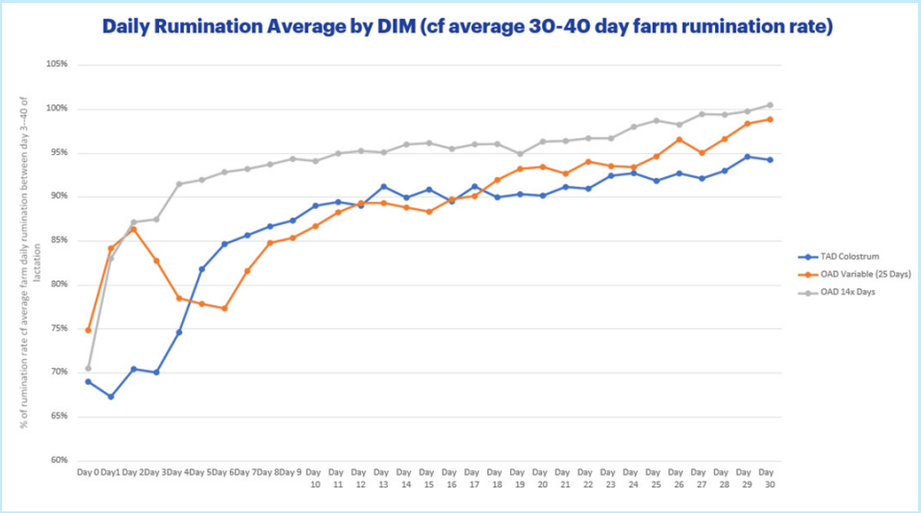
MAY 2022

Veterinary Centre MoozNews

Repro Reviews

Ryan Luckman **BVSc (Dist) MANZCVS (Epidemiology)**
VETERINARY CENTRE Waimate

This month we have been doing repro reviews with many of our farmers. For those with collars, these reviews are packed with a whole heap of extra data. This allows us to objectively assess the performance of the farm with regards to springers, transition feeding, pre-mate cycling rates, weekly conception rates, phantom cows, and feeding levels.



At this years SIDE conference we will be presenting a repro review case study alongside Ben Smith, one of our early adopter collar farms. Many of you will know him as the "orange line" in the transition graph that we have used widely in many of our presentations.

At the SIDE conference we will be walking through the changes that Ben has made to his systems, what results he has seen, and anything he'd do different next season.

Conferences are a great place to network, challenge your current thinking, and find out what your peers are doing. This years conference is in Oamaru on the 8th & 9th June, so there's no excuse not to get along!! Visit ***www.side.org.nz*** to register.

Run by farmers for farmers

SIDE is the South Island's premier dairy event

WEDNESDAY
8 JUNE
10AM - 4.30PM

Brydone Hotel, Oamaru

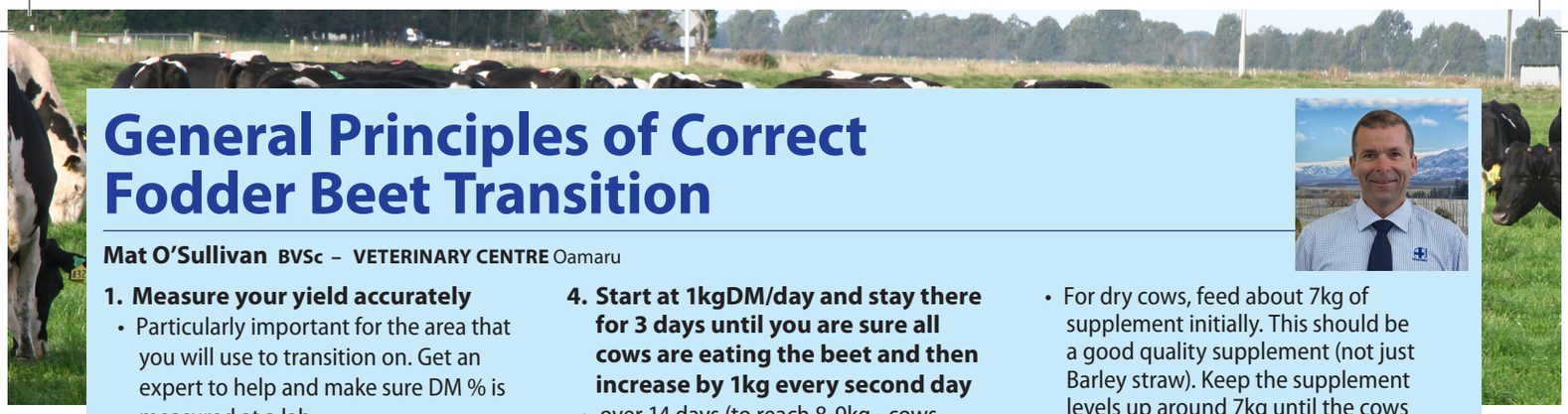
In this Issue

Veterinary Centre Winter Dairy SEMINARS

Save the Date

We'll be running the Winter Dairy Seminars on 29 June. Venues and topics are still to be confirmed.

Thank you to all those who replied with their preferred topics.



General Principles of Correct Fodder Beet Transition

Mat O'Sullivan BVSc – **VETERINARY CENTRE** Oamaru

1. Measure your yield accurately

- Particularly important for the area that you will use to transition on. Get an expert to help and make sure DM % is measured at a lab.
- Rows are generally planted 50cm apart so there are usually two rows per metre square. A 25-tonne crop should contain 2.5kgDM/m2 and 1.25kgDM/linear row metre respectively.

2. Allow at least 1 linear metre/cow along the face of the crop

- The 1m spacing means all cows can reach the face and ensures that shy cows can eat. NOTE: Any time a practice leads to differential feeding rates (i.e. shy cows unable to eat) then you will increase the risk of acidosis.

3. Ensure there is a 6m (minimum) to 10m headland that can be used for transitioning

- The headland provides space for cows to enter the crop face and turn (important for less dominant cows). Using a beet bucket to harvest bulbs and create a headland is the most common method used. This headland can also act as an area where supplements can be fed.

4. Start at 1kgDM/day and stay there for 3 days until you are sure all cows are eating the beet and then increase by 1kg every second day

- over 14 days (to reach 8-9kg - cows which have never eaten beet before may/will take 21 days to achieve this). Ad-lib maximum intake is 10-12kg depending on breed size.
- Cows should not enter the paddock full on grass or supplement before-hand as some cows will not eat - leading to others overeating.
- Train cows to stay and eat their allocation. Even if most is eaten in 20 minutes, cows should stay on the break for 2-3 hours so they all learn that they need to eat.

5. Setting your allocation

- Cows can comfortably graze 45cm under a wire. Set your fence 30cm back from the row you wish to graze.
- Keep it simple – if you know your tonnage/ha, this will covert to kg/linear metre divided by two. Graze the length of your rows.

6. Feed a good quality supplement, but do not overfeed this.

- For dry cows, feed about 7kg of supplement initially. This should be a good quality supplement (not just Barley straw). Keep the supplement levels up around 7kg until the cows reach around 4kg of beet.
- Once at 5kg of Fodder beet supplement can be reduced to 4kg (assuming it's not just barley straw!). Then keep the FB climbing
- 2-3kg of a hay or straw should be maintained even with cows at max feeding levels.

7. If you find beet underfoot BEFORE day 7, pull back – you have over allocated!

- You typically see the biggest issues with acidosis and deaths at day 7-10 of transition. It takes around 7 days for cows to reach maximum intake (but a further 7 days for the rumen to get ready).

Targeting BCS 5.0 at Calving

Mat O'Sullivan BVSc – **VETERINARY CENTRE** Oamaru

It is a well-known industry target that cows should be a minimum of BCS 4.5 at dry off at the end of May. If this is reached then cows only require a gain of 0.5 of a BCS over the winter to reach the desired target of 5.0 at the point of calving.

Cows which are at BCS 3.5, should be dried off now. Cows less than 3.5 are unlikely to get to BCS 5.0 by calving even if maximally fed. Most herds gain half a BCS over the winter and cows on true ad-lib beet feeding can gain 1-1.2 of a BCS if managed well.

Ideally cows would be wintered in groups according to predicted calving date. However, if there is a wide range in the BCS profile cows may need to be split up into BCS groups for tailored feeding through June and early July and then split into calving groups from mid-July.

An alternative is to winter the majority of cows in mobs based on predicted calving date, but also form a mob of light cows and a mob of fat cows.

Remember the aim is to restrict intakes of springers by 10-14 days before predicted calving date, so the BCS target of 5.0 needs to be reached by 15th -20th of July for an early calver.

The Vet Centre offers a whole herd BCS service. We record this on Infovet (during milking) and then create mobs for wintering based on BCS and calving date. This information is also used to calculate required daily feed intakes for these mobs. Call you Prime Vet for more details.

Autumn Dairy Drenching

- There is considerable trial work available both nationally and in our district showing that drenching lactating dairy cattle is likely to result in an increase in milk solids production.
- Cydectin Pour-On and Eprinex are two of the most effective anthlemintics, both having significant persistent activity against Ostertagia species of 4 weeks or more.
- Both Cydectin and Eprinex have nil meat and nil milk withholds making their use in lactating herds very easy to manage.
- Genesis cattle pour on is a premium abamectin product with 14 days persistent activity. It has 35 days meat withhold so needs to be managed carefully when making culling decisions.

Whatever your approach to autumn drenching of your herd we are always available to give professional advice on the products available that will optimise your herd performance.

Active: Abamectin

Label Claims

- 14 days persistent activity
- 99% effective against lice

Withholds

Milk Nil • Meat 35 days

Notes -

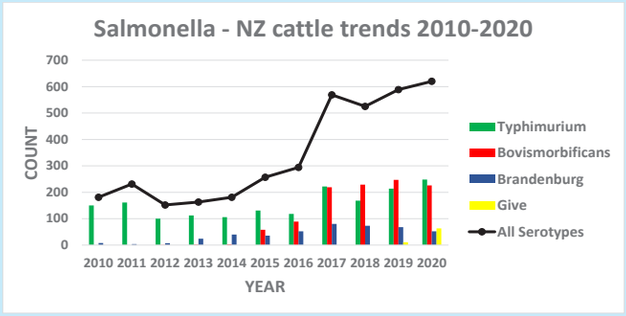
Abamectin restrictions apply if supplying Oceania Dairy.

Salmonella Cases on the Rise

Salmonella is a significant disease of cattle. It is increasing in prevalence and is found throughout New Zealand. Salmonella is

3.8 times more prevalent now than in 2013

as the graph below shows (Surveillance data, MPI).



Salmonella is a bacteria that is usually spread by healthy carrier animals which don't show signs of disease but shed bacteria (usually intermittently or at low levels). There are many serotypes, but the most important are shown on the graph above. *Salmonella Give* is a recent addition, currently only found in the Waikato and Bay of Plenty.

Outbreaks happen when ingestion of an infective dose of *Salmonella* occurs at the same time as a stress (a change in feed, young calves, late pregnancy or immune suppression). It is at this time that animals become sick or abort from *Salmonella* ; sick animals shed more *Salmonella* into the environment, which can infect other naïve flock/herd mates, making the outbreak worse.

The impact of an outbreak of *Salmonella* on a dairy farm can be devastating. On average 10% of cows become sick, and approximately 1-2% die.

Ways to reduce the risk of *Salmonella* on your farm are:

- Clean and disinfect yards between groups of animals
- Minimise time off feed when yarding/transporting
- Separate stress events (eg transport and vaccinating)
- Vaccinate at-risk animals prior to stress events or diet changes
- Double check magnesium supplementation forms/rates

In many cases, vaccination will be recommended. Salvexin+B is the *Salmonella* vaccine for sheep and cattle in New Zealand. Most farms only need to prevent one cow dying from *Salmonella* to justify the cost of preventatively vaccinating the whole herd.

A practical time to vaccinate for dairy farmers is around drying off, and this will allow colostral antibodies to pass into the calf.

Salvexin+B ACVM A007886

ACVM A006203

$4.72 Excl GST
per 500kg Dose

Active: Moxidectin

Label Claims

- 35 days persistent activity against Ostertagia
- Label claim against lice

Withholds
Milk Nil • Meat Nil

Notes -
A flexible and effective product for use whilst still lactating.

Nitrate Poisoning

Vanessa Love BVSc – VETERINARY CENTRE Ranfurly

Nitrate poisoning is due to a buildup of the compound in plants that cattle are grazing or accidental fertilizer ingestion. The nitrate ion in the plant becomes nitrite in the rumen, enters the blood stream and combines with red blood cells. This causes non oxygen carrying methemoglobin to form instead of hemoglobin. Cows are particularly vulnerable.

Clinical signs can occur within an hour of exposure to the toxic feed and include:

- Salivation and frothing
- Diarrhoea
- Abdominal pain (especially if fertilizer is the cause)
- Laboured breathing
- Staggered walking
- Body tremors
- Blue/grey gums
- Coma and death

Nitrate poisoning cases usually involve multiple animals. The treatment is methylene blue dissolved in saline given intravenously, which replaces methemoglobin with hemoglobin and if given quickly enough will save the animals life. While waiting for your vet to arrive, all animals that seem unaffected should be moved away from the toxic feed and monitored closely.

Eye fluid and blood from deceased animals can be tested for nitrate levels, and the blood usually has a characteristic chocolate brown colour.

Plants use nitrates for growth as a protein source, this process requires energy from photosynthesis. Nitrates build up in plants during periods where photosynthesis is limited such as during prolonged foggy weather, low temperatures and during frosts.

When rain breaks a drought, plants rapidly pick up nitrates and commonly become toxic.

The most affected feeds are annual rye-grasses, some new pastures, oats, kale, rape and brassicas. Suspect feeds can be tested either at your local Veterinary Centre clinic or test kits can be purchased for use on farm. The test turnaround time is approximately 40 minutes and only requires two handfuls of the feed. Toxic feeds should be retested at weekly intervals until safe to feed.

Risk can be managed by feeding suspect pastures or crops in the afternoon during winter, and filling cows up on hay before changing breaks.

UdderNews

Hamish Newton **BVSc PhD – VETERINARY CENTRE** Oamaru

May has arrived so cows will start to be dried off. Regardless of what products you are using they will work best if they are applied correctly and to cows that don't lose some or all of the product after it has been inserted.

The following is a slide from the presentation you will have seen or will see at your Milk Quality Review and dry cow consult. It details some practices we have seen that result in good outcomes.

Keep an eye on the weather forecast and try to avoid wet weather as well. Finally please read the "Best practice administration" poster that we are attaching to all dry cow orders (Antibiotic DCT and TeatSeal) and make all of your staff aware of the standard of hygiene you expect when putting any product into a cows teat.

SLIDE

1 At Last Milking
- Identify/mark cows by treatment category with colour codes
- Cows to stand on yard after milking

2 Set Up
- Clean down shed
- All staff have a quick breakfast
- Return for staff briefing – roles and process
- Set up tables, water baths and towels.
- Have an overseer that ensures area stays clean, restocks tubes, provides clean towels, watches job hygiene etc

3 Insertion of Product
- Good practice to have 1-2 pre-cleaners of teats
- Follow best practice administration guide. Teats **MUST BE CLEANED AGAIN** before each insertion
- Mark cows as treated, teat-spray and clean-up tissues/tubes before exit.

4 After Insertion
- Cows stand on yard till last cow treated in mob
- Cows slowly walked back to paddock (controlled by bike in front)
- Put cows in large area, low cover/tag to clean up, feed straw

Copper Supplementation in Young Stock – Heading into Winter

Jess McKenzie **BVSc (Dist) – VETERINARY CENTRE** Waimate

Copper levels in cattle tend to decline the most over the winter months for a variety of reasons including reduced availability, low copper levels in many winter crops and increased foetal demand in late pregnancy (R2's).

R1's

- A 20 gram copper bullet is a safe and effective form of slow-release copper which can be given to R1 calves prior to winter.
- Alternatively, a 2ml dose of injectable copper (Coppermax) may be a more convenient option.
- Coming out of winter, a 2ml dose of injectable copper can be considered.
- Multimin (1ml/75kg) can be given strategically 4 weeks prior to mating (but will not significantly lift liver copper stores).

R2's

- Most R2's will benefit from a 4 ml dose of injectable copper (Coppermax) prior to winter if they have received no other form of copper supplementation in the previous 3-4 months.

Spontaneous humeral fractures in first-lactation dairy heifers is a condition unique to NZ with cases on the rise the last few years. With no overseas data to provide insights as to why these heifers are at risk of fracture, what we have learnt is that the problem is likely multi-factorial.

Copper is essential for the proper cross-linking of collagen with regards to bone growth. Low copper levels have been found in many of these heifer fractures hence the timely reminder that supplementation should not be forgotten.

Nutrition also plays an important role. The second winter is a crucial time for R2 heifers as they are still growing and partitioning energy to the foetus. Research indicates that although the second winter may not be the only period of bone development that puts them at risk of fractures, results indicate that it is likely significant. The humerus continues to grow after the first year of life (whereas the bones in the lower leg have largely finished growing). The humerus is therefore sensitive to changes in diet for a longer period than the bones in the lower leg – ie. the first two years of life. Take care not to restrict feeding levels at any time, but particularly during that second winter.

Youngstock wintered on Fodder beet should also have access to a good quality calcium and phosphorus supplement – low calcium/phosphorus can cause a condition which can also predispose to fractures.

ACVM A009469

ACVM A005259

WHOLE HERD PREGNANCY RETEST – $1.74 plus GST

Identifying just 0.5% empties will off-set the preg testing in cow wintering costs.

Veterinary Centre

MoozNews EXTRA

Preparation of Dairy Cows for Transport

Preventing Down Cows

Follow these 3 steps before your cull cows get on the truck:

Step 1

Stand them off pasture (green feed) for 4-12 hours prior to transport.

Step 2

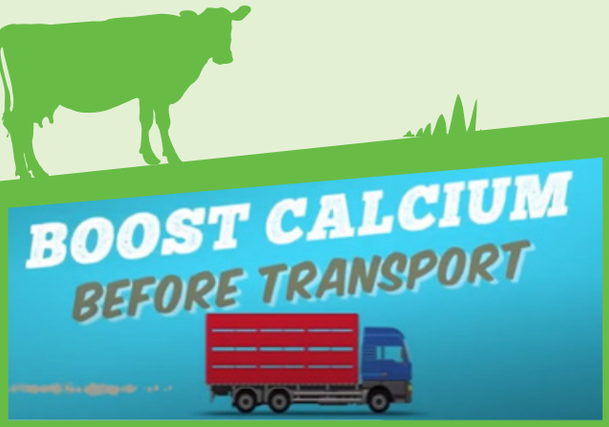
Provide roughage/dry feed and water while they're stood off.

Step 3

Supplement with CALCIUM (lime flour), as well as Magnesium. Add to roughage, dry feed or as an oral drench.

What do I need to do?

It is vital that dairy cows are prepared adequately before transport to another farm or saleyard/slaughter. Even though the risks are greater for lactating cows, dry cows can also suffer from low levels of blood calcium. Therefore, all cows should be prepared properly regardless of lactation status, using the guidance on the back of the page:



In summary it is essential for the welfare of your cows that they are prepared for transport and receive CALCIUM as well as magnesium supplementation. Good preparation will also maximise your potential economic return.

More information can be found here: www.dairynz.co.nz/transport
or seek advice from your vet.

Dairy cows should not be starved.

Stand off pasture for 4-12 hours before transport BUT provide roughage/dry feed and water until loading on the truck.

You can then add CALCIUM and magnesium to the hay/baleage/palm kernel.

1. Add 100 grams of **Calcimate** per cow to feed during stand off (4-12 hrs before transport). This provides each cow with 35g of CALCIUM. An alternative supplement can be used but it must contain the equivalent amount of CALCIUM.

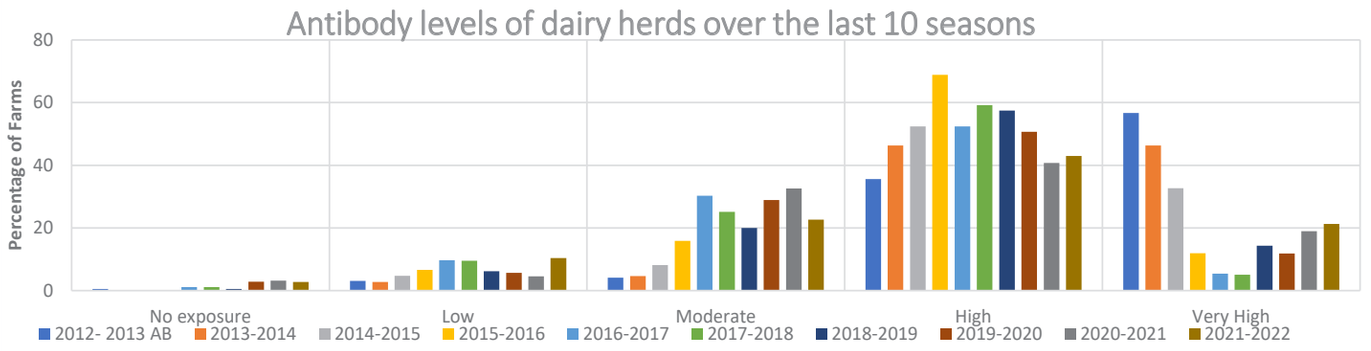
2. Also give 60 grams **Magnesium Oxide**. Note that this contains Magnesium not CALCIUM so is not a substitute for Calcium supplementation.

Veterinary Centre
by the Big Blue Cross

Oamaru 311 Thames Street	03 434 5666	**Waimate** 128 High Street	03 689 7213
Palmerston 29 Stronsa Street	03 465 1291	**Kurow** 32 Bledisloe Street	03 436 0567
Ranfurly 16 Charlemont Street East	03 444 1020	**Omarama** 13 Chain Hills Highway	03 438 9868
		Glenavy 19 Redcliff Road	03 689 8118

BVD Bulletin

Andrew Muir BVSc BSc (Hons) – **VETERINARY CENTRE** Oamaru



Following on from last months BVD bulletin this month we are looking at the bulk milk antibody levels on farm. On your results sheet they are the information highlighted below in the red box.

Result	BVD AbELISA	SP	BVD PCR
29/11/21	Very high exposure	1.02	neg
14/12/21	High exposure	0.88	neg
11/03/22	**Very high exposure**	**1.08**	***

The graph shows antibody levels, which are an indicator or exposure over time. It shows us that over the last 10 years there have large drops in the percentage of herds with high and very high antibody levels (the herds most likely to have active exposure to BVD virus). Over the last 5 seasons there has been an upward trend in the percentage of herds with very high exposure, though nothing like the peak of 10 years ago. At the other end of the graph the percentage of herds with no or low exposure 13% this season versus 8% last season continues to increase. These tend to be the properties that have been put in steps to control BVD in other parts of the farm system (young stock, bulls, neighbours stock) not just the milking cows. If you want to discuss more fully what the antibody results mean on your farm please contact your prime vet.

Drying Cows Off

Luke Smyth BVSc
VETERINARY CENTRE Oamaru

The goals of dry-off are to; cure existing subclinical mastitis infections and prevent new infections through the dry period and early lactation.

To achieve this, not only do we need to select the right cows to keep in the herd and the right dry cow product to treat them with, but we also need to adequately prepare cows nutritionally to successfully dry them off.

For cows doing less than 5L/day (0.4 kg MS/day) this is not a problem- Just do it.

- SCC will be increasing and the risk of an inhibitory grade in spring is much higher if milk volume is very low at dry off.
- For cows doing between 5-10L/day (0.5-1 kg MS/day), these cows will handle drying off fine.
- There is no need to change the diet prior to dry off. But reduce intakes to maintenance for 7-10 days after dry off, 8-10kg DM/day.
- But for cows producing between 10-20L/day (>1kg MS/day) it can be a challenge shutting down production.

- Nutritional changes must be made at least a week before the last milking and then again 3 days before dry off date.
- A reduction in both energy and protein intake will have the greatest effect.

Farewell to Celia and George

At the end of April we farewelled Celia and George from Oamaru – as they head off on their 'OE', with Prague being their first stop, with locums in Scotland for the summer months also on the agenda. George has spent over 5 years with us 'saving lives', and Celia over 3 years. While George is well known to our Maniototo dairy farmers and the squash fraternity in Ranfurly, he has also been known to turn out for Tainui hockey, social tennis and squash in Oamaru. Celia has played Prem netball, donning North Otago colours as well. Her thoroughbred horse has also kept her busy for her time in Oamaru. We wish Celia and George all the best on their adventure – and look forward to their return to Oamaru in the future.