



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

December 2019

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

SHEEP MATING

I know it seems an age away, but far too quickly the rams will be joining the ewes. I was reminded of this last week when asked to vasectomize some rams to make them teasers! This system works very well to compact mating; the presence of (vasectomized) rams prior to the mating season brings the ewes into heat for the real rams! It is a relatively straightforward veterinary surgery, but needs to be done a month or two before their introduction to ensure they are not fertile. Other things to consider ahead of time are the 2 major causes of abortion, for which highly effective vaccines are available.

TOXOVAX

Toxoplasmosis never goes away and has been shown to be present on every sheep farm in New Zealand. One shot of Toxovax gives your ewes a lifetime of protection against the devastating abortion storms Toxoplasmosis can cause. Vaccination can increase lamb numbers by an average of 3% as well as decreasing the number of dry ewes by 14% on average. Ewe hoggets and two toothers are most at risk, but any susceptible ewe that contracts Toxoplasmosis during pregnancy is at risk. Infection causes:

- ◆ At early gestation - embryonic loss or reabsorption
- ◆ Mid gestation - fetal death, mummification and abortion
- ◆ Late gestation - birth of weak, non-viable lambs

The life cycle of Toxoplasmosis involves wild birds and rodents who have cysts in their muscle and are then eaten by cats. Cats then pass out the infective stage of the life cycle directly onto pasture or hay via faeces. Sheep grazing on this contaminated pasture or hay can pick up the disease, and if this occurs for the first time during pregnancy, abortions can occur. Often the farmer sees a reduced scanning percentage and a lot of late or dry ewes. Abortions are not always seen.

Toxovax is a live vaccine, has a short shelf life and is made to order. Please order your Toxovax from us at least four weeks before you need to use it, which should be at least 4 weeks before mating, to ensure supply.

CAMPYVAX4

Vaccinating with Campyvax® improves lambing performance and prevention of Campylobacter abortions. Flocks that are vaccinated have lambing percentages on average 9% higher than flocks that are not. Vaccination should happen 4-8 weeks prior to mating. Hoggets need a sensitizer dose 4 weeks before this shot (ie 8-12 weeks before mating).

- Campylobacter is present on 88% of New Zealand farms.
- Maiden Ewes hoggets or two toothers are most at risk but mixed age ewes who have not been previously exposed (up to 50%) are still at risk too.
- It is the most common infectious agent causing abortion on New Zealand farms, with 60% of sheep abortions diagnosed attributed to Campylobacter.
- Occurs when susceptible animals ingest contaminated feed or water, or by direct contact with infected fetuses or fetal membranes. Scavenging birds such as the Black Backed Gull may spread the disease between paddocks and even farms.
- After infection, the organism is present in discharges for up to six weeks, with some ewes becoming longer-term carriers.
- Infection can persist for a number of years in carrier sheep without overt signs of disease.
- Signs are not just aborted lambs, there may be reduced scanning and lambing percentages too.



Potassium Bromide and Perennial Ryegrass Toxicosis

Ryegrass staggers is seen in lambs and calves in the summer / spring. Some perennial ryegrass contains the fungal endophyte *Epichloe festucae* (previously *Neotyphodium*) var. *lolii*, which produces toxins such as lolitrem B. This is a neurotoxin which can cause tremors, incoordination/ataxia, falling over, and a high-stepping gait. The clinical signs are an effect of a depolarising blockade of the purkinje neurons in the cerebellum.

Potassium Bromide (KBr) has been used for ages to help treat seizures. It has the opposite effect to lolitrem B (hyperpolarizing the cerebellar nerve cells), so a group in Australia trialled the treatment of Ryegrass Staggers/Toxicosis in lambs with a drench of potassium bromide.

Various groups of lambs were fed either Lucerne chaff or ryegrass seed containing lolitremB, and then some were treated with Potassium Bromide either as a single dose or as a daily drench.

Those lambs which were fed ryegrass seed with lolitrem B and developed moderate tremor and gait abnormalities who were

subsequently given a single drench of KBr had a reduced likelihood of falling and a better gait. They also had lower muscle voltage, suggesting reduced tremor. It may also reduce stress levels (measured by cortisol concentration).

In the future, this could be a useful treatment to help farmers move affected stock, to perform husbandry procedures on them, or to treat recumbent animals. However, the dose rate and safety of the product has not been established for ruminants, so further studies will be needed.

So for now, it is best to identify at-risk paddocks and avoid grazing them with susceptible stock (especially calves). They show signs particularly when grazing seedy grass or grazing really low. New varieties of ryegrass are available for re-drilling paddocks which do not contain the endophyte.

If you do see animals showing signs of ryegrass staggers, it is best to minimize stress and droving. Monitor them for accidents (e.g. getting cast or stuck), and be slow and gentle with them. Delay yarding if possible.

There is currently a global outbreak of **African swine fever (ASF)**, which is a highly contagious haemorrhagic viral disease of pigs. Clinical signs of ASF range from mild to severe depending on the strain of virus. With the severe form, almost all affected pigs die.

Border security inspections in Australia have identified ASF test-positive pork products in the baggage of some arriving passengers. Accidental importation of virus-infected product is a real concern for New Zealand's pork industry.

Pigs are great recyclers of food waste. But did you know, to protect our herd from diseases like ASF, it is illegal to feed meat to pigs, even scraps of food containing meat, unless it has been boiled/cooked at 100C for an hour.

As far as we are aware, ASF is not present in New Zealand and we want to keep it that way!

LEPTO

Yes, yet another reminder to get calves vaccinated for leptospirosis. It is important to get them done as soon after 1 month of age as possible, when any maternal protection will have worn off. Vaccinations will not be effective if given after a calf has caught leptospirosis and it is hiding in the kidneys. None of us want to catch this horrible disease.



AHP, Welfare and Infovet

Several milk companies are looking to have formal Animal Health Plans and Welfare Reports, under discussion with their farm veterinarian, as part of their assurance schemes. We have been offering Animal Health Plans, Prescription Consultations, Body Condition Scoring, Tail Scoring, Healthy Hoof services, Infovet Analysis and Milk Quality Assessments for some time now. So, this should be a straightforward transition to utilize these and amalgamate them to add value to your herd supply. It will take a chunk of time to sit down and design a health plan calendar, so please give your vet a ring to organize it ahead of schedule. It also adds another reason to sign up for Infovet while it is still free.



Dry cow Therapy/Antibiotics

We have moved into a new age – the Post Antibiotic Era. Well, maybe not, but we are certainly part of the movement to reduce, replace and rationalize antimicrobial usage so that we minimize the spread of drug resistant bacteria to people. The NZVA states that by 2030 we should no longer need antibiotics to maintain animal health. This does not mean we won't be able to treat sick animals, rather it is an aspirational aim to have better preventative health programs, management and husbandry in place so we don't need to use antibiotics prophylactically. You can see our industry/profession has already made inroads with this, such as the work and recommendations done on colostrum management and pen hygiene to maximize calf health, and the focus on drying off practices and an increasing use of teat sealants. However, this most affects us with antibiotic dry cow therapy. Blanket DCT is no longer permitted; we are allowed to treat high SCC cows or those with a mastitis

profile, but "clean" cows need to be managed through dry off procedure/teat sealants/environmental management/monitoring. This means that we need to identify high/low cell count cows. A herd test is the best solution to this, otherwise the cows could be RMT'd.

The other side of the coin is the Traffic Light Categorization of antimicrobials. We are trying to use/prescribe less Red antibiotics, as these are considered critical for human health. There are a limited number of choices to be fair, but it is something we need to address nonetheless. The MPI report "Antibiotics Sales Analysis" details the National consumption of antibiotics in the animal & horticultural sector for 2017. Interestingly it shows that 58% was used in medicated feeds, 23% of sales were for injectable, 12% intramammarys, and half of all antibiotics were used in the pig and poultry industry. Alarming, the sale of products "critical to human health" went up for 4 of the 5 drugs.

REPRO BENCHMARKING INFOVET FARMS

We have 41 farms signed up with Infovet, and the repro data can be benchmarked.

Below you can see that the average 3 week submission rate was 82% (InCalf target 90%). If your farm is significantly below this local average, we should look into why and what we can do to lift it next year. If you don't know your rate, we can find you on this anonymous graph!

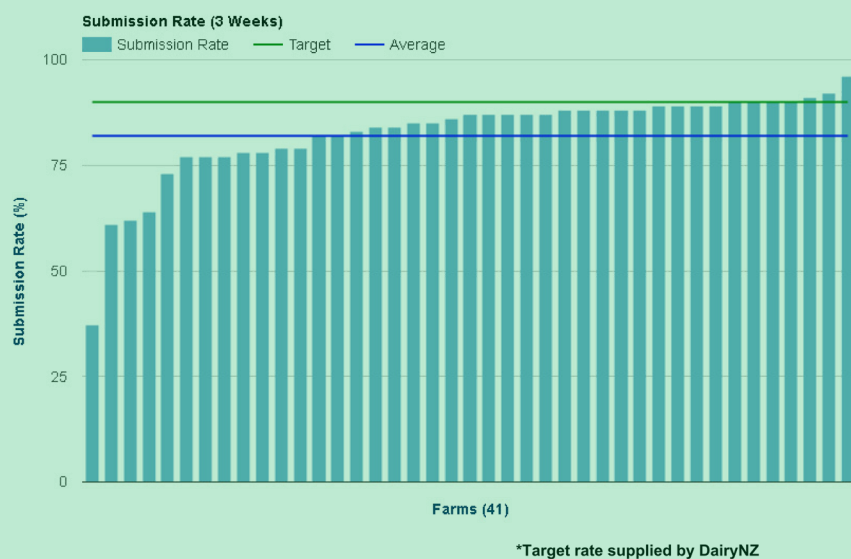
The heat detection report is, not surprisingly, an echo of the Submission Rate, but this takes out the late calvers as it only asks if mature cows calved >42 days were mated in the first round. Target 95%, average 87%. How did you do?

infovet benchmark.

Submission Rate

Selected Clinic: All Clinics - Selected Farm: All Farms

Year: 2019



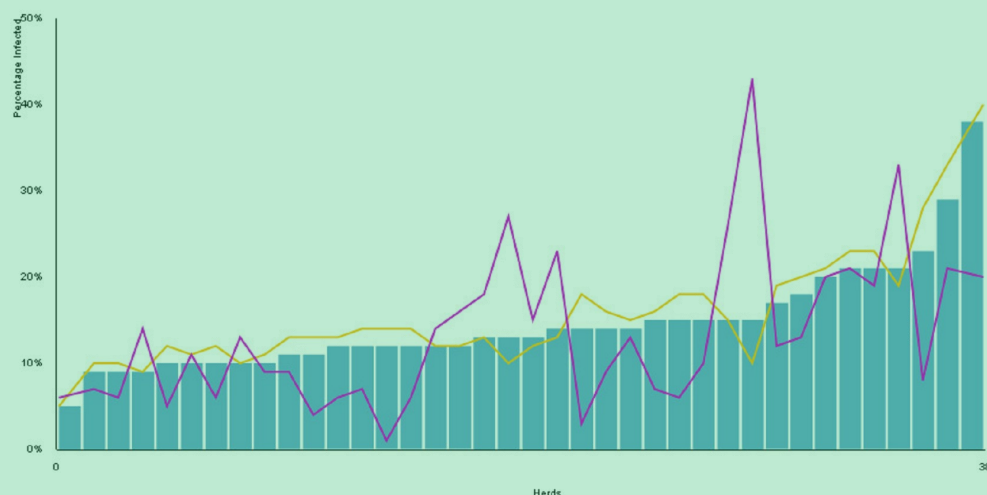
infovet benchmark.

ISCC - Subclinical Mastitis Report

Selected Clinic: All Clinics - Selected Farm: All Farms

Season: Early 2019

Heifers
Mixed age cows
Herd



Likewise the average BTSCC so far is 157. We can see from the purple line spikes, some farms have much higher scc in heifers than others. Culling heifers because they have picked up sub-clinical mastitis which also impacts on yield, is pretty frustrating. We can benchmark your heifer milk quality and make some suggestions for improvements.

Clinic Hours for Christmas & New Year 19/20

Mon 23 Dec	Tues 24 Dec	Wed 25 Dec Christmas Day	Thurs 26 Dec Boxing Day	Fri 27 Dec	Sat 28 Dec	Sun 29 Dec
8am-5pm	8am-5pm	Closed	Closed	8am-5pm	9am-12.30pm	9am-12pm
Mon 30 Dec	Tues 31 Dec New Years Eve	Wed 1 Jan New Years Day	Thurs 2 Jan Holiday	Fri 3 Jan	Sat 4 Jan	Sun 5 Jan
8am-5pm	8am-5pm	Closed	Closed	8am-5pm	9am-12.30pm	9am-12pm

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

SCANNING

Scanning your herd is such an important management tool, allowing you to identify and cull empties (especially if pasture cover is tight), to identify late cows (for culling or delayed dry off), to identify early calvers (for differential feed management or return from grazing). We utilize backpack scanners and, if you are signed up to Infonet, a tablet with mating dates on it. This improves accuracy and will then upload the results automatically for you. Early scanning (6 weeks after AI finishes) allows us to accurately date AI pregnancies, and to give you direct feedback on the success or weaknesses of AI/heat detection/cidr's. Late scanning (6 weeks after the bulls exit) allows us to identify late calvers and empty cows. Whether you want one or both scans, everyone else will be wanting this service at the same time! So please book in scanning with us ahead of time to guarantee the best possible service.

Disbudding Calves, topical local anaesthetic and effects on pain

VetEnt and Massey conducted a study in which they compared different treatments for disbudding 364 calves (2-6 weeks). Calf behaviour and pain sensitivity over the next 24 hours were monitored, and weight gain recorded.

All calves had a local cornual nerve block, as is now a legal requirement and which generally wears off in 2-3 hours. Half were sedated, half restrained in a crate.

Both these groups were then further divided into 3:

- Nothing further
- Meloxicam injection before disbudding
- Topical anaesthetic antiseptic gel spray applied to the horn bud wounds afterwards

The calves were then assessed for the frequency of ear flicks, head shakes, head scratches and pain sensitivity of the wound (how much pressure can be applied). Additionally calves were weighed before disbudding and 7 & 28 days afterwards.

Conclusions

- Sedation reduced pain (ear flicks and sensitivity to pressure).
- Additional treatment with either meloxicam or TriSolven further improved behavioural responses and pain sensitivity.
- Average daily weight gain at 7 days was 0.14kg/d better for calves that had sedation plus metacam, and 0.09kg/d better for sedated calves at 28 days.

M bovis

There has been a lot of talk about the need for improved tests if M bovis is to be eradicated. That's never a quick deliver. In the meantime the graphic below shows the current status nationally:

Mycoplasma bovis
Programme update

To date, there have been **211 Confirmed Properties**

there are **253** properties under a **Notice of Direction** and... **271** properties under **Active Surveillance**

What's changed over time?

- 126,751 Animals have been culled
- 1,291 Properties released from NOD movement restrictions
- 1,086,257 Tests completed

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