



MOOZNEWS

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.

Bull Management

'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% conception rate = 300 pregnant,
- this leaves 400 non pregnant, which requires 13 sound bulls in the herd at all times
- In a 700 cow herd which is doing 6 weeks of AI, they will need:
- 700 cows with 65% 6 Week-In-Calf Rate = 455 pregnant
- This leaves 245 non-pregnant, which requires 8 sound bulls in the herd at all times.

Bull numbers in general can be reduced by about 40% at the end of each cycle. Remember to ensure that bulls have been both vaccinated and tested clear for BVD.

2nd 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 AI'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

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Product of the Month

Eclipse is a double combination pour-on for parasite control



No Freebie Eclipse pour on 5.5L deal! THAT'S 10% EXTRA FREE!



Making the Most from Mating

Recommended mating lengths of 10 weeks are considered optimal to ensure all cows are calved by the 10th of October (if the PSM was the 23rd of October) to retain a healthy calving spread. In this scenario a 10 week mating period would have bull removal occurring on the 1st of January.

The number of lactation days is one of the key economic drivers of your farms profitability. Therefore success of mating should be measured in how quickly they get in calf (3 and 6 week in-calf rate) as well as the empty rate.

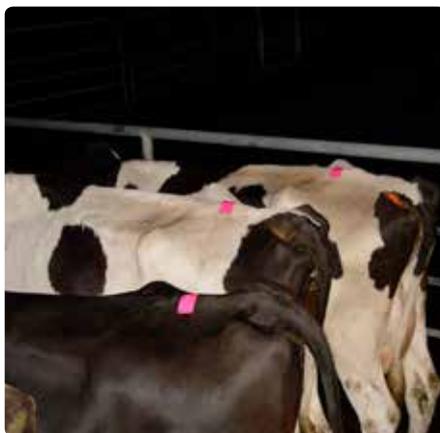
The reality of a 10 week mating period is that cows have just over 3 cycles to get back in calf. The average cow has a ~50% chance of getting in calf at each cycle. If given every opportunity she would have a 12.5% chance of being empty after 3 cycles. However if she was to miss the first round of AI she will have a 25% chance of being empty. Likewise if a heat is missed in the second round she has a 50% chance of being empty!

If your 3 week submission rate is tracking below the >90% target, review your heat detection practices immediately and look to get non-cyclers examined and treated. Ideally all eligible non-cyclers (calved >40 days) should be

mated inside of 3 weeks. This involves hormonal treatment by day 11 of mating at the latest, or day 18 to achieve 3 cycles within 70 days. Failure to take proactive action will result in not only

a protracted calving spread but also a higher empty rate.

All eligible cows not mated after day 24 of mating should also be examined and treated accordingly.



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

■ 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!!**



Johne's News



Cattle initially become infected with the Johne's bacteria when they are calves, with the greatest risk period being the first 6 months of life. A major risk factor is the ingestion of faeces contaminated with the bacteria. This is where paddock selection for the calves while they are on the dairy farm can help. Try to put calves into paddocks that hasn't got effluent going onto them. This may prove more challenging if effluent goes over the whole farm through the irrigation. If this is the case at least try to prevent effluent being sprayed into troughs that calves drink from. Finally try and get calves off the dairy platform as quickly as possible when they have been weaned.

Christmas Promotion



With qualifying purchases of

■ Arrest C 20L

■ Matrix Minidose 10L

■ Eclipse pour-on 2.5L, 5L

(excludes Eclipse pour on bonus 10% 5.5L)

■ Eprinex 5L, 20L, 25L

■ Genesis pour on 5L, 10L

■ Cydectin pour on 5L, 15 L

you receive a tasty Ham on the bone or Crozier Turkey. (While stocks last).

OR FORGET THE HAM OR TURKEY AND DEDUCT \$30 OFF THE PURCHASE PRICE

Mycoplasma bovis reminders – Minimising Risk

■ November sees many calf sales occur through local sale-yards. If looking at purchasing or selling stock try to minimise the use of sale-yards as untraceable casual exposure through railings could potentially occur.

■ Bulls will be out with heifers by now, but if still sourcing bulls for the herd try to ensure that these have come from single sources with low risk of infection. Testing of bulls from small lines is not particularly sensitive,

■ If calves are going away to grazing where other lines are going to be present, make sure a biosecurity plan is put in place with all parties involved. Talk to your vet about the practical procedures required

New Calf Disease – Sporadic Bovine Encephalitis (SBE)

Two years ago a new calf disease was reported in NZ. This was first seen on several farms in the Canterbury area and then more latterly in the Manawatu. To date there have been around 15 properties that have had a confirmed diagnosis in NZ.

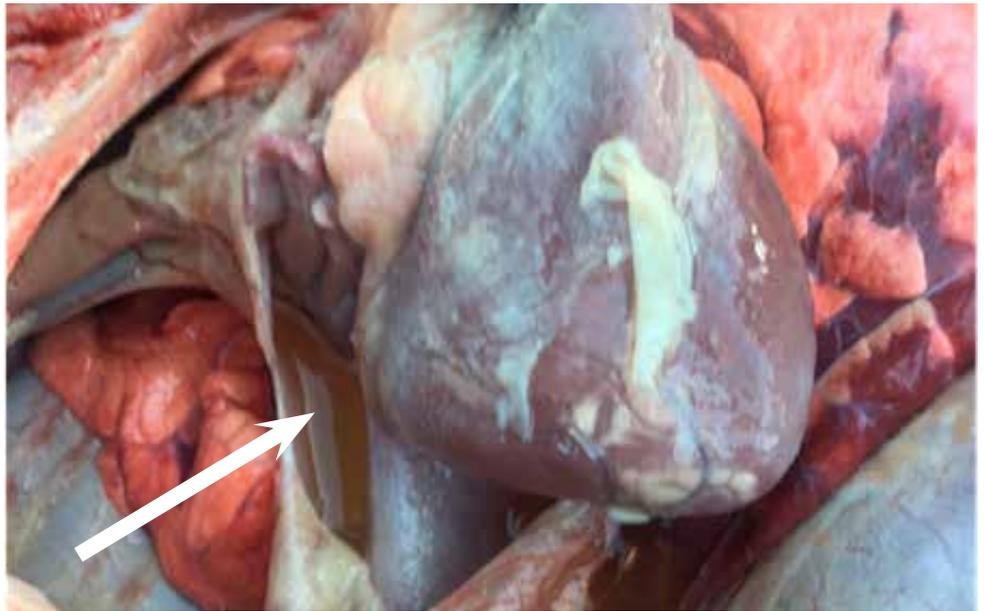
The disease is caused by the bacterium *Chlamydia pecorum* (which was first found in NZ in the goat population about 30 years ago).

Affected calves develop neurological symptoms which include, seizures and hind limb ataxia (wobbly in back legs), depression and an inability to stand. The progression of the disease is quite rapid - within 24-48hrs healthy calves may no longer be able to stand or want to suckle. The spread of infection through a mob of calves seems to be quite rapid - a high percentage of calves in the mob may have high temperatures without displaying significant illness.

The brain, heart and abdominal organs can all be affected. The pathology to the heart when viewed at post-mortem can be very dramatic (see right). The pericardium (sack around the heart) is thickened and full of fibrin (see arrow). In September we diagnosed the first case in our practice. The affected farm was has lost around 20 calves out of 350 reared, but it is probable that many more would have died had treatment not been provided. Early treatment is required to be successful. The rearer's

commented that they had not realised how sick the whole mob was until they

started playing again a few days post-treatment.



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.
- Last year we saw a case of several acute deaths in calves which had been worm drenched through the milk. This is a very timely reminder, not to add worm drench, especially levamisole or abamectin, to milk. Each season we see 2-3 cases of either levamisole toxicity or abamectin toxicity in calves under 100 kg.
- Poa aquatic (also known as *Glyceria maxima*) is a grass that proliferates in wet areas of paddocks and drains. Under the right environmental conditions it can accumulate cyanide - which can be fatal if ingested. Sudden death in a wet paddock could be potentially due to cyanide. If you have suspicions contact your vet for identification of the grass.
- Polioencephalomalacia (P.E.) - This nervous condition of calves is now the most common disease of calves that we see over the summer months. Polioencephalomalacia (PE or CCN) is considered to be associated with a change of diet from a fibrous stalky diet to a lush, rapidly growing grass diet. High sulphur intakes have also been incriminated. P.E. is a vitamin B1 deficiency. Clinically, calves with P.E. show nervous signs. They may appear blind, staggy and develop muscle tremors, before becoming recumbent, with severe convulsions and die. We traditionally see P.E. cases from late November, peaking late Dec/early Jan. Individual calves, if treated early enough with injectable Vitamin B1, respond well and make a full recovery. In the face of an 'outbreak', it is well worth considering the prophylactic use of an oral drench of Vitamin B1, for the entire mob of calves.

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.

Uddernews



Have you had a good look at your herd test data? The Somatic Cell Count number measures the number of cells in the milk at the time of sampling and most of the cells are white blood cells. A cow that does not have an infection in the udder will typically have a SCC at this time of the year of less than 150,000 cells per ml. Obviously the cows above 1,000,000 cells per ml are worth a look but as you can see from the graph below a quarter with a subclinical Staph infection has a SCC that spikes periodically so might be missed at a herd test but is reliably above 200,000 cells per ml.

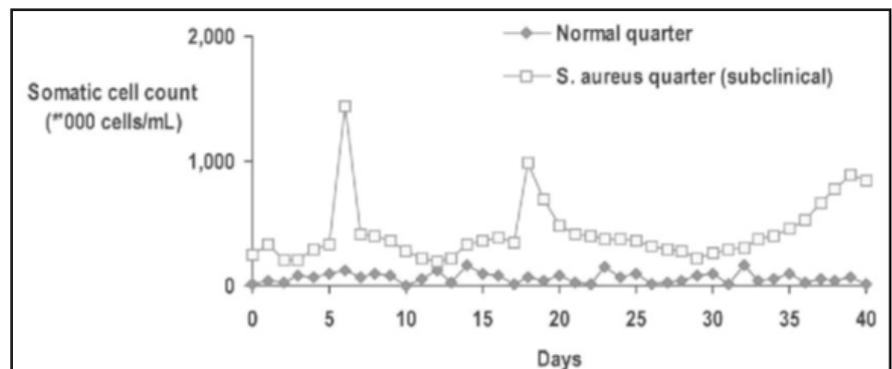
If you are culturing Staph aureus from the mastitis cases you have had, you need to consider cows with a SCC greater than 150,000 cells per ml as likely infected and consider managing

them as separate group or screening them for Staph aureus.

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.



Day 24 of Mating - Have all the 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.

BVD Bulletin



Bulk milk results are coming in thick and fast at the moment. We are seeing herds that are returning positive bulk milk samples, i.e. there are PI animals in their herds that have been negative for a number of years, some with low levels of antibody. There are a couple of likely areas that a breakdown is likely to have occurred, heifer replacements kept from heifers and bulls.

Heifers are often at a greater risk of being exposed to infection as they are at run off blocks or with graziers where they can be exposed to animals that haven't been tested for BVD. If this occurs during the critical 1st 120 days of pregnancy then more PI animals can be formed which are then brought back into the herd. It is too late to practically do anything for the current yearlings that are being mated. However there are this seasons replacement calves. I would encourage you to put a plan in place to protect them for mating in October 2019.

If the chaser bulls you have got haven't been tested for BVD and fully vaccinated there is still time to do this. If you aren't sure make some enquires from the vendor or your agent.

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light in animal
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Veterinary Centre Palmerston
Veterinary Centre Glenavy
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