

Heat Detection

By Katrina Roberts, Herd Health Veterinarian, Anexa Vets

So, what's the most important job on your farm for the next six weeks (or more)?

Hopefully everyone reading this has mumbled 'picking the cows on heat'. But this isn't something to declare loudly not mumble. InCalf research tells us that this job needs to be done by the most experienced people in your farm team and should not be shared between all staff. I know that doesn't make for a particularly exciting few weeks ahead, but you all know that the effort you put in now, will repay you next season in more milk and more AB calves. With many of our clients considering all AB in the milking herd this season, heat detection is more important than ever. There is no bull there to fix up the cows you missed!

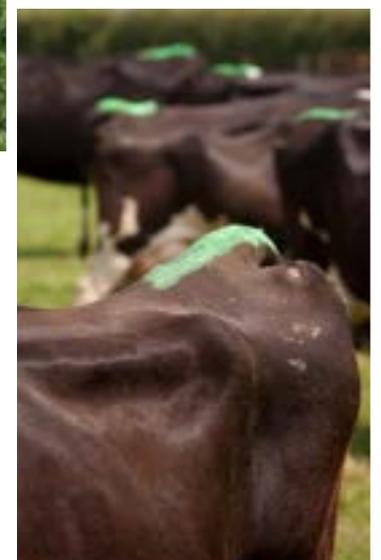
The herds that are achieving 78% 6 week inCalf rates are achieving more than 90% of their herd submitted by the end of week 3, but we know that the national average submission rate is only 80%. We also know that missed heats is one of the primary reasons for that lower than target submission rate.

The duration that cows are in standing heat varies considerably (range 2-28h but typically 12-18h), therefore those cows with shorter heats really need some dedicated observation to be identified and put up at the right time. The intensity of a cow's heat can be negatively affected by factors such as poorer body condition score, poor health, low energy intakes, adverse weather conditions and stress.

The heat behaviours exhibited are due to the hormone oestrogen, and therefore the higher the levels of oestrogen, the stronger the signs of heat. A recent published study in the UK clarifies the timing of the varying signs that cows exhibit during a heat event. The first signs of heat that a cow exhibits are sniffing other cows followed by allowing cows to sniff them. These are followed by the on-heat cow resting her chin on other cows and then allowing cows to rest their chins on her. This then follows the on-heat cow mounting other cows and nearby cows attempting to mount her (but her rejecting the mounting), and then finally standing to be mounted. After the cows have finished standing heat, the signs of heat that preceded the standing mount occur in reverse order. The on-heat cows are most active (most walking) during the mounting and being mounted periods. Other signs of heat commonly observed in New Zealand cows (but not reported in that study) include bellowing, reduced milk production, a change in milking order, mucus around the vulva or on the tail and evidence they have been ridden by other cows (mud on the flanks, saliva on their backs).

Good heat detection is not just about observing the signs of a cow on heat is it also what each of your farm team do with that information. Is everyone on your farm aware of their role in the heat detection system?

There are simple checks that can be undertaken during the pre-mating period to make sure you are all ready for the planned start of mating:



- ? **Have all your calving dates been entered into Minda/Insite?**
- ? **Are all ear tags clean (check that electronic tags/collars are working for ALL cows)**
- ? **Are the drafting gates all functional?**
- ? **What heat detection aids (tail paint, other detectors) are you using, how are they being applied, do all staff know how to apply them correctly?**
- ? **How often are heat detection aids being reapplied and by who?**
- ? **Do all staff know the signs of a cow on heat?**
- ? **If someone sees a cow on heat, where does this information go (whiteboard, Protrack, pass it onto the Manager)?**
- ? **Where are the on-heat cows going to wait for the AB Technician?**
- ? **Who is responsible for returning the mated cows to their appropriate mob after AB?**

If you need some help getting your staff motivated for this season's heat detection, please talk to your vet.



Bulls

By Michael Shallcrass, Veterinarian, Anexa Vets Gordonton

Mating is about to start, and with an average mating period of 11 weeks it is important that you take steps to ensure your bulls are working as well as they can. Across the practice last year, the average six week in-calf rate was 70%. If we assume 5 weeks of AB, that will mean approximately 40% of a herd will need to get in calf to a bull mating. With an average herd size of 310, that would leave 124 cows for the bulls and only 6 weeks (two cycles) to do it.

The inCalf book provides some good guidance around bull power. This average herd should have four bulls in with the cows at any one time. Because we want bulls to be rested 50% of the time, that means at least eight bulls on the farm plus spares. For some people that might seem like a lot of bulls, but it lowers your farm's risk of having too many empty cows

Last month we talked in depth about ways to reduce the risk of bulls bringing Mycoplasma onto your farm, but the essence of it is about the importance of getting a good history of each bull's life up to that point. Bulls should ideally come from a single source, not have been mixed with stock from other farms, and not have been used for service previously.

Selenium to cycle, Copper to hold

By Russell Goddard, Veterinarian, Anexa Vets Paeroa

Now is the time to ensure your trace element (TE) programme is up to scratch to enable a successful mating period in the coming months. The three most important TEs are Copper, Cobalt/B12 and Selenium. If any of these are lacking, then your in-calf rate may suffer. Don't leave it too late; get your pre-mating TE testing booked ASAP to ensure a good mating. Late winter and spring are the seasons when Copper and Selenium levels are lowest in the pasture, but arguably most critical to your herd.

As well as getting Copper, Cobalt and Selenium sorted, you should ensure adequate Iodine and Zinc levels. Talk to your Vet to verify your herd's TE status and for advice on the best way to get the minerals into them.

And remember your replacement animals. Copper is not only required for reproduction but also growth. Your heifers will be doing both, and so it's critical to get good levels into them to ensure well grown heifers join the herd next year. Long acting boluses are often the best way to prevent Copper deficiency in heifers. There are also effective multi-mineral boluses that provide sustained TE release, such as the 'All-trace bolus', that will get the job done.

Increase your chances of detecting clinical mastitis early

By John Penry, Veterinarian and Researcher, Anexa Vets

Clinical mastitis cases during the calving period and early lactation are virtually impossible to avoid. The cows immune system is compromised for around 2-3 weeks after calving and the environmental challenge to the teat-end defences can be high. Smart SMMM has a trigger for action of 8 cases/100 cows/mth which indicates that the clinical mastitis rate below this level is common. Research on how long a newly detected clinical case has been in the "clinical phase" is limited but suggests that many cows can show signs of visible inflammation (flecks or clots in the milk, swelling in the affected quarter) for 24-36 hrs prior to be detected (and treated) during a milking. We all are aware that a missed clinical mastitis case will contribute in excess of 2-5 million cells/ml in additional cell count so finding these cases in a timely manner lowers the risk of an increase in bulk tank cell count.

One strategy which can be useful is to check one quarter per milking during the calving period. If the same quarter is checked in each cow for an individual milking, over 4 milkings the entire udder of each cow will have been checked. While this appears to be a significant additional workload, it does quickly become part of the milking routine and is often a better, and lower risk alternative, to stripping all teat in all cows after clots have been detected on the filter sock. Remember to always wear milking gloves while this process is being undertaken. It is also a good idea to spray your gloves with the teat disinfectant being used in the dairy at the end of each row, or half a turn if milking in a rotary shed.

Farmacy.co.nz is gaining momentum – are you signed up and enjoying its many benefits yet?

Record treatments cow side

farmacy+
Member log ins available now, talk with your Vet

- Q. Does the Farmacy Digital Diary meet my requirements in a shed audit?
- A. Yep, it sure does! The Farmacy Dairy Diary meets NZCP1 requirements, so you can be confident you are meeting your treatment recording requirements when you have your shed audits.

NEW Animal Welfare Rules

Did you know as of 1 October 2018 tail docking of cattle is illegal. Those individuals who continue with this practice are liable for a fine of up to \$3000 under Animal welfare regulation 50. For further information or to discuss options for your farm talk to your local Anexa Vet. A summary of the latest changes can be found at: <https://bit.ly/2v8OpnM>. The complete codes of welfare can be found at: <https://bit.ly/1X87jFT>

Lameness in cattle

We are always trying to improve the lives of our stock on farm by providing improved animal welfare conditions. The sick skinny cow, the down and scouring calf, and ingrowing horns are all obvious times when we as farmers and Vets should intervene, but have you thought about your lame stock?

Lame cows are painful, and we have a duty as owners of animals to lessen and prevent pain and suffering. So, what can you do to help improve welfare of your lame cows?

Is the cow lame? Firstly, you need to be able to identify that your cows are lame. Cows which are three-legged lame are easy to spot but can you recognise subtle lameness in cows? Dairy NZ has some great videos on line which help you identify and grade lameness in cattle (<https://www.dairynz.co.nz/animal/cow-health/lameness/lameness-scoring/>).

Identify the cause. Once you have identified the lameness, then pick up the foot and try and identify the cause. If you can't identify a cause, make sure you contact your local Anexa Veterinarian for further assistance.

Treating appropriately. Once you have identified the lameness, you will need to give the appropriate treatment. This may include applying a cow slip to the unaffected claw to take weight off the diseased claw, paring the hoof to remove dead/underrun tissue and giving a NSAID (anti-inflammatory) to reduce pain and inflammation. Many lame issues in cattle don't require antibiotics, but when they do we need to make sure we are selecting the appropriate one. Sound knowledge of the correct treatment is essential, as you can make things worse very quickly. Therefore, if you are unsure of what treatment is appropriate, contact your local Anexa Veterinarian for further assistance.

We can provide on farm training on basic hoof health for farm staff, and we have two healthy hoof accredited Veterinarians who can provide whole farm assessment to reduce lameness in your herd. Remember we are here to help.

Transporting lame animals and veterinary transport certificates:

As of October the 1st 2018, as a rule, all lame animals being transported will likely need a veterinary certificate to certify that the animal is fit to transport. Being lame is essentially defined as having a definitive limp or being unable to bear weight on one or more legs when standing or moving. The full clause and definitions can be found at the following link <https://bit.ly/2LCKpCg>

Although the requirements for transport are essentially unchanged, MPI is now enforcing transport breaches under section 23 of the Animal Welfare Act 1999 with infringement notices and/or fines. This will include people in charge of the animals transported (owner/farmer) and Veterinarians who certificate animals which are not fit for transport. As Veterinarians, we follow strict guidelines to ensure animal welfare isn't compromised during transport. If we don't certify an animal, then it categorically cannot be transported. If an animal is not fit for transport, we then have a responsibility to help provide solutions; this includes providing appropriate veterinary care to get them up to the minimal standards for transport or advising on alternative solutions such as humane euthanasia or on farm slaughter where appropriate.

Please also remember, Veterinarians in practice can only certify for the transport of stock. We cannot certify animals as being fit for consumption, and we have no control over what happens to animals at the meat works.

Each transport certificate is only valid for a maximum of a week. It is recommended that you pre-arrange with a stock agent if the works can take the cows prior to getting the certificate but, be mindful that there are times when we will need to liaise with the MPI Veterinarian at the works in cases when it may be unclear if the animal is fit for transport. As contact with the works Vet can take some time, it should not be presumed that a certificate can always be issued on the day of inspection of the animal. When we write a certificate we also need to know where the animals are intended to go to slaughter. If that is not suitable (usually dependant on distance from the farm to the meat works but other examples could include the steepness of the loading races at some facilities which would make it difficult for lame animals to navigate), then the Veterinarian is able to direct where the animal is required to go to slaughter.

Remember, prior to transport, cattle should be stood off from green pasture (which could include a holding yard or grazed out area) for at least six to eight hours, but they must have access to water during this time.

MPI has a great App which you can download as a guide for what conditions in cattle are unacceptable for transport. It's called 'Fit for Transport' and is available for download via the app store on your smartphone or device.

HOOF-IT
WAIKATO HOOF TRIMMING



IT PAYS
TO  BELONG

- ✓ Quality trim
- ✓ Good service
- ✓ Vet referred

Book your herd's hoof trimming now

Phone Rhonda on 027 886 5621 or
email anexa.services@anexafvc.co.nz

anexafvc.co.nz/farm-services



What worming program is best for your young stock?

Calves are starting to go out onto pasture, which means that now is a good time to make a drench plan. Calves start ingesting worms as soon as they start eating grass and will start shedding eggs about three weeks after that. The pasture around the calf shed will very quickly become contaminated, and calves coming out later in the season can be subjected to a very high parasite challenge.

Along with good feeding and trace element supplementation, a comprehensive drench program is an important part of getting good growth from your calves and yearlings, which means regular treatment with the right products. When considering what treatments are best for you a few points to consider are:

- Oral drenching works best in young calves, is cheaper than the alternatives, and should be done every month until it becomes physically too difficult to wrestle the calves, usually when they're about 120kg.
- Drenches should always be a combination product with at least two active ingredients, as these will be more effective than single actives and will slow the development of resistance on your farm.
- POUR ON PRODUCTS ARE NOT SAFE FOR YOUNG CALVES as they often have a relatively low safety margin and can easily be overdosed. Pour on drenches should only be used on calves over 120kg
- Consider leaving calves that have achieved target condition or better, and in good health, untreated. This helps to slow the development of resistance to drenches as well as saving money
- With older calves and yearlings ideally treatments with a combination of active ingredients should still be used, while the interval between treatments will change based on product used, the likely challenge to stock from worm larvae in summer and their first winter and the achieving target weights
- As well as ensuring they've been getting adequate copper and selenium supplementation it's worth giving your rising 2 year olds a pre-mating drench, especially if they're on a property that regularly grazes other young stock.

An effective worming program can save money and achieve better young stock weights - talk to your vet about what's best suited to you and your farm



Focus on the path to optimal calf weaning

For calves to have a smooth transition from a liquid dominant/milk-based diet to a plant dominant/pasture-based diet, they need to have adequate rumen development. If calves are weaned before their rumen is well developed, they will encounter delays in their growth rates, as they will not be able to properly extract, absorb and utilise the nutrients contained in their feed.



Fig. 1. Milk only.
Penni Slate Extension

Fig. 2. Milk and hay.
Penni Slate Extension

Fig. 3. Milk and grain.
Penni Slate Extension

We aim for a smooth and gradual transition from milk to pasture. High quality meal with 20% crude protein offered to the calves from birth will help to achieve this rumen development. The carbohydrate available in the calf meal drives rumen papillae development and this can be clearly seen in the photos with this article. Weaning calves when they are consuming 1-1.5kg of meal/calf/day will ensure they are prepared to handle a fully pasture-based diet when sent to grazing. Calves fed on milk only, or milk and hay, do not have good to optimal rumen development and will experience a set back at weaning.

Evidence based, best practice recommendations are that calves are weaned based on weights and meal consumption, rather than age. Sub-optimal weaning weight can affect the long-term productivity and survival of cattle. Calves should gain about 0.7kg/day of live-weight over the entire milk feeding period. Your calf weaning weight will depend on the genetic live-weight potential and breed of your herd. Talk to your Vet about the target weaning weight for your calves.

UPCOMING MEMBER EVENTS

For more info and to RSVP visit www.anexafvc.co.nz/events

Quiz Night Morrinsville

5th September, 6.30pm, RSA Morrinsville

Repro 101 Farmer Workshop

11th September, 11.00am, Gordonton Hall

Quiz Night, Hauraki

11th September, 6.30pm, Hauraki Golf Club

Annual General Meeting (Note: Change of date)

Wednesday 31st October 2018 commencing at 11.30am Anexa FVC, 25 Moorhouse Street, Morrinsville

0800 2 THE VET | anexafvc.co.nz

Coromandel
P: 07 866 8556

Huntly
P: 07 828 7660

Matamata
P: 07 888 8068

Ngaruawahia
P: 07 824 8630

Paeroa
P: 07 862 8815

Rototuna
P: 07 853 0027

Te Kauwhata
P: 07 826 3581

Gordonton
P: 07 824 2103

Maramarua
P: 09 232 5891

Morrinsville
P: 07 889 5159

Ngatea
P: 07 867 7256

Raglan
P: 07 825 8390

Te Aroha
P: 07 884 8014

Thames
P: 07 868 7005