliform mastitis that is not associated with a sick cow, and these often do not need treatment with antibiotics as the immune system will generally clear the brief infection.
Milk samples are critical for confirming coliform mastitis, and antibiotic sensitivity profiles.

Take home message: If you are grading, or getting a lot of mastitis, or weird mastitis, please contact your vet. Milk samples can tell you what is going on, and we can discuss reducing risk factors on your farm.

BLANKET DRY COW – THE CLOCK IS TICKING!



The NZVA have just released a statement that by 2020 dry cow antimicrobial therapy (DCAT) should only be applied to cows with an infection. This will affect blanket dry cow programs, and using dry cow in low cell count cows. Many European countries have already instigated this requirement, and the driving philosophy behind this stance is to reduce the incidence of antimicrobial resistance. I am sure none of us want to see our children in hospital because antibiotics are no longer effective, and the One Health banner links human health, animal health and the environment.
Our prescription of any antimicrobial is required to be both judicious and appropriate.

Ultimately the ideal will be to treat selectively, choosing cows with a high cell count or mastitis history/risk for DCT. Cows identified as low risk/cell count still have the option of teat sealant for the prevention of new infection. Teat Sealants are well proven to be at least as effective as dry cow antimicrobial therapy in cows with no intra-mammary infection for preventing new infections. So how do we identify (un) infected cows? Herd testing, treatment history, or RMT / conductivity tests. We may need to get a bit creative with herds who do not currently herd test!

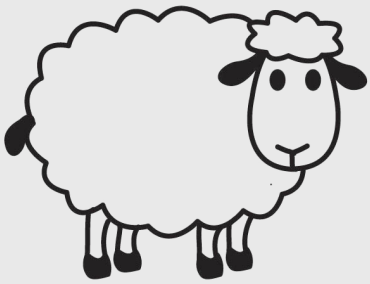
The relevant bodies will be issuing research, advice and guidelines, and we will be utilizing this and passing it on as it comes through. My main concern is that we will still be allowed to use blanket dry cow in herds that are battling a contagious staph aureus problem. We will be giving our feedback to those concerned!

As well as technology such as teat sealants, we can also examine management, environment, plant function, teat health and other contributory risk factors to on-farm mastitis incidence. This forms part of our dry cow consultation, and we can delve deeper into investigation and advice if needed.
Anyway, we have 3 years to rationalize our approach…

SHEEP WORMS

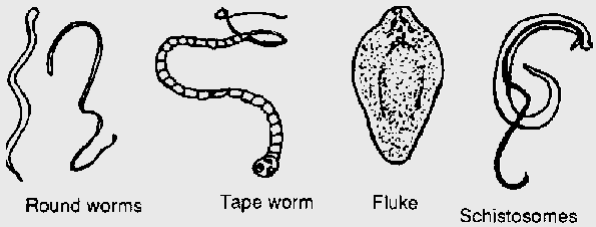
Gribbles lab have done an update on anthelmintic resistance in sheep. They discovered that we have more of a problem in the north island than the south island (perhaps due to more frequent drenching or more intensive grazing?).
Overall, using a resistance definition of a reduction in egg count of less than 95% they found that:

- **47% of parasites were resistant to benzimidazole**
- **45% resistant to levamisole**
- **56% resistant to ivermectin**
- **0 resistance to monepantel**
- **21% resistance to benzimidazole/levamisole combi**
- **6% resistance to triple combination**



Bear in mind you may not notice the difference between a drench that is 100% effective and one at 90% in the field, but the latter would be classed as a resistance. The Wormwise program is a great resource for reducing the onset of resistance.
Some tips are:

- Do faecal egg counts to see if your stock actually need worming. The less frequently you use a drench, the less risk of resistance. Rich grass can cause nutritional scours.
- Co-grazing with other species helps reduce worm burden and minimize the need for drenching
- Run older animals after youngstock for the same reason
- Refugia – consider not drenching the top 10% of animals; their worms will not be exposed to drench and will compete with any potential resistant worms shed by drenched animals.
- If concerned about resistance, contact us to organize a trial assessing pre-and post-drench worm levels.
- Be accurate with dose rates – weigh some representative animals and drench to the heaviest, and double-check your drench gun is delivering an accurate dose by squirting 10 doses into a measuring jug.



Congratulations

We would like to congratulate Christina our telephonist and her husband John on the safe arrival of their daughter. '*Renee Rose*' was born at 7.12am on the 9th November weighing 7lb and 12oz. We wish you and your family all the best!

AG DAY PHOTO COMPETITION

Congratulations to all the kids who entered their Ag Day school show! We had a great response for our photo competition – here are a selection from our winners Johnny, Madeline, Paige and Dani.

Cambridge Vets is delighted to support our local schools because we believe it is important to encourage kids in animal husbandry.