



Mat O'Sullivan BVSc Oamaru Veterinary Centre

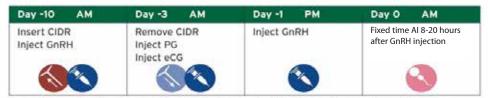
## CIDR Program 2020

Many herd owners have already booked in dates for treatment of anoestrus/non-cycling cows. There has been a huge rush on programmes starting before P.S.M. Please ensure you plan/ notify your Al technician immediately to avoid clashes.

This year's CIDR program does not differ from last year's programme. Please note the following:

- A CIDR program takes 10 days to complete from CIDR insertion to insemination i.e. a cow CIDRed on the 12th of October will be inseminated on the 22nd of October. (up to 50% of cows may cycle on day -1 i.e. one day earlier)
- Expect an average of 17% of cows to be on heat on the morning of day -1 (range 5 32%). Mate these cows immediately.
- A further 20 30% may come on heat between morning and afternoon on day -1. It is an option to get the technician in again that evening if desired.
- The rest of the cows should be blanket inseminated 8-20 hours after the final GnRH injection.
- We recommend giving eCG at the time of CIDR removal/PG injection. This will increase pregnancy rates by a further 5-7%.

#### ANOESTRUS COW TREATMENT AND SYNCHRONY



Cows observed on heat prior to the final GnRH injection should be mated and removed from the programme.

#### Best Practice Set up for Non-cycler Interventions





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### Are your heifers small? Pre-pubertal?

Prostaglandin synchrony may be ineffective. Ask your prime vet about easy, convenient and effective heifer CIDR synchrony.

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#### **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



Lucy Cameron BVSc. BSc Waimate Veterinary Centre

## Animal Health Tips Post-Weaning

As we get closer to weaning calves there are a few things to consider over the next few months:

**Clostridial disease** – most calves should have had their first shot of Covexin 10, make sure they have a booster within 4-12 weeks to protect against sudden unexplained deaths in their first year.

When to wean – calves should have reached minimum target liveweights on milk e.g. 70kg for Jerseys; 80 kg for XB; 90 kg for Friesians – but these will depend on the rearing system used – **and** importantly they should be consuming an average of 1kg/day of good quality calf meal. Keep weaned calves (that are weaned off milk) eating 1-2 kg for at least 2 – 3 weeks before slowly decreasing the amount of meal fed.

**Worms** – as calves begin eating pasture they are exposed to infective larvae – set up a drenching plan to start once pasture has been a significant part (green faeces) for 3 weeks. Oral drenches at 3-4 week intervals are preferable, and always use combination drenches with levamisole to avoid problems with resistant Cooperia. Lungworm can become an issue in summer but is susceptible to most drenches. Take care with drenching milk fed calves – don't add drench to the milk or pull them off the feeder to drench. This can lead to drench by-passing the rumen and potential toxicity. Make sure you know how much your calves weigh so you can dose accurately, and wait till calves are 100kg+ before using oral drenches which include abamectin.

**Minerals** – copper, selenium and B12 are all important minerals for young growing calves. Copper can be given by bullet or injection – for younger animals a 10g bullet in January is a safe option and will give 3 - 4months of copper supplementation. Selenium and B12 can be given in combination e.g. 2ml Prolaject B12 2000 + Se in December, followed up with a long acting selenium injection in 1-2 months to cover calves through autumn and into winter.

**Coccidiosis** – this parasite can decrease growth, cause scours & deaths from one month of age, especially on paddocks used for calves for several years. Calf meals contain protective coccidiostats – but calves must be consuming 1kg/d. Toltrox is a one off oral drench that could be used as calves are weaned off meal, or earlier if the property has a history of coccidia.

**Monitoring growth rates** – regularly weighing your calves and responding to those not meeting targets is the best way to ensure they keeping gaining 0.7 – 0.8 kg per day, every day, and reach targets as they enter your herd in two years time.

## Planning For Reproductive Success – Reproductive Consults with your Prime Vet

The majority of farmers feel that 'Non Cycling Cows' are the greatest restraint in achieving good reproductive performance.

Achieving a high rate of pre-mate cycling will enhance both submission and conception rates.

Our reproductive consults are targeted with advice and monitoring to promote early resumption of cycling.

- Review of key reproductive problem areas from last season
- Regular BCSing and nutritional checks



#### Veterinary Centre – By the Big Blue Cross

- Manipulation of reproductive hormones through nutrition
- Strategic management of high risk (low BCS) cows
- Trace mineral profiling
- Time-lined KPI's leading up to mating
- Tailored tailpaint program and options for optimising non-cycler outcomes once mating nears
- Handy hints and tips gathered from top performing farms – Heat detection, Bull management, heifer mating, disease treatment and prevention.

### Why Do Early Non-Cycler Interventions?

<sup>⊷</sup> Increase 3 Week SR

> This will ensure more cows have at least three potential cycles inside a 10 week mating period which should lower herd empty rate

#### ✓ Increase Days-In-Milk

Early CIDR treated non-cyclers will average 16 days more milk than non-treated animals in the following season

# Condense Future Calving Pattern Calving Calving Pattern Pattern Calving Pattern Pattern Calving Pattern Calving Pattern Calving Pattern Calving Pattern Pattern

This will increase proportion of cows with pre-mate heats next season

## **Coccidiosis Prevention of Calves**

We often see coccidia outbreaks in calves that are greater than 4 weeks of age that still aren't eating enough meal (<1kg per day). However the other time we see coccidia problems are when calves have the meal

## Heifer Synchrony

Early calving heifers become early calving second calvers. Your heifers are also the highest BW animals you will breed. Early mating of your heifers will achieve early calving R2's with high BW calves.

Synchrony programmes ensure that heifers are mated over a short period and can be completed before mating starts in the cows. There are three options worth considering;

#### Heifer Co-Synch CIDR synchrony -

Becoming increasingly popular. No fuss - just three yardings involved plus timed AI - no heat detection necessary. CIDRs can stimulate pre-pubertal (poorly grown) animals to cycle (prostaglandin has no effect on these). Nine days from CIDR insertion to insemination. Cost ~\$28/head excl GST plus time.

#### Double Shot Prostaglandin (PG)

- Two doses of PG given 11-14 days apart (we recommend 14 days). Mate to detected heat for 6 days post injection. For mating start date of e.g. the 16th of October, first injection required on the 2nd of October. Total cost ~ \$11/head excl GST, plus minimum Visit Fee.

Why Wait PG Programme – Mate to detected heat for 6 days and inject the rest with PG on day 6. Mate to detected heat for a further 5 days. Usually work on 60 - 70% of heifers remaining at day 6. Cost per dose ~ \$5.50/head excl GST, plus minimum Visit Fee.

removed after weaning. The coccidiostats in calf meal inhibit coccidia growth, when the meal is removed the coccidia will continue their development and complete their life cycle which can result in disease. Trial work in NZ has shown that calves treated with Toltrazuril (Toltrox) when meal is removed are 3-5 kg heavier 5 weeks post meal removal than those that aren't treated. This was in an environment with a relatively low coccidia burden. A lot of our farms will have much higher burdens than this so perhaps we could expect even greater weight gains. If you have had calves in previous seasons that just don't do well when meal is removed it would be advisable to consider the use of Toltrox in calves at calf meal removal.

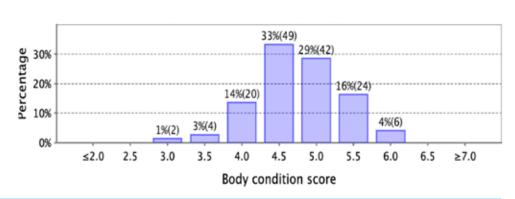


## **Cow BCS Going Into Mating**

Cow BCS going into mating is one of the biggest determinants of mating success. The greatest factor governing herd body condition going into mating is the condition at calving.

We know that from DairyNZ studies and from the National Herd Fertility study (conducted locally), that optimal reproductive performance will be achieved in mature cows with a BCS of 4.5-5.0 and in first lactation heifers with a BCS of 5.0-5.5. Aim to have no more than 15% of cows below BCS 4.0 at mating with an ideal average score of 4.7. The herd profile to the below, came from a local herd and would be ideal going into mating.

In the next month concentrate on improving the bottom end of your herd. Cows below 4.0 and heifers below 4.5 should receive preferential feeding. Do you know your herd profile?



#### 24 Sept 19 (147 animals - mob, average: 4.8)

### **Bull requirements for mating**

Start sourcing bulls NOW. These should be blood tested free and vaccinated for BVD. A 700 cow herd with an average reproductive performance – i.e. 82% 3 Week Submission Rate and 52% Conception rate and a 65% 6 Week In-Calf rate,

- if doing a 4 week AI period would need 14 sound bulls in the herd at all times, plus another 14 to rotate and possibly 5 to back up.
- if doing a 6 week AI period would need 8 sound bulls in the herd at all times, plus another 8 to rotate and possibly 3 to back up.
- a good idea is to run a marker bull e.g. a Hereford with the mastitis/lame mob throughout the AI period to minimise the need to heat detect in this small mob.





Hamish Newton BVSc, PhD Oamaru Veterinary Centre

## Uddernews (

over milking is occurring. Examine the actual

skin of the teat and decide if it is "soft and

supple" and not cracked, if the skin is it not

soft and supple then check the emollient

levels in the teat spray and make sure the

spray is actually getting on the teats. Finally

closely examine the actual teat ends. If the teat end is not smooth but has a "rough or

warty" appearance then there has either been over milking occurring for a few weeks or the "massage" of the teat during the

pulsation cycle is not effective, so look at

the pulsators and the liners. As a final check

make sure all the wands for the teatsprayers

are actually working. There are plenty out

there not working well when I have been

## **Milking Routines**

Before the start of mating, when heat detection and drafting often disrupt the milking routine, take the time to make sure the whole team is milking your cows as well and efficiently as possible. I suggest that whoever is responsible for your shed has a look at the teats once the cups have been removed. How the teats look once the cups are removed will give you a very good indication of how the machine is interacting with the cow. Look to see if the teats are swollen or discoloured (look at the pink teats) and overly firm, this could well suggest that

## **Antibiogram Results**

Spring Antibiogram results will become available over the next two months. An Antibiogram, taken from a Bulk Milk sample, cultures any Staph aureus and Strep uberis that is present, and then determines what concentration of different antibiotics are required to kill these bugs. We will be using this data to either confirm that what has been scripted for your farm is still appropriate, or to make a rational change to what we dispense for your herd going forward.

## **Tracecheck Feedback**

Over the last few weeks many of our clients have blood profiled their herd for trace mineral leading into mating.

Three brief observations;

- Vitamin B12levels on most farms have been good to date but these often drop as we enter lush second round grass. A combination of low dry matter , high crude protein and low fibre (NDF) reduce the formation and absorption of vitamin B12. Loose faeces area good indicator of these feed attributes. Consider strategic early October injection.
- Low Zinc levels have been seen in a large percentage of farms. Zinc is both important in cow immune function (i.e. slow clearing of uterine infections) and successful conception. Additional supplementation of chelated Zinc or strategic use of Multimin 2-4 weeks from mating may improve the reproductive odds.
- Low lodine levels are being seen in many mobs, especially those that no longer use lodine based teat sprays. The best way of supplementing lodine is using 10% Stock lodine, added

daily to your dos-a-tron at 25mls/100 cows. lodine is an important part of driving healthy metabolism and is key for producing good heat expression, conception and early embryonic survival.

metrichecking!!



## **MINDAlive**

Hopefully since last month's article if you were not already using the MINDA app, one of our vets has convinced you to give it a go and you are comfortable putting in health events as they occur. There is now likely to be the odd cow or heifer leaving the herd in the next few weeks e.g. slips that did not come into milk, the odd Johne's cow, or a heifer that has failed to make the transition to herd etc. Give the "remove animal" button a go. The first decision that is asked is, if the removal is due to being Culled, Sold or Died. Once you get to Reason page you can be as detailed as you want. Most of the value of this exercise will come from recording the broad reason cow left the farm (Culled , Died or Sold) and the actual date it happened.



## PREPARING FOR MATING



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Many of our clients are putting more strategic thinking into mating this season, to get the best returns and outcomes. A number of areas are worthy of consideration when planning:

Fertility BV of bulls. If lifting 6-week in calf rate and reducing empty rate is a high priority for your operation it is worth paying attention to the Fertility BV of the bulls you are selecting. Chris Burke's DairyNZ 'Fertility and Genetics' study showed differences in reproductive performance that far surpassed what is predicted by the Fertility BVs of the High and Low fertility BV lines. (6 week-in-calf rate comparisons between these lines were; 67% v 37% in the 1st lactation and 74% v 39% in the 2nd lactation). If fertility is a priority aim for bulls with fertility BV's of +4-5 or greater. Sexed Semen. Some farms are looking to target the use of sexed semen in their highest BW animals and/or maiden heifers to provide the targeted number of heifer replacements and then use beef semen over the remainder of the herd. Be aware that sexed semen is sourced from genomically tested bulls (i.e. they are not sire proven).

Gestation Length and PSM. Last season LIC measured the nations average recorded gestation length. This came back as 280.7 days, which is 1.3 days less than the long used 282 day gestation for a diary cow. Many farms this season have voiced concern that far too many animals had calved well before the intended Plan Start of Calving (PSC) and thus it is putting significant pressure on feed demand through the first round or grazing (some finishing earlier than the 15th of September). Heifers in general have slightly shorter gestation length and if using 'easy calving sires', this often also transpires into a shorter gestation length. Several farms this season have indicated a shift back of their PSM.

**Planning to Succeed** 

**Synchronisation.** CIDR Synchrony or anoestrus programmes require synchrony beyond just the cows themselves. Our vets and admin team work hard to; liaise with farmers, techs and the semen companies to ensure overloads do not occur on specific days. We also

look to coordinate and engineer program times to fit in with tech time availability (and thus avoid the district chaos that would result without this coordination). Please book in early to ensure the smooth running of these programs.

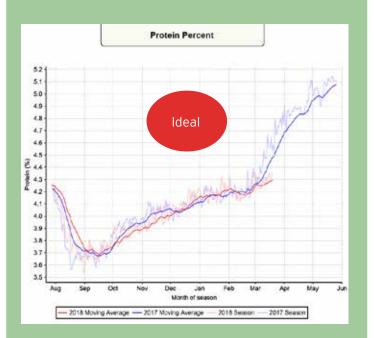


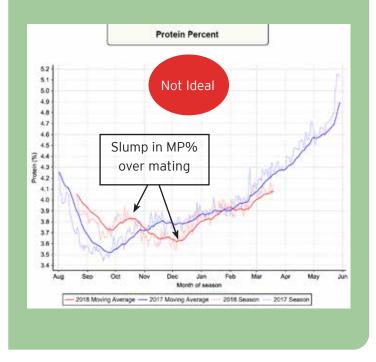


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**Having cows 'on a rising plane'** At a herd level your milk protein percentage is quite a good indicator of energy status of the herd. For most herds the lowest point in milk protein % is seen in mid/late September and from here ideally you will see a steady gradual rise through the rest of the season (referred to as the Nike tick). A curve going down or with wild fluctuations in October/November indicates cows are likely to be in periods of negative energy balance and this will have a harmful effect on mating. Ensure that cows energy requirements are met daily over the next two months.



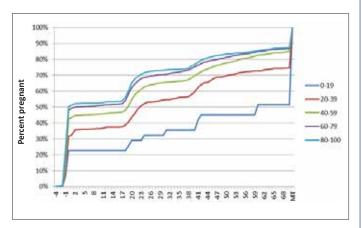


**Using hormones isn't natural!?** Did you know - all healthy cows that re-enter a cycling state require the same orchestrated sequence of hormones that are used in a CIDR programme. Hormonal programmes just assist those anoestrus cows back into the 'normal state' of their herd mates.

## Backing Winners – Which Cows Should Be Treated with a CIDR?

Our Veterinary Centre reseach team examined 8,500 non-cycling cows treated from 64 farms in our practice. This is the biggest single study conducted in NZ on CIDR outcomes at a commercial level. From this study we were able to identify the optimal number of daysin-milk when treated, best time to treat relative to PSM and the optimal age of treatment. Overall the average first service CR was 47% which is extremely good for cows being mated on the first oestrus for the season. Cows under five years had the best response. Optimal first service conception rate occurred from cows >45 Days in Milk (DIM)and optimal MT rates in cows >40 DIM.

Relationship between Days since calving at treatment and Reproductive Outcome



## How is your herd tracking pre-mate?

Count cycling cows. Aim for

Day - 15 70% cycled

- Day 1075% cycled
- PSM 85% cycled

