

Dairy Farmer Newsletter

November 2014



CLUTHA · V · E · T · S ·
Animal Health Centre



Balclutha Vets

John Smart	B.V.Sc.
Jason Darwen	B.V.Sc.
Rob Mills	B.V.Sc.
Hamish Moore	B.V.Sc.
Catherine Copland	B.V.M.S.
Peter Heslip	B.V.Sc., M.A.C.V.Sc.
Steven Butler	B.V.Sc.
Annie Jackson	B.V.Sc.
Elsbeth Dunne	B.V.Sc.
Isobel Topham	B.V.Sc.
Bevan Topham	B.V.Sc.
Ruth Andrews	B.V.Sc. (Locum)

Milton Vets

Peter Kalb	B.V.Sc.
Jillian Clark	B.V.Sc.
Sid Taylor	B.V.Sc, M.A.C.V.Sc.
Barbara Christensen	B.V.Sc, M.A.C.V.Sc.
Keara Brennan	B.V.Sc.
Lewis Sparrow	B.V.Sc.

Telephone Numbers

Balclutha Clinic	(03) 418-1280
Retail Direct	(03) 418-1281
Milton Clinic	(03) 417-8032
Clydevale Store	(03) 415-9121

Web: www.cluthavets.co.nz

Email: admin@cluthavets.co.nz

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Around the Practice

October has proved to be a difficult month weather wise with a lot of rain and wind. The poor weather has reduced grass growth meaning that little supplement has been made thus far. Here's hoping things will turn the corner in November.

We have been busy finishing off the last of the debudding and metri-checking for the season. If you do still need some late calving cows metri-checked or calves debudded now is the time to book them in. Debudding calves once they are over 6-7 weeks of age can become difficult as the buds are growing into horns

and the calves can be difficult to handle. While there has been some nervousness about the forecast payout we have still seen most people taking a very proactive approach to mating and the treatment of their non-cycling cows.

Lewis Sparrow who has been with us for the last 2 years has decided to move northwards to be closer to his beloved. His unique sense of humour and personality will be sorely missed at both Balclutha and Milton. We are currently in the process of employing two new graduates to start in early 2015.

Maximising Your Submission Rate

By Hamish Moore

You should aim for a 3 week submission rate of 90%. You can perform a simple calculation to assess how you are tracking towards this target through the A.I period. You should mate on average 4.3% of your cows each day. The percentages are shown at 5 day intervals below:

Day	Percentage of the herd cycled
5	21.5%
10	43%
15	64%
21	90%

Where does the 90% 3 week submission rate come from?

The 90% submission rate is the targeted 3 week submission rate as this, combined with a conception rate of 60%, will give you a 6 week in calf rate of 78%. Those that achieve a 6 week incalf rate of 78% can have a short mating of 9 weeks and still only have 5-8% empty which is the dream of every farmer I am sure.

Over the past few weeks while metri-checking and inserting CIDRs I have been taking a particular interest in the tail paint on cows. I have noticed that there is a wide range in the quality of tail painting.

The basic idea of the tail paint is to apply it to the area of the cow's back which is most likely to be rubbed when she is standing to be ridden while on heat. It is most useful in identifying cows which have had weaker heats, as those with a strong heat that have been mounted many times are going to be obvious even to the inexperienced eye. If too much tail paint is applied, or the strip of paint is too wide, then this will hinder its ability to be rubbed off especially if the cow has a weaker heat and is only mounted a few times. Alternatively if the paint is applied to the long winter coat and the hair then starts to fall out, heat detection can become very difficult.

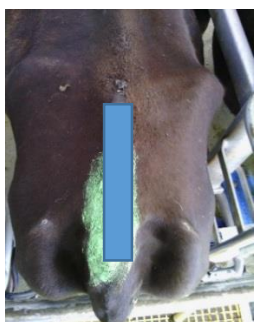
Incorrectly applied tail paint



Tail Paint is not far enough forward.

Tail paint is too wide

Correct position for tail paint



Some basic pointers when applying tail paint –

1. Only use a registered tail paint product as normal paints are not designed for the job.

2. All cows should be tail painted 5 weeks prior to the start of mating.
3. Tail paint should be applied from the base of the tail forward about 20-25 cm including the elevated ridge just behind the hip bones.
4. The tail paint should be about 2 - 2.5 times the width of the tail paint nozzle.
5. Always remove all excess hair and previous tail paint when repainting the cows.
6. Tail paint should be touched up daily (as needed) during the mating period.

The A.I period is the culmination of a huge amount of hard work that you have put in over the previous 9 months. It includes actions such as –

- The 16 hour milking of cows from February onwards.
- The early drying off of light cows and preferential feeding of these cows over the winter.
- Your transition management on and off the crop.
- Calving management.
- Trace element supplementation, metri-checking and feeding post calving.

In order for you to benefit from all of the above, maximising your heat detection and 3 week submission rate is paramount. This can be achieved by following some basic guidelines –

1. Have your best heat detector doing all of the heat detection for at least the first 3 weeks.
2. If in a rotary shed the designated heat detector should do their heat detection from the vet stand.
3. Ensure that your system for drafting cows identified on heat is working 100% of the time.
4. Use tail paint (applied appropriately) in conjunction with heat mount detectors if possible.
5. Perform paddock checks for at least the first 3 weeks to help identify the cows with weaker heats.
6. Use intervention programs such as CIDRs for cows that are not cycling.
7. Use a teaser bull to improve the detection of weaker heats.

Options for Non-Cycling Cow Treatments

There are a number of different options for treatment of non-cycling cows which include:

- blanket treatment with a CIDRSynch programme
- blanket treatment with OvSynch
- treat some cows (based on age, BCS, Days Since Calving etc) with CIDRSynch; leave the rest
- do nothing (they will usually cycle eventually!)
- run with bulls (or teaser bulls).

As routine inductions have been removed from our tool box, now is the time to ensure that next season you have a tight calving spread. We would recommend counting the numbers of non-cycling cows and then putting a plan in place with your vet from the options that are available.

CIDRSynch Programme

We know from our own experiences, and from NZ trials, that the CIDRSynch programme will consistently give the best results and the best financial return. As for last year our recommended treatment for non-cyclers will usually be a

CIDRSynch programme which takes ten days from insertion to fixed time insemination. The timing of events within the programme is crucial, and there is little room for error. Please refer to the following table, discuss thoroughly with your vet and AI technician, and do not suppose that you can change a thing!

Once your first visit has been completed you should contact your AI technician and get him/her to commit to an insemination time on Day 10. The timing of CIDR removal (Day 7) and GnRH injection (Day 9) will depend on this. You also need to bear in mind how long it is likely to take to inseminate these cows (eg 2 hours for 100 cows). If the technician will start serving those cows at 12 midday on Day 10, and anticipates taking about 2 hours, then the GnRH injection must be given between 6pm-8pm on Day 9 (ie 8-20hrs prior). CIDRs will need to be removed (& PG injected) 50-56hrs before this, so between 12pm and 4pm on Day 7 if GnRH injection is to be at 6pm on Day 9. Aim for 72 hours between CIDR removal and AI and this should work well.

Event	Timing
1. Insert CIDR + Inject GnRH	Day 0 (eg Monday) – time not important
2. Remove CIDR + Inject PG +/- eCG (AI to detected heat)	Day 7 (Monday)
3. Inject GnRH – all unmated cows	Day 9 (Wednesday) – 50-56 hrs after 2
4. Fixed time AI	Day 10 (Thursday) 8-20 hrs after 3

Ovary Scanning of Non-Cycling Cows

Over the past few seasons we ovary scanned a large number of non-cycling cows. This allows us to view the structures present on the ovaries at that time and make an appropriate treatment decision for that cow. Cows that have active ovaries can be treated with far less expensive options such as an Ovsynch program or a PG injection. Last year we scanned a large number of cows and then assessed how well these got in calf depending on whether they were CIDR'd or treated with one of the other options. While this was by no means a scientific study, and there was a huge amount of farm to farm variation, our feeling was that the cows that were treated with the Ovsynch programme in the first 2-3 weeks of mating did not perform as well as the cows that were CIDR'd. However, from week 3 onwards the Ovsynched cows performed just as well as the CIDR'd cows, and the PG'd cows outperformed both of the above programmes.

Heat Detection Test Kit

The **P4 Milk Progesterone Test** is a new product on the market to aid farmers with accurate heat detection. It measures the hormone, Progesterone, level in the milk right there beside the cow (\$8.37/test, come in boxes of 25). Squirt a sample of milk into your palm, suck it up into the test kit and it gives a definite 'Yes' or 'No' answer in less than 5 minutes.

While it isn't going to take over from tailpaint and other heat detection aids, especially for strong heats, we see this test as extremely useful for farmers to sort out those cows showing weak heats:

- faint tail paint or scratchy pad rubbing – is this cow really on heat today?

- cows that seem to come on heat again in the middle of their cycle? – is this cow really on heat today?
- cows that have weak heats around 18-24 days after being inseminated – did she hold to that last AI or should I put her up again?

Re-inseminating a pregnant cow significantly increases the chance of her losing the first pregnancy with 19% of these cows re-absorbing.

Bull Testing and Management

By Isobel Topham

AI is heading into full swing... A great time to get organised and on top of things for when the bulls go out. On average 30-40% of your herd will be non-pregnant at the end of AI and will require bull power to get in calf.

Getting the most out of your bulls:

- Did you know that around **1 in every 20 bulls FAIL** semen quality testing and should not be used as breeding bulls. There are another 8% of bulls on top of that who have marginal semen quality. As the price of a bull is often in excess of \$1800-2000 it is worth considering getting your bulls tested prior to their arrival on farm. Any bulls that fail are then able to be rejected and replaced before you need them. Clutha Vets has recently purchased a new bull probe and microscope for the purpose of bull testing and this can now be done in house very cost effectively. A full veterinary soundness exam can also be performed at the same time.
- So how many bulls will I need?
 - A rule of thumb is 1:30 2yr old bulls in the paddock at any time for all estimated non-pregnant cows; and 1:15 or 1:20 for your heifers.
 - Be conservative when estimating the pregnancy rate; a 90% submission rate with a 50% conception rate over six weeks of AB will produce a 70% in-calf rate. This means: **for a 500 cow herd with a 70% in-calf rate, two teams of 5 bulls are required** + a couple of spares. Don't underestimate the amount of semen you need! *Each bull only needs to get one cow in calf and he's paid for himself.*
 - Well-grown yearling beef bulls are fine over smaller crossbred cows but don't expect these bulls to serve as many cows - an approximate ratio is 1:20.
- Every bull should be BVD tested, and have completed the two dose course of BVD vaccine at least 4 weeks prior to going out. Lepto vaccination status is worth considering when selecting your bulls. 7 in 1 vaccination covers this, plus prevents clostridial diseases, bonus!
- Make sure your bulls don't get shagged out – rotate them frequently. Any longer than three days and all the required parts start getting tired.
- Having two teams is ideal. Establish the bull groups well before mating, and keep them the same throughout to reduce the amount of time bashing heads, and maximise their useful energies.

- Try to keep the bulls off the lanes and off the yard if possible, it really helps to save their feet.

Dried Off?

She just dried herself off? Let us help! Year on year, there seems to be an increasing incidence of cows presenting with left displaced abomasums (twisted guts), which may be associated with increased concentrate feeding. Typically these cows only show a gradual decline in milk production and reduced appetite. Sometimes there will be signs of ketosis eg. pear-drop breath, staggering and licking more. If identified early, with no complications, the surgery to fix these left displaced abomasums is usually straightforward and the chances of her returning to milk are good. So give us a call and get her checked out. We can fix these ones!

Salmonella in Adult Cattle

Salmonella is the most common disease associated with acute diarrhoea in adult cattle. In New Zealand, most cases are due to Salmonella Typhimurium, which rarely causes abortion. Salmonella is a serious zoonotic disease (i.e. humans can catch it from animals). Attention must be given to personal care and hygienic practices when dealing with infectious animals. Avoid drinking raw milk!

S. Typhimurium is not host specific and transmission may occur between cattle, or from other domestic species or wild animals. Spread can be directly animal-to-animal, or from contaminated feed or water. Animals / birds / people / equipment can also transfer infection between properties. The bacteria can persist for long periods of time in the environment eg between 4 months and 2 years in contaminated rearing premises, pasture and soil. Overcrowding, calving and sudden dietary changes can predispose adult cattle to Salmonella infection. Inductions and BVD infection may also predispose. *High levels of Magnesium supplementation* (or sudden increases) are likely to increase the risk of outbreaks in dairy herds.

Adult cows usually present as not eating; off their milk; raised temperature; profuse diarrhoea often containing blood, mucus and gut lining (nasty!). Dehydration (sunken eyes) may be obvious. Veterinary involvement is recommended as early as possible to allow proper diagnosis, appropriate antibiotic choice (Bovipen and Tylo won't do any good!) and supportive therapy (fluids, anti-inflammatories). Affected animals should be isolated.

Our experience in South Otago has generally been of occasional cases in adult cows, however this year we have experienced a severe outbreak of S. Typhimurium on one dairy farm, where approximately 30 cows were affected, including several deaths. As a result of this, and other outbreaks around the country, **we now strongly recommend vaccination of all cattle with Salvexin-B**. Vaccination will not give 100% protection on its own, but may reduce the frequency and severity of the disease when used in combination with appropriate control measures. Cost is currently 85c per dose (incl gst).

Lame Cows

We have recently noticed an increase in axial wall cracks when treating lame cows on farm. This is usually a less common cause of lameness, but often painful and awkward to treat. The cracks form along the inner hoof wall and often fill with mud or grit, in time you may find 'proud flesh' also forms and they require a vet visit to sort out. We are

interested to hear if the occurrence of these cracks on farm is increasing.

Please email kbrennan@cluthavets.co.nz if you have noticed this on your farm.



Lameness Workshops

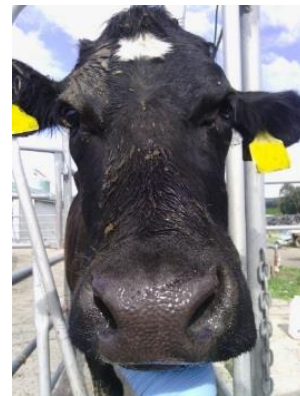
We still have funding from DairyNZ to run LAMENESS PREVENTION WORKSHOPS at a bargain \$30 per person. These are entry level staff training workshops on the basic ways to PREVENT lameness on farm.

Please email kbrennan@cluthavets.co.nz if you are interested in sending staff to a workshop.

Interesting Case

By Lewis Sparrow

This cow was noticed to be slightly off colour with a reduced gut fill. There were no obvious signs of illness until we looked at her head. On the left hand side she had reduced nervous function with a drooping ear, a reduced blink reflex, a muzzle that didn't twitch and a stiff jaw. We took bloods to look for evidence of infection which returned clear, but the pathologist suggested early Listeriosis so she was treated with antibiotics for a week. She has now made a full recovery and is milking well.



Retail News

This month's list is as follows:

- **Milligans Calf Milk Powder 20kg** - \$91.99 tonne rate (bag price incl.) or \$94.08 nett incl. per bag.
- **Eprinex** – buy 3 x 5lt get another one FREE.
- **Eclipse E Injection** – buy 3 packets get the 4th packet FREE.
- **Merial Ancare Christmas Hams** – available on qualifying cattle drench – enquire at retail.
- **Nexeptrin Microjet Cattle Injection** – contains Eprinomectin and Vitamin E. Low dose of 1ml / 100kg. Purchase 4 packets and receive a FREE Samsung Galaxy Tab 3 (7").
- **Take-A-Mate Fishing - Stewart Island** – All purchases of Merial Ancare products go in the draw to win a place on this trip, and you get to take a mate.