MOOZNEWS



Hamish Newton BVSc, PhD Oamaru Veterinary Centre

Zoetis Teatseal Milk Quality Awards 2021

Business	Manager/Share Milker/Owner	Average BMSCC
Le Emari Trust - Willowbridge	Leo Omamalin / Hugh & Darla Le Fleming	42,000
Rylock Farms	Lachlan & Roslyn McConnachie	65,000
Hoofing-It Dairies Ltd	Mark & Louise Jellyman	66,000
Willowcreek	Stu Smith / Paul & Sarah Smith	68,000
Lisburn - Teschmaker Shed	Glen Constable / Hayden & Lisa Watson	71,000
H H F Partnership	Jackson & Sarah Henshaw / Jackson & Paul Henshaw	78,000
Palmdale Farms Ltd	Jonothan & Joanna Dyson	81,000
Bonnie Doon Farms Ltd	Lorenzo & Myra Cavinta / Karl & Emma Guy	82,000
Eden Dairies Ltd	Chris & Rebecca Eden	82,000
Northdairy Ltd	Alex & Hayley McLeod / Ken & Brenda McLeod	83,000
Retell Holdings Ltd - DHL	Ben & Grace Smith	85,000
Pomona Dairy Farm	Mark & Vanessa Shefford / Geoff Hay	85,000
Braeburn Dairies	Logan & Charlotte Ferguson / Rogan & Michelle Borrie	88,000
Le Emari Trust - Morven	Casey & Bonnie Sparrow / Hugh & Darla Le Fleming	89,000
Seamist Dairies	Terry & Shay Wells / David Legg	89,000
Peebles Siding Dairy Ltd - DHL	Bernard & Merlyn Lauglaug	90,000
Smit Dairies	Steven & Tineke Smit	90,000
Minus One Trust	Andrew & Barbara Richardson	94,000
Meyer, Gerald	Gerald & Janet Meyer	96,000
Snaplulu Ltd	John & Sam Harper	96,000
Kowhai Dairy Limited Shed 2	Geoffrey & Alicia Sewell	97,000
Providence Farm	Joe & Becky Laming	99,000
Cantley Developments Limited – DHL	Andrew & Debbie Harrison	100,000
McIntyre - Ikawai	Dave & Vivian Gordon / Doug & Lynda McIntyre	100,000



Here is the list of the lowest bulk milk somatic cell counts (BMSCC) from our client base until the 14th of December. The BMSCC numbers are up a little on last year with a few less of you less than 100,000. Speaking with Fonterra though our district is doing very well. Zoetis have provided prize money to the top three place getters (\$750, \$500, and \$250).

JANUARU 2021

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OUR CLINICS

Oamaru Ph 03 434 5666 Waimate Ph 03 689 7213 Palmerston Ph 03 465 1291 Glenavy Ph 03 689 8118 Kurow Ph 03 436 0567 Omarama Ph 03 438 9868 Panfurly

Ranfurly Ph 03 444 1020



Ryan Luckman BVSc Waimate Veterinary Centre

Coccidiosis – another differential for 'wormy' calves

We've recently had four farms in quick procession presenting with depressed, scouring calves that look in "desperate need of a drench" (to paraphrase the farmers involved). Some of these had been drenched less than 10 days previously, and others were drenched at the time with limited response. We have two main differentials in these situations;

- 1. Larval Challenge parasite larvae on the grass can be ingested on a daily basis, causing a lot of the clinical signs that we attribute to 'worms'. We often see this on pasture that is used year on year to raise calves. However we mainly see this in Autumn when larval pasture contamination peaks, so it wouldn't be our top differential in Dec/Jan.
- 2. Coccidiosis coccidia multiply within the cells that line the calves' intestines. As part of the lifestyle they cause the cell to rupture, eventually releasing oocytes into the environment via the faeces. The rupture of these cells that make up the lining of the intestines means the calf can't absorb the nutrients or water effectively from the diet leading to the clinical signs of scouring and blood in the faeces.

In these four cases we were able to take faecal samples and perform an oocyte count (like a coccidia 'egg' count) in-clinic and confirm a diagnosis of coccidiosis. Typically in these outbreak cases the calves have been weaned from meal in the previous 2 to 4 weeks. The theory here is that the coccidiostats contained in the meal arrest/ stop the development of the coccidia within the intestinal cells so the coccidia sit dormant. When the meal is stopped the coccidia can start 'reproducing' again, a process which takes around 16-22 days. At the height of the reproduction the coccidia rupture out of the cell walls (as outlined above), and so we observe a mass outbreak of scouring and wormy looking calves two weeks post-weaning from meal.

What can you do?

Eventually the calf itself will mount a strong immune response to coccidia and suppress infections. However it appears that this doesn't occur during the dormant stage, so while the calves are on meal they are not developing this strong immune response. It is therefore a balancing act – we want a small amount of coccidiosis to develop the immunity, but if it goes too far before the body kicks in then the calves will go backwards. Much of this balance comes down to the environmental challenge the

COCCIDIA LIFECYCLE



calves face – a low challenge (or clean) environment will usually tip the balance in the immune systems favour. Meanwhile those farmers rearing calves in the same paddock year on year tend to face the greatest challenge, and therefore the greatest risk of tipping the balance in the favour of disease.

In the cases above, the infection has gone too far for the body to cope by itself. The best option is to step in and kill all stages of the coccidia life cycle with a drug called Toltrazuril (brand names are Toltrox or Baycox). This clean out (much like using an effective drench) gives the body time to get in front and mount an immune response to prevent any further infections. A Massey trial which enrolled calves with just moderate levels of coccidiosis (not the clinical levels outlined above) saw a 3.8kg weight advantage at the end of a 6 week period to the calves drenched with Toltrazuril, so there are huge losses associated with coccidiosis, and definite gains to be made. So if you are getting 'wormy' looking calves in spite of a robust

drenching programme, or think that this happened last year on your farm after weaning then talk to one of our vets. They can help you work out an appropriate testing regime and ideal timing to intervene with Toltrox or Turbo Initial if this is required. The pricing on these drugs has recently come down markedly so they are now a cost-effective tool that you can use in your calves.

One final point is that you can also see outbreaks after stressful events, and the major one of these coming up is movement to runoffs (which is often combined with weaning from meal), so keep an eye on your calves in the first couple of weeks post-shift!





Electronic Cow Collars

Simon Laming BVSc Oamaru Veterinary Centre

Providence Farm (1300 cows), and Fortitude Farm (950 cows) have now had collars on for 3 months, so we can start to review the role they play.

Installation and Anoestrus

The installation was completed in early October, which was a little late. The collars collect data from individual cows over 2-3 weeks to form a baseline for each individual cow, and it is only after this initiation period that the heat activity data becomes reliable. So rather than identify and treat anoestrus cows 10 days before the start of mating, our anoestrus cows were treated 10 days into mating. It was very noticeable how many cycling cows did not have obvious rub marks, but were not in anoestrus. The collars saved a lot of CIDR's!

Heat Detection

It only took a few days to establish that the accuracy of heat detection with the collars is excellent. Correlation with the signs of standing heat, and comments from the Al techs, rapidly reinforced confidence in the collars. The system of electronic collars detecting cows for AB, and drafting them out through the Protrac Gate, took real pressure off the staff. These farms don't use bulls, so heat detection is normally exhausted by Christmas!

It is significant that the experienced staff usually tied up with heat detection, now have time to assess production information and records thoroughly, and make really positive management/feed decisions.

This year mating will continue into early January, using short gestation dairy semen in all the late matings.

It was obvious that cows were historically submitted for AI too early in their standing oestrus, and with the collar information, the slightly later submission time for AI should give significant gains in conception rates for sexed semen. Hopefully after pregnancy testing, we will confirm some improved

Dated Heifer Pregnancy Testing

Each year, we are now dating more heifers for pregnancy. If you want, or need, accurate calving dates for heifers, they should be scanned before 90 days after Planned Start of Mating (PSOM). For most heifers with a 20th October PSOM, it is best if they are scanned before 20th January. conception rates.-watch this space!! AND NO MESSY TAIL PAINT!

Sick Cow Identification.

The collars are a very sensitive indicator of individual health. Some cows are identified as requiring vet treatment, which would never be picked by manual observation.

Example 1. Cow selected for vet check. Examination showed no abnormal signs, still eating and defecating. However at the herd test the next day she was producing very little milk. Over the next week, she disappeared off the alert screen and came into full milk.

Example 2. Cow selected for vet check. Like example 1, she showed no obvious clinical signs, but was light in her udder. She came back into full production, and then dropped dead 12 days later!

The collars are accurately identifying the cows to be treated, and we need to develop a better skill set to diagnose and treat them!

Lepto cred

Many of our clients are now part of The Veterinary centre 'Leptocred' programme.

Leptocred is a working plan between you and The Veterinary Centre to minimise the risk of anyone on your farm contracting Leptospirosis. It includes farm management practices as well as a planned vaccination programme. While the current Lepto vaccines are very effective in preventing the shedding of serovars Hardjo-bovis and Pomona in the urine of cows, recent NZ research has shown the nonvaccine serovar Tarassovi has emerged as a significant risk on many farm and needs to be managed. It is vital for the dairy industry that we continue to have a robust programme that strengthens Leptospirosis protection on farm, but at the same time allows some flexibility with vaccine use.

The annual reaccreditation consult is an essential part of this process. All existing Leptocred officers will need to sit down with one of our vets for their 2020 audit and accreditation for 2021. This needs to occur before the 28th Feb 2021.

With Leptocred you can have peace of mind that you are meeting your obligations under health and safety requirements.

Product of the month

Matrix Minidose & Alliance Oral Drench

- For calves over 100kg
- Triple combination power of three actives (white, clear and mectin families)
- Triple drench technology delays the onset of drench resistance
 Application
- 1 ml per 10kg, 12mls per 120kg
- Both products priced at \$0.68 plus gst per 120kg liveweight (12ml) dose
- 14 days meat withhold





Hamish Newton BVSc, PhD Oamaru Veterinary Centre P

The Veterinary Centre – Boehringer Ingelheim calf parasite monitoring project

I have just sent away the 100th set of calf poo samples for the project we are doing looking at worm egg counts post drenching. A massive thank you to all who have contributed samples. To date 80% of samples have come from calves drenched with Arrest C, of which only 10 have had eggs detected with an average number of eggs of only 29 eggs per gram. There were 70 sample sets from calves drenched with Arrest C that had no eggs found in them. This project will run till May so can I please ask you to continue to collect samples as we will start to use more Matrix, Eclipse and Genesis. If your calves are at graziers get them on board as well – this information will be as useful to them as it is to you. If you have not sent samples in, we would still love to get them, and if you already have we would love to follow your calves right through the season.

Thanks again for your support, Hamish and Finja.



Hamish Newton BVSc, PhD Oamaru Veterinary Centre

Over-milking

Hopefully everyone got some time off over the Christmas / New year period and had a good time. Once everything has got back to "normal", routine wise it is a good time to evaluate the risk of over milking. A generally agreed on figure for what over milking is, if the cups are on a cow for greater than 1 minute when milk flow has finished. If you have ACRs, take some time to see when the vacuum is cut off relative to when the milk flow slows to a "dribble" in the bowl. If you have a herring bone divide the time between the first cup going on and the last cup coming off the milkers by the number of rows. This will give a pretty good estimate of the time the cups are on a cow for. 95% of cows doing 15 litres at a milking will be milked out in 6 +/- 1 minute, so if your row times are getting up towards 8 minutes there is likely to be over milking occurring. Over milking increases the risk of mastitis by damaging the teats. If milking times are

not reducing after the peak, see if any of the following can be improved so the milkers spend less time in the shed and the cows spend less time on concrete and more time eating and lying in the sun.

- Can the front gate be opened earlier?
- What is slowing cow flow?

Uddernews

- Are people waiting for one or two slow milking cows in a row?
- Can the teamwork in the pit be improved?



The summer period is often a time when lame cow numbers increase, this can be a result of how cows have been managed in the season so far, wet weather, thin soles and stressors that have occurred during the calving period. The numbers can be made worse with people having time off.

If we get a bout of wet weather it is worth taking the time to improve drainage off the edge of tracks. Take a spade and open up the grass, a spades width wide at regular

Polioencephalomalacia

We are once again seeing several cases of P.E. (polio encephalomalacia), a nervous disease seen primarily in calves and younger stock. P.E. is caused by a lack of vitamin B1 (not to be confused with a cobalt deficiency, which is associated with a vitamin B12 deficiency). P.E is thought to be nutritionally induced, when there is a sudden change in diet from stalky, higher DM diet, to a lush, low fibre diet. A high dietary sulphur intake, especially with brassicas, has also been incriminated as a cause of P.E.

Calves with P.E. appear blind, may walk aimlessly, appear wobbly, have muscle tremors and head press. If calves are treated early in the disease process with a series of vitamin B1 injections, survival rates are good. In an outbreak situation we have had good success, by prophylactically treating the remaining, unaffected calves, in the group with an oral vitamin B1 drench. This has proved a very cost effective preventative measure.



The brain of a calf with PE, fluoresces under a UV light.

Yersinia in Calves

In December we start to see outbreaks of Yersinia in weaned calves. Yersinia bacteria are commonly found in the intestines of most calves. Stress associated with parasites, trace element deficiencies and BVD may result in an overgrowth of this bug in the intestines. Overgrowth results in severe scour. Large percentages of a mob are often affected severely checking growth rates. Mortality rates of 5-10% are not unusual. Isolation of affected animals and treatment with neomycin anti-biotic for 3-5 days is an effective treatment/ control.



intervals to allow water to drain off the track. The grey box shows a good spot to cut away the grass.

- If you have an underpass, keep it free of water and slurry. Make sure that sump pumps are working properly, sumps are cleaned out and pumps are turned on when it rains.
- If you have a section of lane that is chronically wet, especially just prior to the yard, consider scrapping the surface. Wet areas slow cow flow which means that more pressure has to be put on cows to get them on the yard and the moisture increases the foot problems. Scrapping lanes can damage the top surface of the lane, but these are often damaged when you get to this stage anyway, however it can allow them to dry out faster and improve cow flow. Look at a more permanent fix over the dry period.
- Have someone who can do lame cows every day or every other day. It becomes much harder to start treating doing them when there are heaps in the mob. They also get a lot worse.

Holiday Rosters

With people taking time off, there will be inevitably either less people milking or people milking who are not 100% familiar with your shed or systems. These are risk factors for cows getting over milked or worse still, Red cows getting milked into the vat. If there is any doubt that a Red cow has been milked into the vat we can test the milk for the penicillin and tetracycline families of antibiotics. We need a sample from the vat (well mixed and not the first bit that comes out of the tap) in a clean container. The test takes approx. 30 minutes to run but give the duty vet a ring first so he or she can get the incubator warm and make sure there is someone to meet you at the clinic.