

# DAIRY TALK

PROVIDING  
VET CARE  
24/7

JUNE 2016 | NEWSLETTER



*"Welcome to the new farmers who have joined us for the upcoming season.*



*We're working hard to show new and existing members that "it pays to belong" to your local vet club. Our job is to give you options, then for you to decide what is going to achieve the best results on your farm."*

Terry Youngman, CEO



Search Anexa

## Upper Cow Road Show - Did you miss out?

By Ashley O'Driscoll, Anexa FVC Vet Ngaruawahia

It has been a very tough year. In anticipation of the coming spring and in support of our dairy farmers, Anexa FVC (along with Boehringer Ingelheim, MPI and Glenmark Veterinary Limited) sponsored a free meal and seminar on down cow management recently. The seminars, in Ngatea and Morrinsville were raging successes, with a total of over 280 farmers attending the events.

Down cows can be frustrating and depressing when, despite your hard work, they never get up. The key speaker, Phil Poulton, is an international expert on how to increase the likelihood that you will be successful in getting your down cow up. His easy-to-follow talk highlighted the importance of nursing care in a well-thought out (but not necessarily expensive) nursing area.

75% of down cows die or are euthanised because of complications of being down (muscle and nerve damage). Only 25% actually die or are euthanized for the original problem that caused them to go down.

These facts supplied the foundation for the great tips and pearls of wisdom that Phil imparted during his talk. Now is the time to make plans for 'down cow care' on your farm, as the nursing care of these cows may otherwise get compromised during a busy calving season.

It sounds like common sense, but does require a bit of preparation: a thick soft place to lay, shelter over her head, and regular turning or lifting as required.

For more details on Phil's talk and down cow nursing, please contact your local Anexa FVC veterinarian.

IT PAYS  
TO BELONG  
anexa  
FVC

Congratulations  
Sam Owen

Winner of  
the Shoof  
prize



## Rotavirus Vaccination

*Prevention is better than cure when it comes to calf scours*

**Rotavirus colostrum vaccines are due NOW.** Anyone who has had an outbreak of Rotavirus calf scours will tell you about the heartbreak they endured as this awful disease spread through their calf shed like wildfire. We now have a vaccine which can help prevent these kind of outbreaks from happening. Rotavirus vaccines are what we call colostrum vaccines; we vaccinate the pregnant cow while her body is making colostrum. In response to the vaccine, she makes antibodies (immune defence proteins) specific to Rotavirus, which goes directly into her colostrum. When the calf drinks the colostrum containing

these antibodies, the calf's immune system is primed ready to recognise and fight off Rotavirus from day one. Vaccinations must be given three weeks before the planned start of calving. Once you have vaccinated, your colostrum management needs to be excellent- there is no point putting the antibodies into the colostrum if you aren't getting colostrum into the calves in a timely fashion! Calves must have 2 to 3 litres of first milking colostrum within the first 6-12 hours of life to absorb the antibodies. It's important to remember, Rotavirus vaccination is an insurance policy; prevention is better than cure.

# Liver biopsies to check your Copper levels - Why?

By Hamish Clare, Anexa FVC Veterinarian Morrinsville

Copper is stored in the liver and levels in the blood only fall when liver reserves are completely depleted. It is impossible to determine from blood tests alone if there are enough Copper reserves in the liver to get cows through winter (late pregnancy) and spring (early and peak production) when demands are highest and Copper availability can be low with cows held tighter and muddy conditions meaning more soil and competing elements are ingested. Copper deficiency leads to ill-thrift, poor immunity, decreased milk production and poor fertility.

Zinc can have a depletive effect on Copper levels and this season more Zinc has been supplemented over the FE season. This combined with some herds feeding less PKE may mean your herd may be at risk of low Copper levels this season

Also be aware that Copper can be toxic at high levels and we do see deaths occasionally. We are beginning to see these high levels more commonly in herds which receive significant PKE for large periods of the year. The extent of these high levels can not be determined from blood tests either.

Testing Copper levels through liver samples is therefore recommended as it gives us a lot more information about your Copper levels. We can perform liver biopsies from cows on farm which is a minor and straightforward procedure. Doing this in autumn or early winter allows us to judge if there are enough Copper reserves to get the herd through the highest risk period with the lowest levels usually around 100 days into lactation. This generally falls right during mating and it is vital that any deficiencies at this time are prevented because of the negative effects this can have on reproductive performance. Also, trying to remedy low Copper levels quickly at this time is difficult because injecting with Copper just prior to mating can also have negative effects on your reproductive performance. Putting a plan in place to prevent any risk of this now during the dry period is crucial.



## FARMER 1 - LOW COPPER

The table below shows results from a local farmer last season that did liver biopsies after having a low Copper blood result. He was shocked to see the extent of the problem across the other cows. This highlights the potential for low Copper levels to be missed through blood testing alone; if cow number 21 had not been included in the testing this would not have been picked up!

Animal ID	Serum Copper	Liver Cu
3	13	<45L
20	12	64L
<b>21</b>	<b>6.3L</b>	<b>&lt;45L</b>
161	9.2	89L
175	11	<45L
262	8.2	83L
282	10	78L
Average	9.2	<63L
Adequate range	8 - 20	(95 - 2000)

## FARMER 2 - HIGH COPPER

These results are from a farmer who had been feeding a significant amount of PKE for a number of years and had never done liver biopsies before to check Copper levels. The results last season were extremely high and they had a cow die from suspected Copper toxicity. Copper supplementation and PKE feeding were stopped and by the end of this season Copper levels have dropped to more appropriate levels.

### May 2015:

Animal ID	Serum B12 pmol/L 06/05/15	Serum Selenium nmol/L 07/05/15	Liver Cu umol/L 07/05/15
18	320	1000	4700 H
25	272	1200	3700 H
70	256	1300	4600 H
74	276	1000	5000 H
80	276	1000	3300 H
Average	280	1100	4260
Adequate range	(81 - 1000)	(150 - 3500)	(95 - 2000)

### May 2016:

Animal ID	Serum selenium nmol/L 21/04/16	Liver Cu umol/L 21/04/16
17	570	830
36	730	400
90	640	780
95		860
114		160
122		1600
142	620	1900
Average	640	933
Adequate range	(150 - 3500)	(95 - 2000)



# Are you ready for calving?

## Prepare your calf pens

If you haven't done so already, the time is right to prepare your calf pens.

Clean out all old bedding and disinfect walls, floors and railings. Pathogens that cause disease in calves, such as Rotavirus and Salmonella, are able to survive in the environment for many months and even several years in the right conditions. A fleck of dried calf poo that was missed from last year can potentially contain enough bugs to infect all of the calves that pass through that pen this season.

### Did you know?

- ✓ As more calves go through the pens, the bacteria, viruses and tiny parasites shed by the earlier calves all build up, to the point where the burden in the environment is too high for the immune system to deal with, and the later calves succumb to disease.
- ✓ The longer the pens are clean and dry, the less chance the pathogens have to remain hidden
- ✓ Throughout the season, top up the bedding to keep it clean and dry. Topping up bedding is going to be more effective at controlling bugs than spraying old bedding with disinfectant. Disinfectant does NOT work on biological matter (poo, mud etc).
- ✓ Calf sheds need to be warm, but also well ventilated to prevent respiratory disease.



## Get the right advice before you order your spring calving supplies

Wednesday 22nd June 2016

3pm - 6pm

Anexa FVC Gordonton, Gordonton Rd



## 3 HOURS OF SPRING DEALS

GREAT PRODUCTS

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## FARMER WORKSHOPS

At Anexa FVC we are service driven, not profit driven. We believe in delivering value to our clients; one way of doing this is by the sharing of knowledge. We do this by not only holding client events like Upper Cow, but also through Vet run farmer workshops, **save time & money, upskill now.**

For further information and to RSVP to the course you would like to attend visit

[www.anexafvc.co.nz/events](http://www.anexafvc.co.nz/events)

Or phone Leeanne on 07 889 5159

### Calf Rearing

Join us for our Calf Rearing Workshop and equip yourself with the expertise for a successful calf rearing season.

Ngatea - Wednesday 8th June  
Morrinsville - Thursday 9th June

### Milk Quality Training

Prevent, Find, and Treat! Learn how to keep somatic cell counts down and prevent mastitis this season.

Ngatea - Thursday 23rd June  
Morrinsville - Tuesday 28th June

### Farm Staff Training

The following topics will be covered on the day: Basics - Thermometer use, syringes, injections and injection sites and animal restraints, Farm First Aid Kit, Calvings, Calf Scours, Lameness, Downer Cow, Mastitis.

Gordonton - Wednesday 8th June

Huntly - Friday 10th June

Ngatea - Wednesday 15th June

Morrinsville - Monday 13th June

Morrinsville - Tuesday 14th June

Raglan - Tuesday 14th June

## Preparation now could increase your down cow's chance of survival

As we learnt at the Upper Cow Road Show both farmers and possibly vets under estimate the secondary damage to musculoskeletal systems after 24 hours down on the ground that more commonly cause the loss of the cow rather than the initial event that put the cow down. One of Phil's take home messages was to prep a dedicated down cow area early. It is likely the day a cow goes down will not be a good one on farm, so by being organised you could highly increase the cow's chance of survival the cow by providing her with shelter. Your down cow area should include:

- ✓ Shelter from the weather
- ✓ Clean, dry and soft bedding e.g. 200 mm depth of saw dust (from the calf shed is fine with some fresh sawdust put on top) or sand or hay/straw that is 500mm deep. And a non slip surface for when the cow tries to stand
- ✓ Barriers to stop the cow from crawling around (bales or gates - they must be tall enough so the cow can not jump them)
- ✓ The pen must be able regularly cleaned and have bedding replaced
- ✓ Access to food and water access

For a detailed video on how to prep the area please visit:  
<http://www.dairyaustralia.com.au/Animal-management/Animal-welfare/Cows/Managing-downer-cows.aspx>

# Managing the cow over the calving period *(transitioning successfully)*

By Katrina Roberts, Anexa FVC Veterinarian and Herd+Plus Advisor

The first question of course is what is a successful transition? Some of this is easy to answer, some a bit more complicated.

We want a cow that leaves the colostrum mob still standing, healthy, milking well, eating well, hasn't cost you in drug treatments and vets visits, early lactation production that is above herd average and she gets back incalf in the first 6 weeks of the mating period without any intervention. So what's that look like at the herd-level?

## To give you some targets to aim for

- ✓ <2% of the herd treated for metabolic issues (down cow/milk fever type conditions)
- ✓ <2% of the herd with retained foetal membranes (RFMs) 24h after calving
- ✓ <1% calves born dead
- ✓ <3% assisted calvings
- ✓ <5% of cows with clinical mastitis in the first month after calving
- ✓ The herd losing on average less than 1 BCS between calving and mating i.e. minimal cows that lose more than 1 BCS

The amazing thing about the transition period (defined as the 4 weeks before until 4 weeks after calving, but practically in NZ is from 4 weeks pre-calving until the cow leaves the colostrum mob), is that it sets the cow up for her entire lactation.

The metabolic adjustments that have to occur from a dry to a lactating cow are huge. For example over the 24 hour peripartum period a cow's demand for calcium increases 400%! One of the reasons why recent research has indicated that fatter cows pre-calving perform better (less metabolic disease) if they are fed 90%

of the requirement, is do with training the liver to process body fat. This process happens from the day of calving, whereas during the dry period it is likely the cow has been doing the opposite (preserving and gaining BCS), so when she calves she isn't metabolically fit.

## Feeding

To optimise the transition period we need cows in the right BCS (heifers and second calvers at 5.5 and mature cows at 5). **We need energy allocation to be correct:**

- ✓ for her stage of gestation (is she calving this week or in a month)
- ✓ her BCS (if she is a mature cow and is in BCS 5 or greater then she can be offered 90% of requirements, if she is a mature cow less than BCS 5 or if she is a heifer, then she needs to be offered 100% of requirements)
- ✓ her live weight (size/breed)
- ✓ to allow for food wastage appropriately

By transition cows being offered a grass-based diet, it is unlikely that protein will be limiting for a pre-calving cow. However, if you are feeding more than 50% of the diet in supplements, we recommend discussing the diet composition with your Vet or farm advisor.

## Macro-minerals (Magnesium, Calcium, Salt, Phosphorus)

There are some general rules of thumb for macro-mineral supplementation for transition cows, however your plan will be specific to your farm, and it is strongly advisable you generate your plan in conjunction with your Vet. If you are not achieving the targets above then I would strongly recommend reviewing your macro-mineral supplementation. Just dusting with more Causmag will not necessarily fix the problem.

## General rules of thumb

- ✓ Cows 3 to 4 weeks before calving need 0.4% DM of their diet in Magnesium, this equates to needing to supplement about 20 g of elemental Magnesium per cow per day over and above their dietary intakes (what is already in the grass etc they are eating). Some farms will need to start supplementing earlier than this.
- ✓ Fast growing new grass and annuals, and winter grass is often very low in Magnesium. If Magnesium levels are low in dry cows then BCS gain can be compromised.
- ✓ Reduce the amount of Potassium in the diet; high Potassium reduces Magnesium uptake by the cow. In practical terms this means staying away from effluent paddocks. Potassium in pasture can remain high for years so it is not just the current effluent area but historical effluent area. If unsure, pasture sampling the proposed springer paddocks is a great way to be sure.
- ✓ Remove Calcium and salt from the diet for the last 3 to 4 weeks before calving i.e. aim to offer a diet <0.2% DM Calcium
- ✓ Aim to offer cows 3 to 4 weeks before calving a diet 0.2-0.3% DM of Phosphorus. Often we don't need to consider Phosphorus, but PKE is high in Phosphorus and fodder beet is often low in Phosphorus
- ✓ When calculating dusting Causmag, assume 100% wastage on a good day and 150% wastage on a wet day, so adjust your amounts accordingly
- ✓ In the colostrum mob we can offer cows 200 to 300 g per cow per day which helps the cow through the period of high Calcium requirement



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