



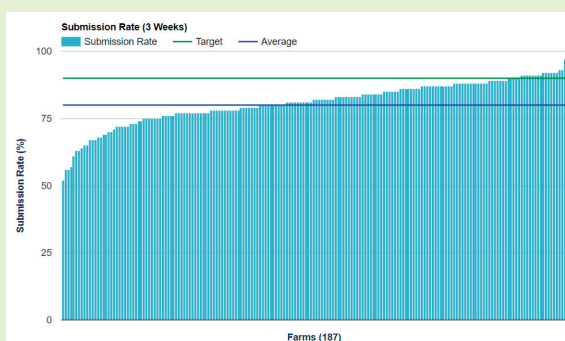
Veterinary Centre MoozNews

Mating Commentary 2022 – 3 Week Submission Rates

Mat O’Sullivan BVSc – VETERINARY CENTRE Oamaru



The two main drivers of six-week-in-calf rate (6WICR) are the conception rate and submission rate. To achieve the target 6WICR of 78% a herd needs to achieve a 60% conception rate and a 90% submission rate in both the 1st and 2nd round of mating.



average at 80% (with the median at 81%). Compared to last year this is a very slight decrease (82% average and 83% median). The important area to note though is how few farms are achieving the industry target 3-week SR (green line). Good heat detection, high natural cycling rates and a

The bar graph (at side) shows the 3-week submission rates from 184 herds in our practice. The blue line shows the practice

preparedness to act early on non-cycling cows remain key to reaching this target. Too many farmers are not prepared to act early when pre-mate cycling rates pre-empt a low 3-week SR.

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THE STAFF AT OAMARU AND WAIMATE VETERINARY CENTRES THANK YOU FOR YOUR SUPPORT DURING 2022 AND WISH YOU A HAPPY AND SAFE CHRISTMAS AND A PROSPEROUS NEW YEAR!



Farewell to Heather

Heather finished in early November after her second stint of five years. ... She was the cherry voice on the end of the phone for many of our clients and a great organiser of calls. ... Her IT and spreadsheet skills were well employed and we wish her well in her new role in a smaller business in Oamaru.

Outbreak of Calf Deaths in November

This month we have investigated two farms which had sudden deaths in calves over a period of just a few days (one had lost 3 calves and the other 5). Two additional farms from clients of our neighbouring vet practice had experienced 8 and 11 deaths all within the same week.

All calves had been weaned and were in good order. The weather conditions leading up to these deaths had been very settled for the week prior. Calves that had died were not noted to be overtly ill for more than 24hrs before they died.

Two calves were alive at vet visits. These had high temperatures (>40 degrees), high heart and respiratory rates (panting).

Freshly dead calves were post-mortemed on the four farms. The common features were pleuritis (inflammation of the chest cavity), pericarditis (inflammation of the sack surrounding the heart) and peritonitis (inflammation of the abdominal

cavity). The inflammation manifested as fibrin clots throughout these areas – this looks like sticky gelatinous snot). In some calves this extended into muscle tissues around the chest and abdomen.

Fluid samples taken from the abdominal cavities of the dead or dying calves grew a bacteria called *Pasturella multocida* on all four farms. This bacterium is typically associated with pneumonia, but the sub-type involved is causing very aggressive septicaemia. All affected mobs responded well to the treatment with oxytetracycline and no further deaths occurred.

Although *Pasturella multocida* is not a new bacterium to NZ this presentation is new. Similar cases occurred in the Canterbury area about 10 years ago and at the time MPI considered this could become a disease of increasing importance. Spread is most likely through aerosols. We would be keen to hear from any other farms that are losing or have lost calves recently.



Herds Coming Off Peak Lactation

Mat O'Sullivan BVSc – VETERINARY CENTRE Oamaru

Most herds in this district hit peak lactation figures in early October. Ideally the lactation peak is flat lined for as long as possible. A >7% drop in production/month is considered excessive and likely to indicate issues with a net reduction in ME intakes of cows.

A significant drop in production in the range of the pre-mate and mating period will often occur in tandem with a drop in cow condition. This is not an ideal situation for optimising embryo quality and pregnancy maintenance. So, what are the most common reasons for herds coming off peak lactation?

Dry matter percentage

- The excessive intracellular water (internal) as opposed to rain on the surface of grass (external) has been shown to restrict voluntary intake. Studies have shown a reduction of dry matter intake of 0.2-0.3kg DM for each percentage drop in dry matter below 15-18%. After a period of wet weather and good growing conditions this might see voluntary intakes drop from 18kgDM/day to 15kgDM/day if the dry matter percentage dropped from e.g. 18% to 12%.
- Mowing in front of cows several hours before grazing to get wilt should increase intakes if dry matter % is low but of good quality.

Quality of pasture

- Grazing pastures more mature than the 3-4 leaf stage will show a marked drop in ME. Grazing to low residuals where previously rounds have been lax means a higher percentage of mature/dead DM must be eaten – voluntary intakes will also reduce.
- If pasture cover is greater than 3,400kgDM you are best to top behind cows rather than in front.

Quantity offered

- Low pre-entry covers, restricted areas and simultaneous removal of concentrate supplements.
- Continue to calculate pre-graze covers and adjust break size or supplement as appropriate.

NDF percentage

- Cows cannot eat more than 1.3-1.5%

of their body weight in NDF (this would be 7.5kg for a 500kg cow). If targeting cows to eat $\geq 18\text{kgDM}$, the maximum NDF content would be about 40% of the diet.

- Ensure that covers do not exceed 3,400kgDM/ha at this time of year, and don't force them to eat low quality residual.

Weed takeover

- Californian thistles and dock can become a significant problem on some farms at this time of the year. They effectively reduce the grazing area.

Heat stress and water restriction

- Temperature Humidity Index, air movement and solar radiation in combination will have a combined affect on the cow being able to maintain a normal body temperature. This in turn will affect grazing behaviour and grass harvest. Having shade and available drinking water (exit races) is pertinent to regulating body temp. Bringing cows together in close proximity in the yards/shed over the hottest hours in summer increases this risk.

- Watch for cows panting. Aim to provide the biggest feed allocation in the coolest part of the day in hot weather and adjust milking times.

Concentrate removal

- Often in-shed concentrates are removed as budget for purchases is reached or there is an anticipated excess in grass. The removal may coincide with any of the above to reduce total ME intake at what may be a crucial time.

Lameness

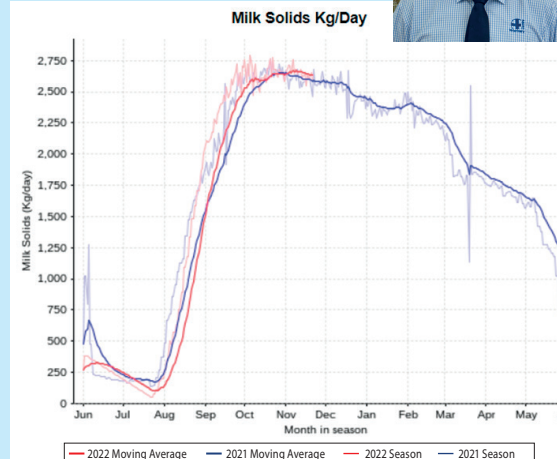
- If a significant percentage of the herd does become lame (and this could be slight), there is an associated increase in lying time as cows try to rest their feet.
- Monitor walking times of cows. If this is slow due to lameness adjust management.

Milking interval

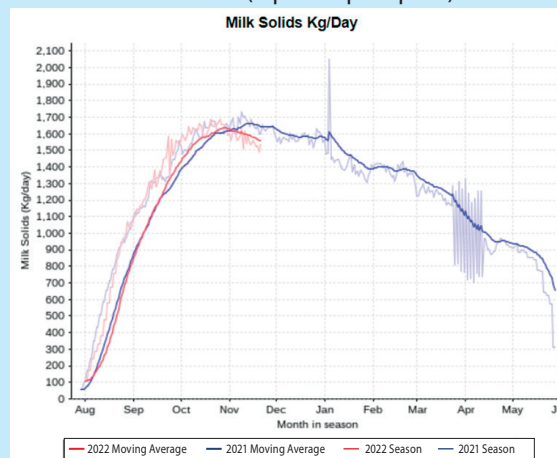
- It is generally considered that dropping from TAD to 16hrs while cows are producing more than 1.6kgMS/day will result in a milk drop.



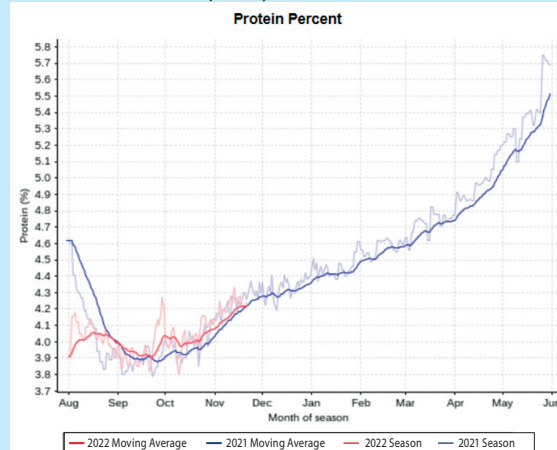
Herd A - Milk Solids (ideal)



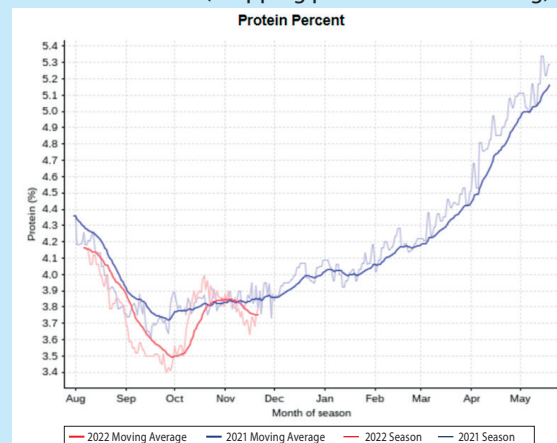
Herd B - Milk Solids (rapid drop off peak)



Herd A - Protein (ideal)



Herd B - Protein (dropping protein start of mating)





Johne's News



Andrew Muir BVSc BSc (Hons)
VETERINARY CENTRE Oamaru

We are starting to see Johne's results come through from herd test samples. It is interesting to reflect on the suspect results.

- Data collected from LIC in the 2021- 22 season looked at the results of 1719 suspect milk tests that were then blood tested. The following table shows the results of the blood tests.

Milk Result	High Positive	Positive	Suspect	Negative	% Blood Negative
Suspect	500	695	36	488	28

- Only 28% of the samples came back negative. The other way to think of it is that about ¾ of suspect cows will come back positive on blood test. As an example I blood tested 5 suspect cows on a farm the other day and 4 of them came back high positive or positive.
- In order to get the full benefit of a test and cull programme on farm you have to be testing the suspect cows and ensuring the positive/ high positive cows are culled from the herd to reduce the amount of bacterial shedding on farm.

zoetis

This season we will be seeking the lowest average Bulk Milk Somatic Cell Count, up to Monday 5th of December 2022. (For farmers signed onto Infovets, and supplying Fonterra and Oceania, there is automatic access to this information.) Winners of these awards for the lowest average BMSCC will be announced in the January Mooznews



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MERRY Christmas

Thank you for your custom and for choosing us as your veterinary provider. From our Veterinarians, our clinic managers, our Territory Managers on the road and all of the Veterinary Centre team, it is our pleasure to be working with you and we wish you and your families a very safe and happy Christmas.



Oamaru Team



Glenavy



Omarama Winter Wonderland



Waimate Team



Kurow Team



Palmerston Team



Ranfurly Team



UdderNews

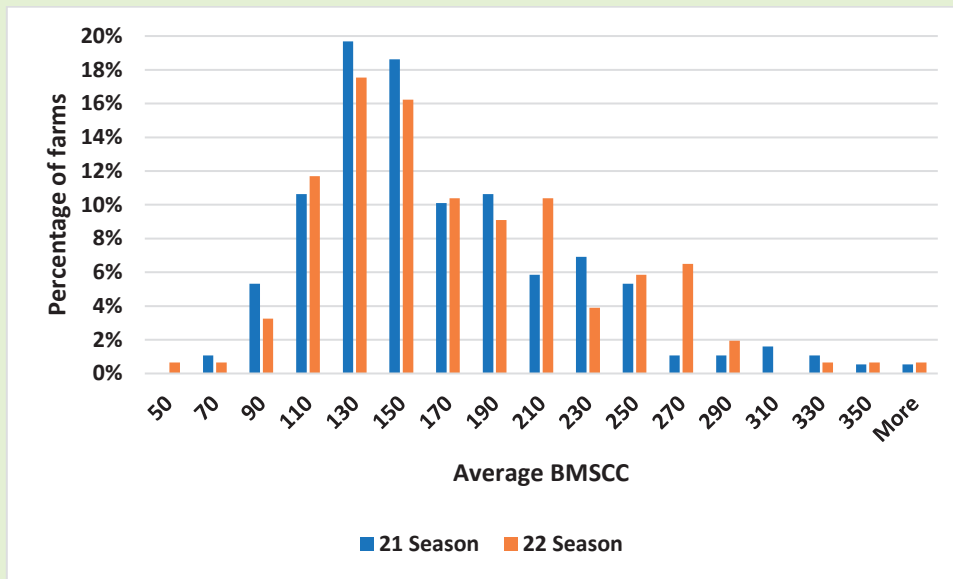
Hamish Newton BVSc PhD
VETERINARY CENTRE Oamaru



Below is a comparison between last season's (21 Season) and the current season's (22 Season) early season average Bulk Milk somatic cell counts for our clients' farms. At this time last year 50% of farms were averaging below 150,000 cells per ml compared with 46% of farms this season.

What is concerning is the increase in the proportion of farms with average BMSCC's between 200,00 and 300,000 cells per ml. These herds will be milking infected cows into the vat. Finding the infected cows is the first step. You could strip the herd looking for clots but many of the infections will

be subclinical (not showing signs we can see) so use your latest herd test results to identify the highest SCC cows. Once you have identified infected cows the next step is to decide what to do with them. Treat the ones with clots. The high SCC cows with out clots are a bit more difficult to treat



and the return you get from treating them does vary. The "best bets" for successful treatment are younger cows, cows that have only just gone high on the most recent herd test, and those that are only RMT positive in one quarter. With calves being weaned off milk there will be, on some farms, milk being returned to the vat from known High SCC cows that were

previously being milked directly into the calf trailers so watch out for those cows (they may not have had a herd test). If your BMSCC is over 200 now, then as soon as possible (may be when he bulls go out) consider the feasibility of running all the high SCC cows, and the cows that have been treated for mastitis this season, in a separate herd. This has the effect of

quarantining or isolating them from your unaffected cows and will limit the spread of infection. You will in effect then have a low BMSCC herd with the production benefits that comes from low BMSCC, and a separate high SCC herd that is not infecting your other herd and pressuring production down in the low BMSCC herd.

Pink Eye Update

Whilst Pinkeye can be tricky to see, it can certainly become an eyesore if left to brew away! Pink eye is caused by bacteria (*Moraxella bovis*). It becomes a pesky problem heading into the summer months as wind, heat, dust, flies and long grass can weaken the natural defences of the eye and cause an infection.

Pink eye is incredibly contagious and can rapidly move through a mob, so it pays to get on top of it quickly. Signs of pink eye begin with weepy, clear discharge and squinting which then can progress to discoloured/white eyes which can develop deep ulcers. If left untreated, it is very painful and

uncomfortable. It can lead to nasty ulcers, blindness and reduced growth rates, as well as it being a significant welfare issue. Lesions quickly worsen for an animal and eye damage can be irreversible (partial or complete blindness).

Treatment of pink eye is either with Orbenin eye ointment OR injectable tetracyclines (Engemycin or Bivatop). If you are having particularly bad problems this year, or it is becoming an annual problem, then come talk to us to see what management factors may be of help. A single dose of Piliguard vaccine given 3-6 weeks before the risk period will significantly reduce the risk of an outbreak.



Follicular Heats

Oestrus Behaviour during Pregnancy

Ryan Luckman BVSc (Dist) MANZCVS (Epidemiology) – VETERINARY CENTRE Waimate

Showing a heat while pregnant is defined in the scientific literature as “Oestrus Behaviour during Pregnancy”. It is thought to be associated with fluctuating oestradiol levels in the cow, likely produced by follicles growing as part of a follicular wave, or the placenta. Oestradiol is the hormone that acts on the body to produce the behavioural heat signs, such as mounting, sniffing, forming SAG’s etc. The release of oestradiol can therefore lead to pregnant cows displaying oestrus/heat behaviour and being put up for re-insemination.

A recent Dutch study showed that between 3-10% of cows could be displaying this phenomenon, and is something we’ve been able to monitor on our collar farms. These follicular wave heats generally present as “silent” heats, with a low heat index score. The heat index gives an idea on the strength or reliability of the heat, and we would generally expect to only see them low on the first heat of the season.

Does it matter if we inseminate these pregnant cows?

There is some work out of Cornell University which looked at embryonic losses following insemination of cows that were already pregnant. Their work showed that there could be up to a 17% increase in embryonic mortality in these cases.

On our collar farms we are able to make some objective decisions on whether to mate a cow based on their heat strength and activity graphs. In this example you can see a true heat to the left (with the diamond shape), followed by the beginnings of a return heat. The peaks are very low, the absolute fall in rumination rate is small, and the Heat Index is only 44 (out of 100). I wouldn’t mate this cow.

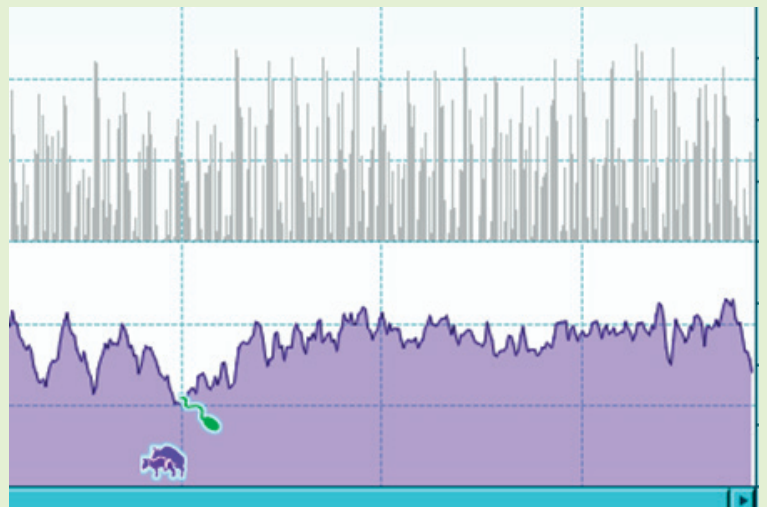
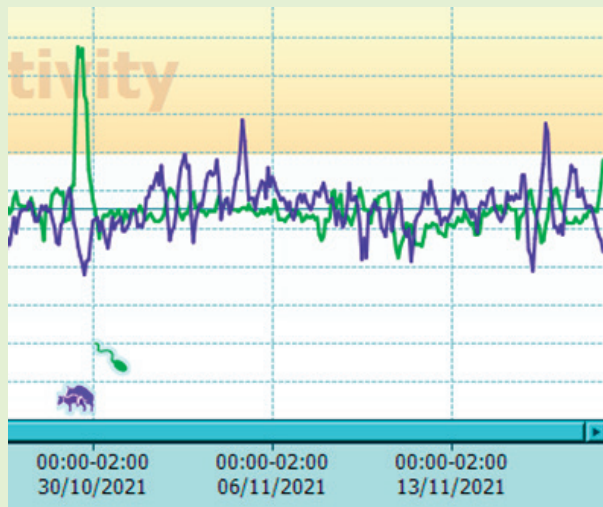
What can you do without collars?

Essentially following best practice around heat aids and touching up will be your best insurance. The more accurate and confident you can be that a heat is real the less false inseminations you are likely to do. The key focus areas we’ve seen from our HeatCHECK study would be:

- Don’t have tailpaint too thick – it cracks off and gives false heats
- DO reapply heat aids (scratches and kmars) as well as tail paint
- Touch up regularly, ensuring old paint is scraped off

If you want to calibrate or check if this is happening on returns at your farm then get in touch to book in a HeatCHECK visit. These returning cows will have a CL (corpus luteum) present so we can help distinguish them from your regular heats and give you some instant feedback on your second round picking.

Don’t mate – Heat Index = 44



LeptoCred
Veterinary Centre
Lepto Assurance Programme



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 2022 audit and accreditation for 2023. This needs to occur before February 28th 2023.

Turbo Initial

Turbo® Initial is an oral drench specifically designed for weaned calves. It provides broad worm parasite coverage as well as helping to protect against coccidiosis. This bridges the ‘susceptibility’ gap after calves come off coccidiostat-treated meal and before they develop natural coccidiosis immunity.



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Reproduction Matters

Mat O'Sullivan BVSc – VETERINARY CENTRE Oamaru



Booking in a Pregnancy Testing Date

Everyone is now fully aware of the tremendous benefits of doing early aged pregnancy testing - these include;

- Providing information for strategic dry off dates
- Aiding in early culling decisions for destocking in the Autumn
- Formation of wintering groups for tailored feeding
- Feed budgeting for the winter period and early lactation
- Efficiency in time and transport logistics of cows from run-off back to milking platform
- Detailed reproductive analysis to help guide where continued future improvements may be made

- Bench marking against the rest of the district.
- Improving the saleability of a herd
- Identification of cows which have received multiple inseminations but conceived to the first mating.
- Ranking cows for culling
- Accurately identifying cows which conceived in the early bull mating period
- Provision of detailed supportive material for possible induction dispensation requests

To provide this information accurately cows should be pregnancy tested 12-15 weeks after the PSM date. For a herd which started mating on the 23rd of October this would be between the 16th of January and

the 10th of February. The accuracy when dating pregnancies beyond 15 weeks starts to diminish. Herds should have had bulls removed for at least 40 days before an empty diagnosis can be confidently made.

For herds which are limiting their mating period to strictly 10 weeks it would be possible to do a singular test at 15-15.5 weeks after the PSM. The reality however is that it would not be possible to get all herds tested in the district within this very tight time frame. We ask therefore that farms stick with the existing program of testing between 12-15 weeks after the PSM. Cows identified as rechecks can then be simply drafted out for retesting 40 plus days after bull removal.

December Preg Testing/Phantom Cows

Every year we get an increasing number of farms that wish to scan non-returning cows in the month of December.

The main reason for doing this is two-fold.

- To identify cows which have not-re-turned to service but are found not to be pregnant - known as phantom cows. Once identified these cows can then be treated

with a CIDR device. High risk herds are those with high CIDR usage, low BCS or high rates of endometritis.

- For herds doing extended AI (no bulls) - identifying all cows which are already pregnant by mid-December can reduce the workload on heat detection as these can then be all run in one herd.

In both situations eligible cows for testing must be greater than 35 days since the last insemination. It is imperative that tailpoint be maintained, to ensure confidence that cows have not returned within the >35 day period.

Timely Reminders



- **Regular drenching programme** - including choice of combination drench and drenching interval.
- **Vaccinations** - Covexin 10 booster/Muultine 5 in 1.
- **Use of selenium and copper** supplementation.
- **REGULAR WEIGHING!!!**
- **Polioencephalomalacia (PEM, B1 deficiency)** – also commonly seen over the summer months. Calves may appear blind and staggy before becoming recumbent. Rapid and early treatment with Vitamin B1 can see calves respond well and make a full recovery.
- **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 antibiotic for 3-5 days is an effective treatment/control.

Product of the Month

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