

Veterinary Centre MoozNews

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.

The traditional Festive Ham Promo

Enjoy a delicious
Ham-on-the-Bone!



Yours this season when you purchase any of the selected drenches from the Veterinary Centre by the Big Blue Cross

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-returned 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 tailpaint be maintained, to ensure confidence that cows have not returned within the >35 day period.

In this Issue

- **Reproduction Matters**
 - Booking in a Pregnancy Testing Date
 - December Preg Testing/ Phantom Cows
- Festive Ham Promo
- Herds Coming Off Peak Lactation
- Mating Commentary 2021
 - 3 Week Submission Rates
- Interesting Case of the Month
 - Rare presentation of an acute severe aspiration pneumonia
- Uddernews
- Pink Eye
- 2021 Milk Quality Awards
- Johne's News
- Merry Christmas from all the admin staff at the Veterinary Centre by the Big Blue Cross
- Lameness
- Tips to putting on Cowslips
- Follicular Heats
- Timely Reminders
- Product of the Month:
 - Turbo Initial
 - Matrix Mini Dose Hi Min
- Interpreting Herd Test Results
- LeptoCred



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 ≥ 18 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

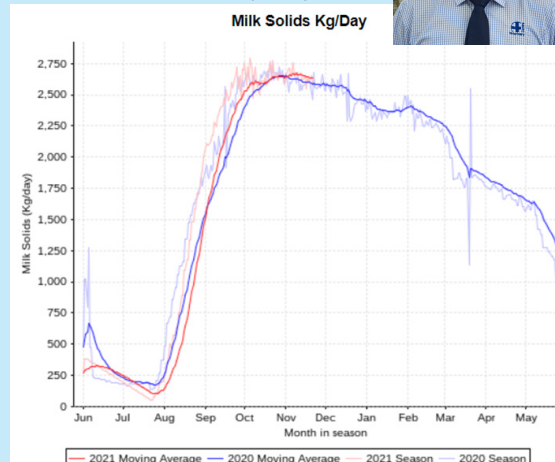
- If a significant percentage of the herd does become lame (and this could be slight), there is an associated increase in lying time as cows try to rest their feet.
- Monitor walking times of cows. If this is slow due to lameness adjust management.

Milking interval

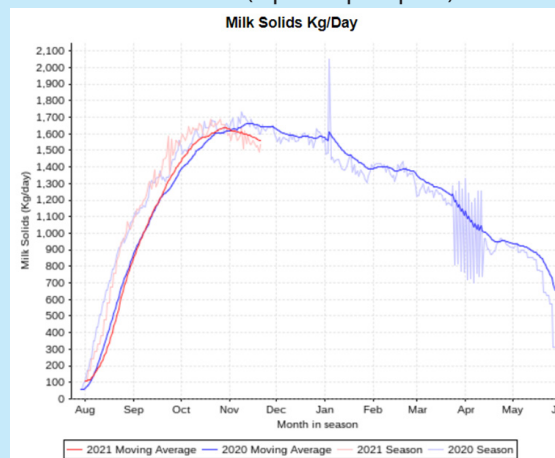
- It is generally considered that dropping from TAD to 16hrs while cows are producing more than 1.6kgMS/day will result in a milk drop.



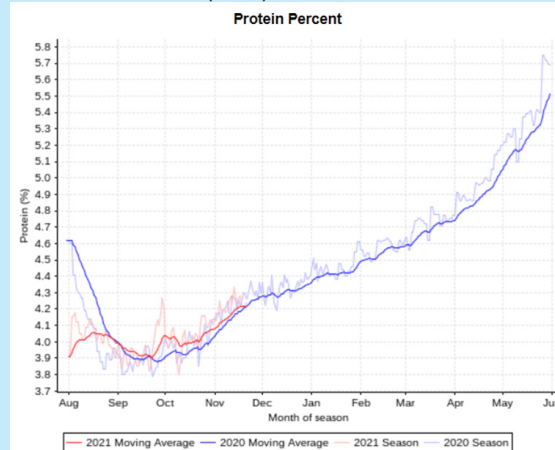
Herd A - Milk Solids (ideal)



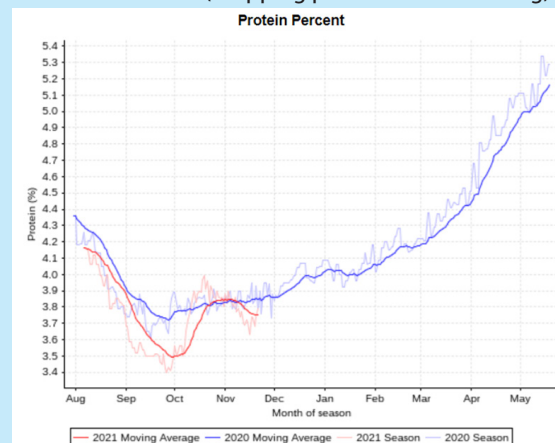
Herd B - Milk Solids (rapid drop off peak)



Herd A - Protein (ideal)



Herd B - Protein (dropping protein start of mating)



Mating Commentary 2021 – 3 Week Submission Rates

Mat O'Sullivan BVSc – VETERINARY CENTRE Oamaru



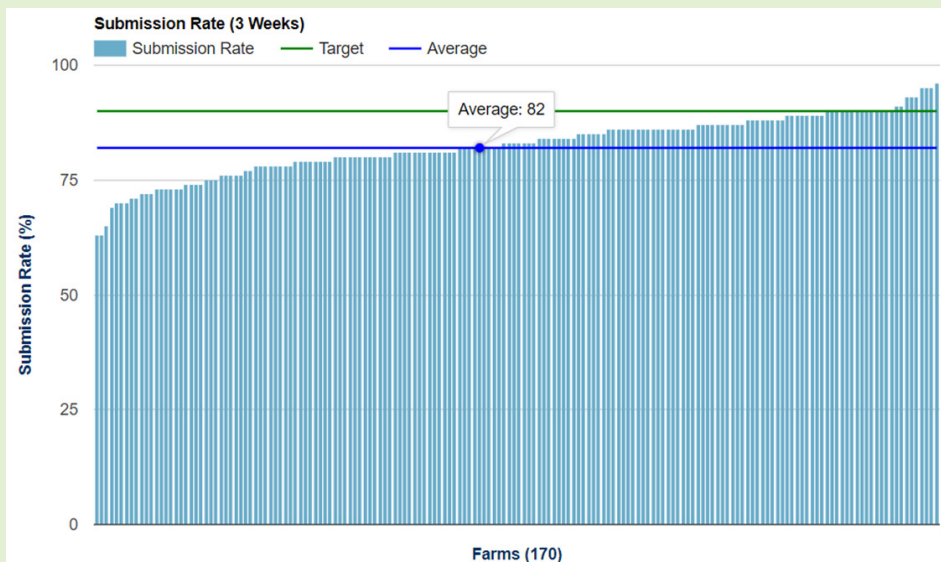
The two main drivers of six-week-in-calf rate (6WICR) are the conception rate and submission rate. To achieve the target 6WICR of 78% a herd needs to achieve a 60% conception rate and a 90% submission rate in both the 1st and 2nd round of mating.

The bar graph (at side) shows the 3-week submission rates from 170 herds in our practice. The blue line shows the practice average at 82% (with the median at 83%). Compared to last year this is a very slight improvement (81% 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 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.

Although weather conditions would have to be described as ideal in the pre-mate and first cycle of mating it would have to be

concluded that this is not the main driver of cycling rates as the improvement from last year to this year was minimal. A few of the lowest performers below were recent adopters of cow collars (post-calving) and these had been bench marked as being the

slowest to resume cycling post-calving (from as early as September). This does indicate that calving condition and post-calving nutritional/energy management remain a key driver.



Interesting Case of the Month Rare presentation of an acute severe aspiration pneumonia

Ella Swann BVSc – VETERINARY CENTRE Oamaru



Rare presentation of an acute severe aspiration pneumonia

Earlier this month the after-hours team received a rather unusual call to examine a bloated cow struggling to breathe. Although this initially did not sound too out of the ordinary, across the district we had been seeing a few cases of bloat with the lush spring grass. However this case was different with the farmer was reporting the cow to have a face like a bull and be looking like a hippo.

Upon arrival it was quickly apparent this was no regular bloated cow. This cow had a large amount of air trapped under her skin extending across her whole body, including under her eyelids, over the hocks and udder. She had quite literally been turned into a walking drum, where tapping her skin would make a sound.

With there not being any possible treatment course to remedy this cows situation she was euthanized. A post mortem examination performed to allow for diagnosis and an explanation of how such a situation had occurred. The entire subcutaneous tissue (under the skin) has been filled with air

creating a bubble wrap like appearance. A large majority of the lung tissue had been destroyed creating large air pockets between normal lung tissues. With the help of histology testing through the laboratory it was determined that the process had been started by aspiration of feed material causing a degree of airway blockage. This would have then allows the secondary complication of air leaking into/around the lungs. With each breath in, air would have traveled down into the lungs, then the air would have been escaping out of the lungs in to the chest. Then every breath out would have acted like a foot pump pushing air out the neck and under the skin, essentially blowing up the cow like a balloon from the inside.

It is not unheard of for this process to occur, in which damage to lungs allows air to escape under the skin. However this particular case was rather severe example of this due to the degree of damage resulting in such a severe presentation. Typically aspiration pneumonia presents as a sick cow, off milk/losing condition, she may have a fever and abnormal lung sounds and on post mortem examination often abscess formation within the lungs. This particular case did not have

any abscess within the lungs, this is likely due to the rapid time line not having time for abscess to have formed.

The proper diagnosis would be an acute severe aspiration pneumonia with obstruction of bronchioles/broncholi leading to severe interlobular and pulmonary emphysema and secondary severe generalized subcutaneous emphysema. All in all, a very unlucky cow and a very interesting case. If you or someone on your farm finds an interesting case you would like to discuss, or investigate further, please do not hesitate to get in contact with one of our experienced team.





UdderNews

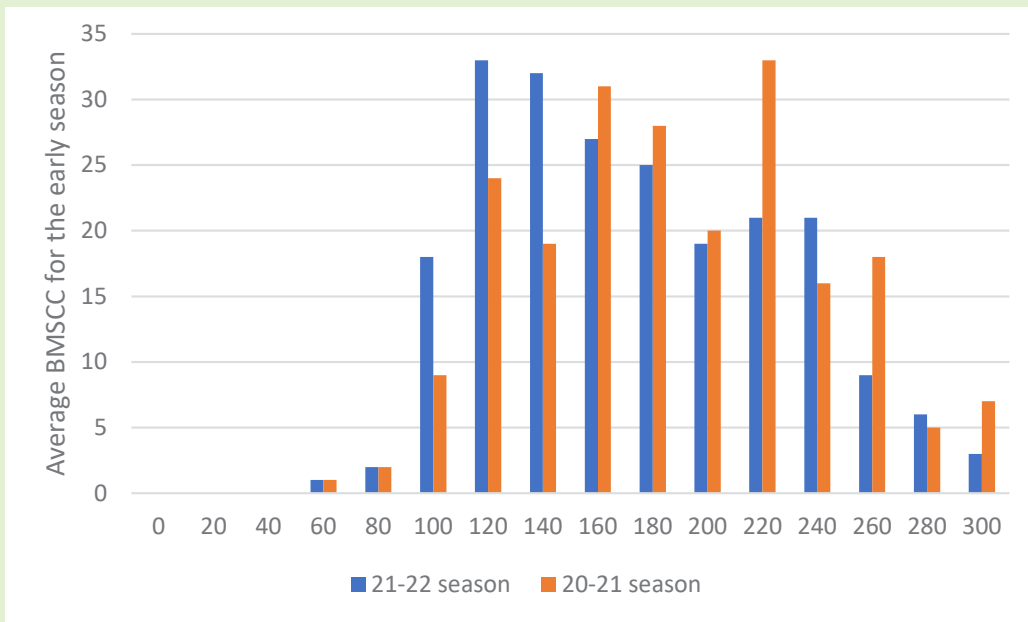
Hamish Newton BVSc PhD
VETERINARY CENTRE Oamaru



November has been a crazy month grass growth wise. Early in the month most people seemed short then two weeks later there were queues for the silage contractors. Milk production for the season to date is still back nationally and in ward 22 (South Canterbury/North Otago) Fonterra

suppliers are back almost 6% for the season but only 2.5% for the month to date. Bulk milk somatic cell counts would suggest that the majority of our Fonterra suppliers are going to be qualifying for Te Puku (the additional 3 cents over the 7c if you have achieved Te Putake) with plenty of pickups

less than 150,000 (you need 30 of these). Below is a graph of the early season BMSCCs from our Infovet clients - we can see a shift towards lower BMSCCs this season compared to last season - well done.



We are seeing a slight increase in the number of mastitis cases recently. While not unexpected during and towards the end of the AI period, it is not inevitable. Take 5 minutes to check that teat spray is being made up correctly and is getting onto the teats. Now that the number of cows being drafted is reducing get your milkers to be more proactive about finding mastitis and

if in a herringbone shed see what changes to the milking routine can be made to avoid over milking. Have you had a look at the milking efficiency section in Fonterra's "Farm Insights report" for your farm? Finally enjoy Christmas, but make sure everyone who puts cups on your cows knows what a treated cow looks like if she ends up in the milkers, and what your system is for

marking, recording, separating and finally treating a cow is. It would be great to run no tests for inhibitory substances but if you have any doubts about a treated cow being milked into the vat please give one of our clinics a ring and we can run a test to tell you if a penicillin type antibiotic, or a tetracycline antibiotic, has got into your vat.

Pink Eye

Finja Schmidt BVSc - VETERINARY CENTRE Waimate

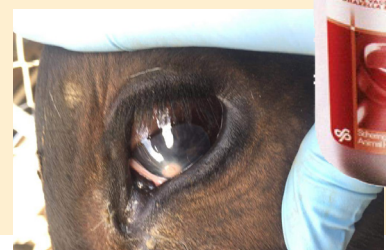
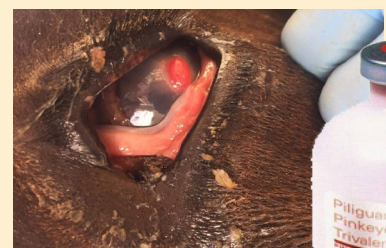


Whilst Pink eye can be tricky to see, it can certainly become an eyesore if left to brew away! Pink eye is caused by bacteria (*Moraxella bovis*). It becomes a pesky problem heading into the summer months as wind, heat, dust, flies and long grass can weaken the natural defences of the eye and cause an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



zoetis

2021 Milk Quality Awards

This season we will be seeking the lowest average Bulk Milk Somatic Cell Count, up to Monday 6th of December 2021. (For farmers signed onto Infovet, 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



Johne's News



Andrew Muir BVSc BSc (Hons)
VETERINARY CENTRE Oamaru

Herd testing after Christmas is a good time to test your herd for Johne's. If this was discussed at your RVM and expenditure review it will be booked in already. If you were still considering the merits of testing and have decided to run with it then let the clinic know. If you need to discuss Johne's testing in more detail then contact your prime vet.



Merry Christmas from the Veterinary Centre administration staff ...



Oamaru

Courtney, Heather, Janene, Shea, Catherine, Kirsty, Ash Andrea, Julie and Brooklyn



Waimate

Sarah, Sam, Johanna, Myles and Chloe



Palmerston

Carla and Nicky



Ranfurly

Lee-Ann, Ella, Jo and Vanessa



Kurow

Chrissy



Omarama

Gwyn & Emma



Glenavy

Helen

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.

Lameness

Andrew Muir BVSc BSc (Hons) – VETERINARY CENTRE Oamaru

This is the time of the year when the amount of lameness in cows starts to increase especially if it gets wet.

If you need any training around lameness, prevention or treatment, please contact Euan, Luke or Andrew to sort it for you.

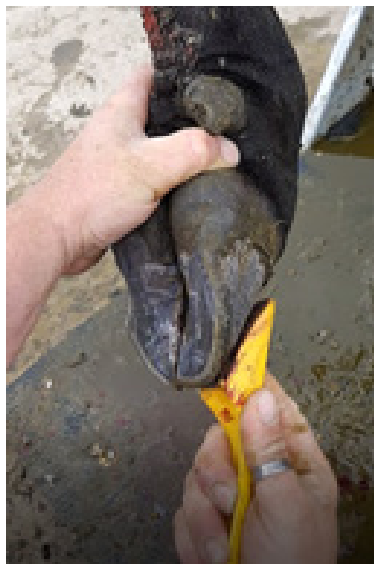
Putting Cowslips, walkease jandals or wooden blocks on cows is critical to getting them to recover quickly from lameness. Sometimes people are put off using these as they can't get them to stay on.



Tips to putting on Cowslips

Step 1

Clean the foot well. Remove any mud or muck from the sole and wall. Use the curved end of a knife, hoof rasp or grinder (carefully). I find that using a grinder on the sole really helps to get blocks and Walkease jandals to stay on.



Step 2

You can spray the foot with meths to help dry it off. Let this evaporate fully prior to putting the shoe on.



Step 3

Mix the glue in the cow slip. Make sure you wear gloves, the glue gets very hot when it sets and can burn your skin.

- Take your time to mix the glue well don't be tempted to put on the shoe on the foot until the glue is nice and thick otherwise it will run out of the shoe onto the ground. It is similar to making a pavlova, you want to keep beating it until you have peaks but don't go too far otherwise the glue will go off before you put it on the foot.
- Mixing takes longer on a cold day. You can speed this up by putting the black Cowslip in a bucket of very hot water while you are cleaning the foot in step 1. Pull it out, quickly dry it and then put the glue in.
- Spread the glue out over all surfaces on the inside of the Cowslip.



Step 4

Push the shoe firmly onto the foot.

Have your hand around the front of the foot to catch any glue that comes out the top/front of the shoe. (Left hand in this photo)



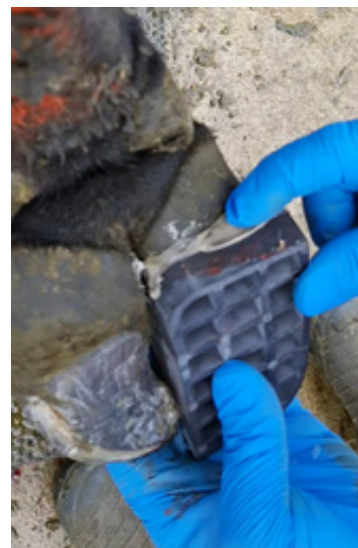
Step 5

Use your wooden stick to smooth the glue edges and reapply the glue caught in your hand around the back of the shoe. Check between the claws to make sure there is no glue that will damage the skin of the other claw.



Step 6

Don't let the foot down until the glue is hard. It is hard when you can't push your fingernail into the glue at the back of the foot.



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.

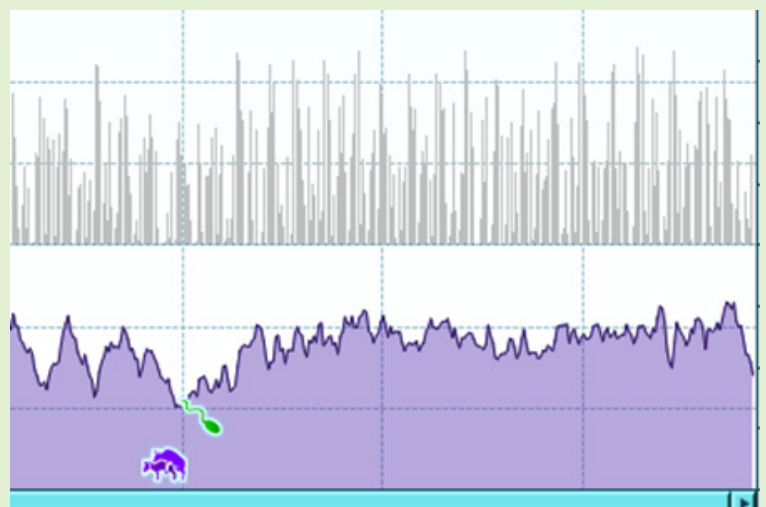
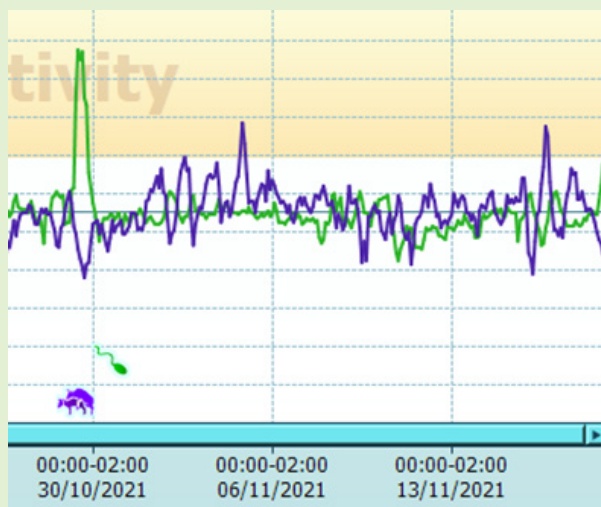
What can you do without collars?

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



Timely Reminders



- **Regular drenching programme** - including choice of combination drench and drenching interval.
- **Vaccinations** - Covexin 10 booster/ Multiline 5 in 1.
- **Use of selenium and copper** supplementation.

• REGULAR WEIGHING!!!

- **Pink eye** – pink eye season is coming up. A single dose of Piliguard 3-6 weeks before the risk period will reduce the risk of an outbreak
- **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 anti-biotic for 3-5 days is an effective treatment/control.

Product of the Month



ACVM A010132

10 Litre
\$659.00
Incl GST

Matrix

MINI DOSE HI-MIN

Recommendations

- Triple Drench Technology delays the onset of drench resistance
- Triple action drenches are best practice for calves over 100kg

Also Contains

- Cobalt (4.4mg/ml)
- Selenium (1mg/ml)

Pricing \$0.57 per 100kg (Excl GST)

Interpreting Herd Test Results

Many herd tests have been completed and hopefully you have studied these and identified your high SCC cows, but before you decide to treat these cows, look for what might be the underlying factors that resulted in these cows getting infected. There have been many studies looking at treating subclinically infected cows and how to get the best economic return from treatment. What is apparent is, if the rate of transmission of infection is high, the economic return from treating cows diminishes. For this reason look for reasons that infection could be going from cow to cow and address these. These reasons are almost always associated with milking.

- Vacuum and pulsation
- State of the rubberware
- Cluster alignment
- Cluster attachment
- Cluster removal
- Over and under milking
- Teatspray application

Herd Test Result Snapshot

| | 21/11/21 |
|----|----------|
| 11 | 12594 |
| 38 | 12305 |
| 33 | 12079 |
| 10 | 9729 |
| 57 | 7890 |
| 38 | 5959 |
| 35 | 5256 |
| 12 | 5032 |
| 24 | 4599 |
| 32 | 4387 |
| 32 | 4286 |
| 52 | 3905 |
| 79 | 3736 |
| 52 | 3357 |
| | 3101 |
| | 3086 |
| 14 | 3065 |
| 53 | 3004 |
| 74 | 2791 |
| 01 | 2612 |
| 51 | 2587 |

Product of the Month



ACVM A011703

2.5 Litre
\$789.00
Incl GST

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.

Pricing \$2.74 per 100kg (Excl GST)



Compass
Explore the potential

LeptoCred

Veterinary Centre
Lepto Assurance Programme



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 non-vaccine 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 2021 audit and accreditation for 2022. This needs to occur before February 28th 2022.

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