

CLUTHA VETS DAIRY FARMER NEWSLETTER



August 2017



Clinic News

As the flood waters recede and the cows start to calve, we would like you to remember that Clutha Vets has the best interests of your farming operation at heart, and we are here to help you. Thanks for your understanding to those who were affected when we cancelled our pre-calving dairy farmer seminar at Outram. We did this to enable as many of you as possible to attend DairyNZ's flood survival meeting at Henley, and we were really pleased to be able to offer the seminar room in our newly re-developed Balclutha clinic for the equivalent event here.

Our vets, techs and admin staff are ready to go! Annie, Tom, Martha and Jason are returning from winter holidays, and we are pleased to add Dana Fleming to our tech team at Milton, and Brad Storer in Balclutha – it'll be calf disbudding before we know it.

We have farewelled Bridget Mason with our best wishes for the upcoming arrival of her baby, and welcomed back Alice Lee in a part-time capacity at Balclutha. We're having a shift around too, with Martha O'Connor based primarily in Milton, and Marek moving back to Balclutha, from the middle of this month.

Blood Testing

There are dozens of things that can be tested for in the blood of cows, and some people would urge farmers to be testing for all sorts of things all the time, often leading to difficult-to-interpret information and significant unnecessary costs to you. At calving time however, there are a couple of tests that we believe are worth doing, because they have the potential to make a major impact on your cows and your profitability.

The first is BVD testing the young stock (see below). The second is "metabolic profiling" of the herd – checking for magnesium, calcium and ketone levels. Low blood levels of calcium and magnesium, and high ketone (low energy) measures are often related, and do not always show up as cows that are obviously unwell. The herd will however be under-producing, and there are convincing statistics available demonstrating both that many New Zealand herds are significantly affected, and that there can be huge ongoing costs to the farmer. It's been suggested that 80% of herd health problems throughout the whole season can be traced back to the four weeks either side of calving. Some simple testing now, to identify potential problems, may pay for itself many times over.

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Antimicrobial Resistance (AMR) - Tylo and Mastalone

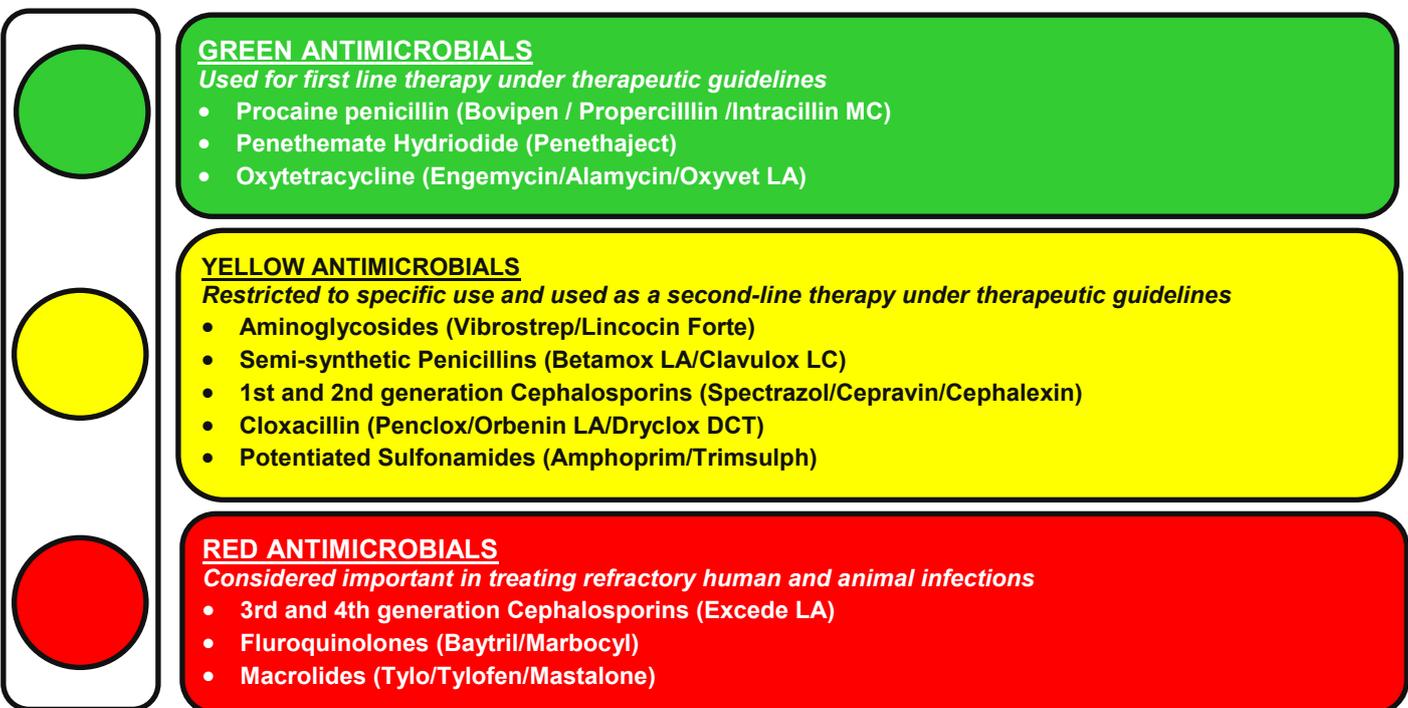
Antimicrobial Resistance (AMR) refers to bacteria that cannot be killed by antibiotics – the popular press sometimes calls these “super bugs”. AMR is big news at the moment, and there seems to be plenty of evidence that we’re all doomed, especially if we ever end up needing joints replaced, or any other significant surgery.

The link between antibiotic use in farm animals and AMR in human bugs is difficult to prove or disprove, but it is fair to say that overuse, or unnecessary use, of antibiotics must be avoided, to prevent the problem getting any worse.

An example of this would be treating lame cows with antibiotics, which is usually unnecessary if the knife work on the hoof is timely and adequate. Another example is Teatseal which many dairy farmers are now using successfully to prevent mastitis in low SCC cows and in first-calving heifers. This is an effective strategy to REPLACE whole-herd antibiotic Dry Cow Therapy **and** REDUCE antibiotic (intramammary) use in the spring through better prevention of mastitis.

Not all antibiotics are created equal, and some are considered of critical importance to human health i.e. ‘last ditch’ cures for some pretty nasty infections. These are the RED LIGHT antibiotics in the diagram below. Vet practices in New Zealand have been asked to help our clients significantly reduce the use of these Red Light antibiotics (in much the same way as we asked you to limit Exceed use a few years ago). If you feel guilty for treating a cow with Tylo or Mastalone, then so you should!

We will be discussing these issues with you at your spring RVM Consult, and working with you to REFINE your treatment choices, so we are all able to demonstrate RESPONSIBLE use of antibiotics.

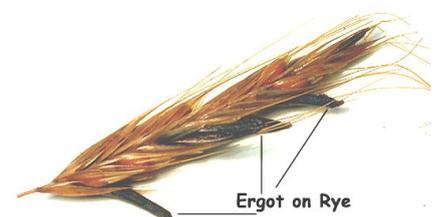


Unusual Diseases

Two cattle diseases have hit the news in the south in recent weeks. We have had two cases of ergot poisoning in our practice area, and there have been more further south. Ergots are fungi that grow in the seed heads of grass (especially rye grass) under the types of growing conditions we saw last autumn. They look like little black or purple mouse droppings, that can be seen in standing grass, hay, baylage and silage. Ergots contain a toxin that restricts blood flow to tissues at the extremities (ear tips, tail, feet), which if severe can cause those areas to die, often requiring the animal to be destroyed. This can be made worse by cold weather, when it has a frost-bite type effect. Ergot poisoning is normally first noticed as swollen hind legs in a number of animals. Because it is feed related, a

significant number of animals can be affected at the same time.

The second disease, discovered a bit north of here, is *Mycoplasma bovis*. This is a bacteria that is common in cattle world wide, but has never previously been detected in New Zealand. It causes mastitis, arthritis (lameness with swollen joints), abortions and pneumonia. Please get in touch if this sounds vaguely familiar to you (but we sincerely hope it doesn't!)



How to calve a cow

- Be kind and gentle.
- Immobilise her somewhere safe for her and you.
- Wash the dung from around her vagina and tail, with disinfectant.
- Using plenty of lube on your arms, establish whether the cervix is dilated, and how big the calf “seems”.
- Establish which way the calf is coming. If there is no head, remember that the fetlock and “knee” on the front leg bend the same way, the fetlock and hock bend in opposite directions. Beware - elbows can feel just like hocks!
- Check that all parts you are feeling belong to the same calf.
- Insert 4-5 litres of warm water and lube. Use a big syringe, or manual pump.
- If you need to rearrange legs, make sure you keep one hand over the claws, to avoid them ripping the uterus. If you need to move a head, keep one hand over the mouth so the calf’s teeth can’t do the same thing. You may need to gently push the calf back into the cow to do this.
- If using a rope on a live calf’s head, make sure it is in the mouth and behind the ears, not around the throat, strangling the calf. This rope is for maintaining the calf’s head in the correct position, not for hauling on!
- If you can’t achieve what you’re trying in 10 minutes, call for help, or try another approach.
- Use clean ropes and chains.
- Don’t start to pull until you have the head and front legs in the correct position (or the back legs, with the tail down).
- Pull slowly; give the cow time to stretch, and work with her.
- Pull down, as well as out, the way a calf would fall if born unassisted. If using a jack, use gentle downwards pressure on the bar to ease the calf out, and crank the handle to take up the slack. If you are using a pulley, anchor it near to the ground.
- Don’t pull with all your might. Don’t tighten the jack beyond what is reasonable. Don’t have two people on a pulley rope. If it doesn’t want to come, don’t force it.
- Roll the calf length-ways as the front comes out, to line the calf’s hips at 45° to the cow’s pelvis.
- Check the calf’s airway is clear, and rub the calf vigorously to stimulate breathing. Use the pressure point on the top gum, and swing or hang the calf to drain the lungs if necessary.
- Clean your arms, check the cow for internal damage and **always, always** check for a twin.
- Don’t pull the membranes if they are not ready to come on their own.
- Give the cow a starter drench, and add her to your “At Risk Cow” list for checking in three weeks. She has a high chance of developing a uterine infection.
- Any problems? Call your vet straight away!

Down Cows

So you have a down cow... What could the cause be? There are any number of conditions that could be to blame. Could it be...

Milk Fever

That’s a good place to start! Not every down cow has milk fever, however milk fever remains one of the most common causes of cows going down in spring. Milk fever is a disease specifically referring to low blood calcium that occurs around calving when muscular contractions and lactation require more calcium than the body can supply.

It is generally seen in high producing dairy cows; usually older than 4 years old; and within a few days of calving. The disease is characterised by three stages:

Stage 1: Up and down, maybe wobbly.

Stage 2: Down; and may have a dry nose, cold extremities, or an S bend in the neck.

Stage 3: Near death; lying on her side, bloated.

At Clutha Vets we recommend a minimum of 1 bag - 500ml of one of our calcium containing products - given slowly in the jugular vein, and another bag given under the skin plus 1 bottle of calcium containing drench orally as treatment for a case of milk fever. It is the safest, easiest way to give some calcium immediately (which she needs) and provide her with enough calcium to prevent her going down again.

The great thing about milk fever is if your diagnosis is correct she should let you know fairly quickly. Signs of response to treatment include shivering, belching, moistening of the nose, and of course standing up!

It is always important to check on recovered cows regularly. As many as 30% of milk fever cases relapse in 12 hours.

What if this cow doesn’t look like a typical milk fever cow? Maybe she’s more agitated and aggressive than depressed and quiet. Well she may have...

Grass Stagers?

Low grade grass stagers, or hypomagnesaemia, is often a complicating factor in milk fever cows that don’t respond to calcium alone.

If magnesium is very low cows can present with clinical grass stagers. In this condition, cows are excitable or aggressive, possibly even down and having seizures (fitting).

Treatment of grass stagers requires magnesium, and because grass stagers frequently complicates milk fever cases, it is never a bad idea to use a bag which contains both magnesium **and** calcium (Calpromag or Glucalpos) if you are unsure what exactly is going on. However, only Magnesium Sulphate 20% has enough magnesium to treat a clinical case of grass stagers – this must be given under the skin only. As with milk fever, response to treatment is rapid usually within 20-30 mins.

One of the most dramatic Spring emergencies we get called to is the cow who has prolapsed her uterus.

If a cow continues to push after she has calved, but before the uterus has closed down, she has the ability to push her whole “breeding bag” right out. This will appear as a great big swollen red mass (up to a metre long and 50cm diameter) hanging out of her vagina (not rectum!). It will usually have fleshy red “buttons” on it – the other half of the cotyledons that you see attached to the membranes when they are passed.

It is an emergency, but seldom a cause for euthanasia! If quickly attended to, well looked after, and if it happens early in the season, these cows often even get back in calf.

Things that make her continue to push after calving (e.g. RFM's, forced traction), or slow down the contraction of the uterus (fatigue, milk fever), are the main contributing factors.

What should you do?

First call the vet!

Then make the cow safe and comfortable until we can get there. These animals usually have milk fever, and this would be a much more likely cause of death than from their prolapsed uterus.

Treat the milk fever by giving her a **single** oral calcium supplement (if she can swallow), or a **single** bag under the skin. Any more than that and the risks include the uterus starting to contract, making it harder to get it back in, or of her standing up which could have the potential of damaging the fragile tissue.

If she is lying down, sit her up, and try to get something clean like a milking apron underneath the uterus to lift it out of the mud. If membranes are attached, leave them on. If they are already separated the uterus can be gently washed with warm water. If she is standing you can walk her to the cowshed if she remains calm and quiet, try to avoid her running.



At Clutha Vets, we are passionate about more than just animal health. We also care about keeping our clients safe and informed when it comes to animal diseases. Some of the diseases that are of greatest importance are those that can spread from animals to people, zoonotic diseases such as Leptospirosis.

Lepto is a potentially life threatening and debilitating disease in humans, that if not identified early can lead to severe health complications such as liver and kidney failure.

- It is the owner's / employer's responsibility to ensure all staff are provided with, or are informed of, the requirement to have appropriate PPE (personal protective equipment) for the work they are doing, and are made aware of the potential hazards in their workplace.
- It is the employee / workers responsibility to wear the appropriate PPE and follow protocol to ensure they are protecting themselves from potential diseases.
- It is everyone's responsibility to ensure a safe work environment.

To help ensure the safety of your employees and yourself, at Clutha Vets this year we would like to offer a free staff training session for your staff. This would be informing them of the potential risks of leptospirosis and how they can help protect themselves against this disease. We also have a staff training form that they can sign, to show they have been made aware of the risks and protective measures; and this will help with the herd owner's health and safety obligations.

Now, with the changeover of farm staff, would be an ideal time to do this. We have folders with a form that the staff sign once they have gone through our training and this will help fulfil your requirements as an employer for informing your staff of the risks and hazards in the workplace.

Leptospirosis is a very real disease and people are still being exposed to it continually. In 2016 there were 93 confirmed cases in New Zealand, and in the first half of 2017 this has continued to rise dramatically.

Staff training sessions could be combined with another call on farm. The only requirements are farm staff (all, or as many as possible) present, and a couple of cows available for training purposes. Please contact us if you are interested.

Metrichecking

Nearly everyone these days is aware of the effect of endometritis (dirty cows) on the herd's reproductive performance, and most people are taking active steps to manage it (metrichecking). However, some people are waiting until most of the herd is calved before getting on to it. Unfortunately, this means that by the time we get the opportunity to treat the dirty cows, many of them have been infected for at least a month. By this time metrichecking is less able to identify the cows that need treating; and like any disease the sooner you treat endometritis, the better the outcome. There is plenty of research to show that by far the best time to check and treat cows is 2-4 weeks after calving – even though you may end up detecting and treating more cows, it is better than leaving it till later when they are less obvious and treatment may be less effective.

Ideally, the whole herd should be checked in the 2-4 week post-calving window so that as many dirty cows as possible can be diagnosed and treated at the most beneficial time. This means cows will need to be grouped and checked in batches every few weeks during calving, rather than waiting and doing the whole herd at one time.

This is not as difficult as it may sound. Vets are already on farm at this time of year for other reasons, and smaller groups can be put through the shed quite quickly. All that is required is to paint cows one colour as they calve, then change the colour every couple of weeks, drafting out the cows of each colour once they all hit the 2-4 week window. The extra effort to do this will be rewarded with much better in calf rates in the treated cows, so it is well worthwhile.

Bobbies & Withholding Periods (WHP)

Drenching at least some of the cows for worms at this time of year can be a sensible thing to do – there is good evidence for particular drenches that this increases milk production of some cows for the season, and helps others get back in calf sooner. However, as with all treatments, you need to be aware of the WHP, including how it affects bobby calves. Calves born within the meat WHP for DCT raise similar issues. Basically, you can think of the unborn bobby calf as part of the cow's body, so any treatment given to the cow applies equally to the calf, and the time before it can go to slaughter works the same way. The latest guidelines state:

1. Any calf that is treated with antimicrobials after it is born must not go for slaughter as a bobby calf.
2. If a calf is born before the meat WHP for the treatment given to its mother (drench, DCT or other RVM) is up, the calf can't go until the mother would have been safe to go (eg a calf born less than 30 days after the cow received Cepravin, can't go until the 30 days **since the cow was treated** are up).

3. For colostrum feeding, it is the milk withholding period that is important. If she calves outside the milk WHP, it is fine to feed any milk she produces (including the first 8 milkings) to bobbies.
4. If a cow calves inside the milk WHP, her colostrum / milk must not be fed to bobbies. If it accidentally is, then the calf can't go for slaughter until after it is 91 days old(!!) - the old "7 days clean milk" idea has been abandoned.

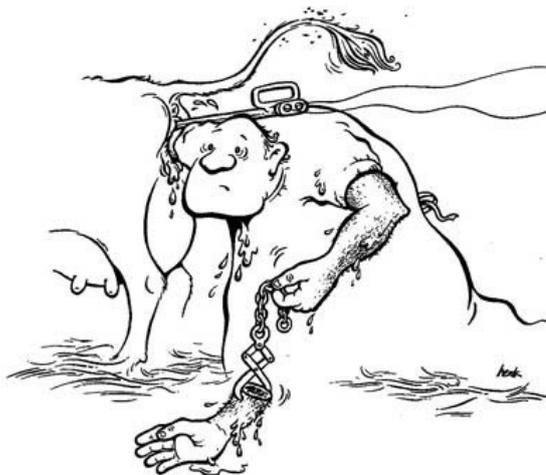
Colostrum - what's new?

If you are in any doubt about the suitability of milk to be fed, or a calf to be bobbied, please give us a call. We all know the importance of getting enough good quality colostrum into every calf, soon after it is born, but let's break it down with some specifics:

EVERY CALF – other studies have shown that very few calves actually get an adequate amount of colostrum from their mother (or their "aunty") if they are left to suckle naturally. And then the quality of the cow they drink from may not be great either. That's why we recommend tube feeding all calves as soon as you practically can. Have you seen the new Antahi Trusti Tuber, for doing this?

ENOUGH and SOON ENOUGH – depending on the size of the calf, the first feed should be between 1 and 2 litres, within 6 hours of birth. Two or three more feeds of 2-3 litres, to supply 10% of the calf's body weight within the first 12 hours, and even more than that in the first 24 hours, will ensure adequate supply of nutrients and antibodies to the calf.

GOOD QUALITY – recent studies have shown that colour and "stickiness" are not good indicators of colostrum quality. The best colostrum comes from those cows that have calved very recently (collect it within a few hours of calving if possible), and cows older than 6 years, but not those cows that have huge udders and heaps of colostrum – the goodies are diluted by the large volume. Some farmers are now using a "Brix meter" to directly measure the level of antibodies in each cow's colostrum. Brix meters are inexpensive, and may make a big difference to your colostrum selection, and thus your calves' health and growth.



Bovine Viral Diarrhoea (BVD)

Yes, we're thinking about getting the cows calved, but it's never too soon to also be thinking about getting them back in calf! That's one of the reasons for the "How to calve a cow" section in this newsletter. It's also why we'd like to remind you about what you need to be doing now for BVD.

If you haven't already "spot checked" your R1 and R2 heifers with 15 blood samples to check for antibody levels (and thus that group's exposure to BVD) now is the time to do it. R1 heifers going into

their first mating with an active infection circulating in the mob, or introducing an infection to your herd as the heifers come in could be disastrous. Now is the time to check.

If you are on a BVD vaccination programme, that needs to get underway shortly too. Like most immunisations, previously unvaccinated animals need two shots, ideally four weeks apart, and for BVD the second one needs to be at least 4 weeks before the start of mating (early September).

Your August shopping list

Calving kit

- ◇ Long gloves
- ◇ Disinfectant
- ◇ Lube
- ◇ Lube pump
- ◇ Ropes / chains
- ◇ Jack / pulley
- ◇
- ◇

Calf shed

- ◇ Disinfectant
- ◇ Sprayer / pump
- ◇ Iodine navel spray
- ◇ Tube feeder
- ◇ Electrolytes
- ◇ Colostrum keeper
- ◇ Captive bolt and activators
- ◇ Brix Meter
- ◇
- ◇

Down cows

- ◇ Metabolic bags
(Calcium, magnesium, dextrose)
- ◇ Calol
- ◇ Headstart Gold
- ◇ Ketol Extra
- ◇ Cow covers
- ◇ Hip lifters
- ◇
- ◇

Milking shed

- ◇ Emollient udder cream
- ◇ RMT paddle / solution
- ◇ Leg bands
- ◇ Tail paint
- ◇
- ◇

Checklist for this month

- Get the cows calved and into milk!
- Complete your spring consultation (including RVM authorisation) before things get manic
- Pre-calving selenium treatment and rotavirus vaccination
- Blood test cows for calcium, magnesium and ketones
- Get BVD vaccination underway
- Mark cows for metrichecking in 2-4 weeks time

Your vets

Balclutha Clinic

John Smart	BVSc
Jason Darwen	BVSc
Rob Mills	BVSc, BSc (Hons), MSc
Hamish Moore	BVSc
Catherine Copland	BVM&S
Peter Heslip	BVSc, MACVSc
Annie Jackson	BVSc
Steven Butler	BVSc
Elsbeth Geddes	BVSc, BAgSc
Bevan Topham	BVSc
Ruth Andrews	BVSc
Alice Lee	BVSc
Anna Burrell	BVSc
Marek Misiewicz	BVSc, BVMS

Milton Clinic

Peter Kalb	BVSc
Jillian Clark	BVSc (Dist)
Sid Taylor	BAgSc, BVSc, MACVSc
Barbara Christensen	BVSc, MANZCSc
Tom Wallbank	BVM&S
Martha O'Connor	MVB