



Reproduction Matters

Mat O'Sullivan BVSc Oamaru Veterinary Centre

Second Round of Mating

The second 21 days of your AI period is just as important as your first. Staff motivation can however drop meaning heat detection rates can reduce.

- Heat detection aids (K-mars, ScratchE's) will improve heat detection sensitivity if scrutiny of tail paint drops.
- If using tail paint use a different colour to paint cows inseminated in the 2nd round of AI.
- Refer to your AI chart if in doubt about whether a cow is a return. If she was last inseminated 18 -24 days

ago there is a good chance she is a genuine return.

- As mating continues the number of cows in sexually active groups (SAG's) reduces. Ensure cows which are Al'd are returned immediately to the herd to form new SAG's to encourage tail paint loss in new cows coming on heat.
- Use paddock checks to increase sensitivity. These should be done 2 hours after the morning and evening shift

Are those Non-returning Cows Pregnant?

On average 10-15% of non-returning cows are later found not to be pregnant. These are referred to as phantoms. If you have a herd history of large condition loss post-calving, metritis, high non-cycler rate, high NEFA at calving, low BCS at mating, metritis and BVD you have a higher than average risk. Consider identifying cows from the first 2 weeks of AI and scanning these in early December. Early identification and treatment of these cows will reduce the empty rate. Please contact your Prime vet for further details.

The Cost of a Missed Heat



For the average producing farm in our area which AI's for six weeks and mates for a total of 10 weeks the cumulative cost of missing one heat in the first round is as follows:

- 17 days lost milk x (1.4kgMS/day x \$6.50kgMS) = \$155
- \$1,000 net cost of empty cow x 12.5% higher chance of being empty = \$125
- I 30% reduction in chance of producing a heifer replacement = \$26
- Less the cost of extra feed above maintenance (17 days x 30c/kgDM x 6kgDM = \$30

Total opportunity cost = ~\$291/missed heat in the first round.

A missed heat in the second round costs increases to approximately \$463 due to higher empty rates (25%) and no heifer replacements!!

Product of the month



Matrix Mini dose Hi Mineral – Triple combination oral drench for calves

- Triple action drench technology (white/clear/mectin active ingredients)
- Delays the onset of drench resistance best practice for calves over 100kg
- Contains an oral dose selenium and cobalt
- Dose rate 1ml per 10kg 10ml dose per 100kg calf
- 1000 x 100kg doses per 10 litre pack
- From 58 cents per 100kg liveweight dose

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

Ranfurly Ph 03 444 1020 Andrew Muir BVSc BSc (Hons) Oamaru Veterinary Centre

Bulk milk BVD results are coming through at the moment with some interesting results. The following farm has been negative for many years but has had a steady increase in the herd antibody level. This has indicated that there has been exposure of the stock, mostly probably young stock to virus but it hasn't reached the milking herd until this season. A PI hunt has been started in the 2018 born heifers to find the culprit(s) in the herd and get rid of them.

If you are seeing antibody levels that are staying high or are increasing with time like this farm it is a very good idea to test replacement stock to ensure that BVD doesn't enter the milking herd. Testing young stock can be as easy as blood testing 15 animals for an s/p ratio.



Effect on fertility

BVD Bulletin

Euan Tait BVMS, Waimate Veterinary Centre

Lameness continues to be one of the main issues we are seeing on farm, despite having had such a dry season to date. Lame cows are often clearly visible, but are not treated promptly enough, especially in the lead up to mating season.

At this time of year with AB in full swing and milk production peaking nicely, lame cows can be a huge economic drain on the farm due to lost milk, poor BCS and decreased chance of cycling on time for a successful mating outcome. Conception rate is half and on average takes 40 days longer in comparison to a healthy cow.

If you need any help with lameness, please get in touch with one of our Healthy Hoof team.



Andrew Muir BVSc BSc (Hons) Johne's News Oamaru Veterinary Centre

Recently we have begun to make an assessment of the number of Johne's deaths in herds over a season in our practice. The following graphs shows the results for 139 farms that we were able to collate data for. The red bar is the median (middle) result.

- There is a large range from close to 0% to over 8%. The farms with the highest percentages have started testing for Johne's at herd testing and as a result are starting to cull larger numbers of cows.
- Johne's is a classic tip of the ice berg disease. For every case that is seen

there are several other subclinical cases that aren't shown on this graph.

The median number of cows culled was 0.8% which equates to 6 cows for an average sized Waitaki farm of 750 cows. This means for the average farm it is going to be economic to start testing your herd for Johne's at herd testing due to the cull cow price paying for the cost of testing and not having them die on farm. In reality the economic benefits will be greater due to the benefit of reducing infections of future replacements, lost production and potential treatment costs.

Percentage of herd culled due to Johne's disease in the 2019
9.00
8.00
7.00
5.00
5.00
3.00
2.00
1.00
0.00
Farm

Maniototo/Omakau dairy farmers early spring update

George Smith BVSc BSc Oamaru Veterinary Centre



- Farms are seeing a good number of cows recorded with premating heats.
- Heifer mating has started with a bang.
 Single shot PG farms have put up good numbers in the first 5 days of mating.
- Cold temperatures throughout September and a lack of moisture have led to an early spring feed deficit.
- All silage and supplementary feed supplies are completely gone in the Maniototo
 - Some silage bunkers holding spare silage for the last five years are empty for the first time in a long time.
- The warm weather and spring rain has finally arrived in the last couple of days which bodes well for the start of mating.



With selected drench purchases, you get a tasty kiwi ham on the bone for Christmas



Jess McKenzie, BVSc Waimate Veterinary Centre

Making sure a calf is fully prepared before weaning reduces the chance that they will need preferential treatment post-weaning. Preferentially managing small groups of animals to 'catch them up' is time consuming and can be difficult to manage, so it is best avoided by good management early on.

Factors to consider before weaning calves:

- Rumen Development Are they consuming the desired amount of feed? Is its rumen sufficiently developed to be weaned off milk?
- The only way this can be assessed is by measuring the amount of concentrate or pasture they are readily eating, which should be at least 1kg/day of meal or 2kg/ day of pasture.
- 2) **Weight** Individual calves should reach a minimum weight prior to weaning.
- No specific weaning weight has been defined by research, however common weights used are 70kg for Jerseys, 80kg for Crossbreds, and 90kg for Friesians.
- Reaching a minimum weight is an important milestone as it indicates that they are ready to transition from individual to group management.
- Age A combination of weight and age is often good to use when making the weaning decision eg. a minimum of 8 weeks AND 90kg.
- 4) **Ability to Compete Within a Group** Is the calf able to compete within the group



Bull Management Mat O'Sullivan BVSc Oamaru Veterinary Centre

'Rule of thumb' is to have 1 sound bull to 30 non-pregnant cows. Ideally there should be two teams of bulls and these should be changed every second day.

A bull is capable of mating up to 3 cows a day before semen quality drops. The daily work rate in most herds will be the same after the 3rd week as it is in the 5th week as the number of cows coming on heat on a daily basis will be similar. Like-wise the work rate will be similar between the 6th week and the 8th week.

Therefore in a 700 cow herd which is doing 4 weeks of AI, they will need (based on 3 weeks of mating):

■ 700 cows x 82% submission rate x 52%

before they are weaned? Any that aren't should be held back until they are.

Calf weaning

The aim is to have calves that continue to gain weight post-weaning - they should never lose weight or remain static. Some animals don't thrive post-weaning so it is a good idea to weigh them 7-10 days postweaning to make sure they have gained weight. Any that haven't may need continued access to calf meal, regardless of weight or age, or examination by a vet.

Relocating Calves

Relocating calves can result in growth checks or be a trigger for other animal health issues including pneumonia, scouring and parasites. Recently weaned calves are at



Hamish Newton BVSc. PhD Oamaru Veterinary Centre

Thankyou everyone who has collected 10 calf poo samples 10 to 14 days after drenching calves. We have had no concerning results yet. Could you all please continue with this monitoring program as the parasite challenge will change with time, as will the parasite species and the drench that gets used. Calves will start to move to off the dairy farm soon, so please encourage

conception rate = 300 pregnant,

this leaves 400 non pregnant, which

times

times.

of AI, they will need:

455 pregnant

requires 13 sound bulls in the herd at all

In a 700 cow herd which is doing 6 weeks

■ 700 cows with 65% 6 Week–In-Calf Rate =

requires 8 sound bulls in the herd at all

Bull numbers in general can be reduced by

Remember to ensure that bulls have been

both vaccinated and tested clear for BVD.

about 40% at the end of each cycle.

■ This leaves 245 non-pregnant, which

particular risk as they are also undergoing changes in diet, rumen development and are usually younger in age.

A few criteria to consider for relocating recently weaned calves include:

- Fully weaned and off milk for at least two weeks.
- Meet the minimum target weight for their age.
- Transitioned onto a full pasture diet or supplement provided for transition.
- Competing and coping well within the group.
- Drenched and vaccinated.
- In good health.

Calf drench monitoring

your grazier to be involved as well. There is no cost to be involved with this monitoring – the lab fees and sampling packs are free with any Boehringer Ingelheim drench purchased from the Veterinary Centre but the information could be priceless.



Veterinary Centre – By the Big Blue Cross

Dating Your Mating

A number of farms have elected to run bulls with lower breeding worth cows this year as a cost saving initiative. To enable us to provide the greatest accuracy with your pregnancy dates we ask that you still record cows which appear to have a natural mating in Minda/ Protrack once or twice a week.



Hamish Newton BVSc, PhD Oamaru Veterinary Centre

Uddernews

Staph aureus Testing

At the next herd test (2nd herd test) consider using the samples collected to identify cows that are carrying the Staph aureus bug. If you have a stubbornly high BMSCC it is likely there are cows in the herd that have a subclinical infection (an infection that is not causing obvious signs) and many of these infections will be due to Staph aureus. While these infections may not appear to be causing mastitis they are a source of bugs to infect other cows and will be raising the BMSCC. If you can halve your BMSCC you will end up with >2% more milk into vat. It is

now cost effective, and easy, to test for this bug in the herd test samples. Cows that are found to be carrying Staph aureus could be managed separately, be put on a potential cull list, or a list to receive an antibiotic dry cow therapy if she is not able to be culled. You can nominate individual cows to have their milk tested or give a list of criteria such as "test cows greater than 4 yrs. old that have a SCC greater than 400 at the current herd test". Give one of the Veterinary Centre clinics a ring and this testing can be arranged through LIC.

Watch out for a Rise in BMSCC

We expect to see many BMSCCs spiking in the next week or so. "Stress" has been implicated as a cause of increased SCCs but experimentally this has not been demonstrated convincingly and estrus and stray voltage probably do not directly raise SCC, but do so by cows delaying their milk let down. When cups are on a cow that is not letting her milk down, at either end of her milking, the risk of mastitis increases. This highlights the importance of not over milking. You obviously want cows to express estrus but don't compound some unavoidable over milking with excessively long row times due to drafting etc. Your milking team may have to hang some cups between rows when large numbers of cows are being drafted or when touching up tail paint etc.

Timely Reminders & Handy Hints for November

- Pink eye in calves We are coming up to the Pink Eye season in calves. A single dose of Piliguard vaccine given 3-6 weeks before the risk period will significantly reduce the risk of an outbreak.
- Covexin 10 If you have unexplained deaths in young stock every year despite using 5 in 1 vaccine, you should consider using Covexin 10 in 1 vaccine, which provides additional protection against two other major clostridial diseases -Clostridium sordelli and Clostridium perfringens type A.



Day 24 of Mating - Have all the Mat O'Sullivan BVSc Oamaru Veterinary Centre cows been put up?

If a farm has done early intervention with non-cyclers during the first 3 weeks of mating, then by day 24, in theory, the whole herd will have been mated. This is seldom ever the case!

There will be a mixture of unmated cows by this date which will include cystic ovaries, late calvers, missed heats, pyometras and genuine anoestrus cows.

If you have a significant number of these cows it is worth getting them scanned or palpated at day 24-26 and provide them with specific treatments.

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.

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

