



VET notes

YOUR TOTALLY VETS NEWSLETTER ALL ABOUT ANIMALS ON YOUR FARM

MAY 2013



Above: 2013 Regional Farm Manager of the Year, Michael & Raewyn Hills

Michael & Raewyn Hills - Regional Farm Managers of the Year

Totally Vets, sponsors of the 2013 Regional New Zealand Dairy Industry Awards, congratulates Michael and Raewyn Hills for winning Farm Managers of the Year. They also won two Farm Manager of the Year Merit Awards - the Westpac Financial Planning & Management Award and the AgITO Human Resource Management Award.

Michael and Raewyn thanked Totally Vets for their support. In their own words, "Lindsay Rowe and the Team at Totally Vets ensure our animal health and management runs efficiently through the advice and training they provide."

Winning Farm Managers for 2013 has provided them with the opportunity to have their business further analysed by the national judges. They are looking forward to meeting the national contestants and sponsors when they head to Wellington in May."

We wish Michael and Raewyn every success at the national finals.

On 1st of April, Totally Vets purchased Taumarunui Vet Clinic (TVC) Ltd and we welcome our new customers in Taumarunui and the Central North Island to this edition of VetNotes.

The purchase of TVC by Totally Vets was initiated by Carin De Groot, the senior veterinarian and clinic owner.

Carin started working in Taumarunui with Alan Brown in 2000, and went on to purchase the practice from Alan in 2004.

Since that time, Carin and her team of up to three veterinarians and her nine staff (business support, nursing and technicians) has established a highly respected clinic in Taumarunui.

The business is a genuine general practice, servicing the sheep & beef sector, dairy herds, deer, and equine (event horses, trekking and farm), as well as providing clinical services for pets and working dogs.

Over the last three years, Totally Vets and TVC had been working collaboratively to bring additional farm advisory and bull assessment programs into the region. Carin's wish to focus on her veterinary work as well as the

values and services Totally Vets brings to her practice, prompted Carin to rethink whether she wished to remain responsible for managing the business.

Under Totally Vets ownership, Carin's commitment to servicing her customers and that of her team remain intact. In the change of ownership, all staff have been retained.

Totally Vets, with its strengths in dairy medicine, sheep and beef, equine and pets, is excited at the opportunity of bringing its service offering to a wider group of customers.

The Central North Island with its (normally) summer moist conditions, along with the success of the Animal Health Board's Tb strategy in the region, is proving to be an important area for beef breeding as well as the breeding of lambs.

The intensification of NZ's dairy industry will also see the area play an increasing role in growing replacement dairy stock as well as supporting higher levels of dairy production in its own right.

For those customers who live in the Central North Island and are new to Totally Vets, we look forward to meeting you as we go about our work over the coming months.

Chris Carter
Chief Executive



Totally Vets proudly sponsors community groups including Feilding Old Boys Oroua Rugby Football Club



Totally Vets current stock health

Dairy

Despite cooling temperatures, Manawatu recorded the highest regional spore count in April at 540,000. Although the recent facial eczema risk has been high, the risk is patchy. With many farms getting to the limit of recommended zinc dosing periods, individual farm spore counts should be used to assess the need for any ongoing prevention.

About 50% of Manawatu dairy cows are expected to be dried off by the end of April, starting with light condition, high somatic cell count and/or low producing cows. Body-condition scoring of cows has been carried out on many farms to assist accurate feed planning.

For cows still milking on autumn pasture, adequate magnesium is needed to reduce the



HA HA

The REAL three bears

Baby Bear goes downstairs, sits in his small chair at the table and looks into his small bowl. It is empty. "Someone's been eating my porridge!" he squeaks.

Papa Bear arrives at the big table and sits in his big chair. He looks into his big bowl, and it is also empty. "Someone's been eating my porridge!!" he roars.

Momma Bear pokes her head around the corner from the kitchen and yells, "for Pete's sake, how many times do we have to go through this?"

"It was Momma Bear who got up first, woke everyone in the house, made the coffee, unloaded the dishwasher, went out in the cold early morning air to fetch the newspaper, set the table, put the cat out, cleaned the litter box, and filled the cat's dish... and, now that you've decided to drag your sorry bear-butts downstairs, and grace Momma Bear's kitchen with your grumpy presence, listen good, 'cause I'm only going to say this one more time..."

"I HAVEN'T MADE THE PORRIDGE YET!"

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Heifer mastitis

Ryan Carr

You may be thinking "good grief, is he going to talk about teat sealing heifers again?" I do sympathise that you may have heard the same information many times, but a good thing is a good thing no matter how many times we hear it. The fact is, reducing heifer mastitis is a smart investment.

In one NZ study, 23% of heifers had a case of clinical mastitis in the first two weeks of lactation¹ and it is estimated the median level of mastitis in NZ heifers is around 15%². Other NZ studies put the cost of **each case** of mastitis between \$100 and \$300. This figure includes the cost of drugs, labour and discarded milk, but not the stress factor involved in dealing with kicking, unhappy heifers with mastitis. Heifers that get mastitis are also more likely to be culled early, have shorter lifetime milk production, and therefore a lower return on the investment in raising them.

Internal teat sealants (ITS) provide a physical barrier that prevents the entry of bacteria into the quarter. It should be applied one month prior to the planned start of calving. Studies in New Zealand herds show that using internal teat sealants in heifers can reduce clinical mastitis by around 70%. Each farm is different and we can run through a cost benefit calculation with you. However on average, if more than 15% of your heifers have mastitis in the first two weeks of lactation, then using an internal teat sealant is a no-brainer.

"Teat sealing heifers is just too much of a pain in the backside". Heifers should be trained into the shed for a couple of weeks before applying ITS, which is an extra job, but those who have done it found the heifers much easier to handle over calving. Hygiene is CRITICAL when applying ITS to avoid introducing bacteria along with the sealant. Totally Vets provides people to do the job for you, or to help out on the day, which makes the whole process a lot easier. We have found that those of our clients who have started teat sealing heifers have continued to do it season after season.

"Surely there is something else I can do to reduce heifer mastitis". A number of other measures have been investigated to try and reduce heifer mastitis. Of those, the ones that have shown the most benefit are:

- bringing heifers into the shed 3 times a week for 3 weeks before calving, to spray udders with teat spray; and
- removing calves from heifers twice daily and making sure they are milked out within 12 hours.

If you haven't already, have a look at your mastitis records and talk to your vet about the preventative measures you can take to reduce heifer mastitis in your herd, including using teat sealants.

References:

- 1) C. W. R. Compton, C. Heuer, K. Parker, and S. McDougall. Epidemiology of Mastitis in Pasture-Grazed Peripartum Dairy Heifers and Its Effects on Productivity. Journal of Dairy Science, 90:4157-4170.
- 2) Compton C and Macdougall S. Minimising heifer mastitis: What's new? Proceedings of the New Zealand Milk Quality Conference 2012, pp 50-58, Apr 2013.



risk of metabolic issues. Cows on maize silage will also need a suitable mineral mix.

Around drying off, many farms will be planning trace mineral supplementation. Trace mineral deficiencies are common but an increasing number of copper toxicity cases are being reported, highlighting the need for trace mineral monitoring of liver and blood samples.

Ensure leptospirosis vaccinations are up to date in all stock classes this month. Don't forget to boost calves against both clostridial diseases and leptospirosis. Dogs also require annual

vaccination against leptospirosis. Recent case reports of deaths due to leptospirosis in both cattle and dogs are a timely reminder of the risks.

Sheep, Beef & Deer

The past month's rainfall and grass growth has seen a 'flush' of the usual post-drought animal health challenges. In young stock, we have seen an increased level of worm challenge, and other infectious causes of scouring. Checking ewe faecal egg counts when the ram is removed could be a good move to ensure they are not carrying production-limiting worm burdens

through to scanning. Mated ewe hoggets need to gain 135g/day from now until lambing - build this into your winter feed planning, and keep on top of their worm control.

Lungworm is one of those parasites that requires some constant ongoing exposure for adult animals to maintain immunity. In other post-drought years, we have seen the odd case in R2 and adult deer, presumably from a combination of feed pressure and reduced immunity. Don't extend drench intervals in weaners, and have any ill-thrift or deaths in older animals investigated promptly.

2013 - year of the sheep scanner and the feed planner

Ginny Dodunski

Every year, we write an article on the benefits of scanning your ewes. If you've tended to ignore these in the past 'because we hardly get any dries', 'we hardly get any singles', 'I can tell which ewes are dry' or 'we just manage them all as multiples', **don't ignore this one**, because the normal rules might not apply after our very dry autumn!

This year most flocks will have:

- Probably more dries than normal
- Probably less multiples than normal
- More variation in performance between age groups
- All ewes in lighter condition going into winter, and
- Less feed to allocate

So for goodness sake, scan your ewes - probably as early as possible - and **make**

use of the information and opportunities:

- The ability to run multiples separately from scanning onward: this is an important opportunity to utilise this year. If feed is short and ewes are going to be underfed, then it is better that multiples get the pick right from scanning. The less weight we can have them lose, the better.
- The ability to tighten single ewes up or put them on the tougher parts of the farm: the cost of a single ewe spending a day longer in each paddock than she should on winter rotation, is way less than the cost of doing this to a ewe with twins or triplets.
- The ability to quit dry ewes: there may be more of these this year.
- The ability to quit some classes of pregnant ewes: farms that quit stock early in the dry, plus finishers looking for non-existent lambs may be into the winter ewe market in a bigger way this year. Could getting rid of triplets be an advantage this year?
- The ability to look after the really sensitive stock classes like multiple bearing 2 tooth; maybe not while on winter rotation, but at least from a paddocking-out point of view in August, and with regard to health aspects, especially parasite control.
- The ability to know what your feed demand is going to be: cast ahead to lambing, look at the deficit and **do something about it**. The feed demand difference between singles and twins, from the third trimester onward, is substantial.

- Pre-lamb nitrogen is likely to be really helpful this year. There may be a case for supplementation on some properties, or extraordinary stock sales as mentioned above.
- Ewes that you sell in winter will always earn you more than those that die or come in wet/dry out on the hills in a situation of underfeeding in the pre-lamb and lambing period.
- We are really happy to help you with these calculations. There is a simple method of doing this that can literally be done on the back of an envelope - don't get bogged down - our vets can help!

There are a lot of decisions to be made this winter; and early decisions are nearly always more profitable than those made once you are backed into a corner. The decision to scan your ewes this year should be one of the easier decisions to make.

Both our experienced operators are able to take on a small number of new clients this season.

Clients who regularly take advantage of the scanning service offered by Totally Vets and Premier Breeding Services will receive booking forms in the mail. If you do not receive a booking form or want to book in early, contact Totally Vets on 06 323 6161.

Alternatively our experienced scanners are happy to discuss your individual requirements and the services we can offer. For more information without obligation, contact Ross Edwards on 0274 402 032 or Guy Haynes on 0274 555 424.



Bopriva for winter management of bulls?

Ginny Dodunski

Bopriva¹ is a vaccination available for the behavioural management of bulls which reduces testosterone production.

The result in most treated animals is a reduction in 'bully' behaviour. Winter management of R2 bulls can be made more flexible in terms of being able to mob them up more than would normally be possible.

The Bopriva programme requires two shots, given a minimum of 3 weeks apart. You can vary this interval beyond 3 weeks to change the duration of effect.

Bulls grow faster than steers because of their extra testosterone production. So cut that back with a vaccine and logically you are going to reduce liveweight gain (LWG). However in NZ studies where bulls were run under restricted winter feeding conditions,

there was no difference between treated and untreated bulls for LWG.

So the decision to use Bopriva depends on your system. If bulls are going to be living on fresh air and scenery anyway, and you want to make them easier to manage, Bopriva fits. If you are targeting winter LWG, you are probably running a system that minimises those negative bull behaviours anyway, so keep taking advantage of that 'natural' growth promotant coming from the testicles and leave the vaccine on the shelf!

¹Bopriva is a registered trade mark of Zoetis Inc. or its subsidiaries. ACVM Registration No. A9931. RVM; available only under Veterinary Authorisation.

What's the goss?

Despite a wobbly weather forecast, the Totally Vets Fishing Competition on 13th April was a fantastic day for all our clients, staff and suppliers who participated. Around 100 people in 35 boats took part in the contest, in pretty much ideal fishing conditions. Congratulations to John Stroud who won Heaviest Snapper, with a 8.7kg catch.

Most of you will know **Charmaine Robertson**, one of our dedicated Feilding reception team members, who has worked

for Totally Vets since 2007. We'd like to congratulate Charmaine on her new appointment - she is now our Client Services Manager, managing customer service at the Feilding branch.

At the end of April, we farewelled our small animal vet **Kellie Doyle** - Kellie and her partner **Tracey** have planned a two-year OE in the UK and Europe - but hope to see her back in the Manawatu soon. Our vet nurse **Kayla Houghton** has travelled to San Francisco on a three-month sabbatical to advance her skills in dog behaviour and training. Being accepted into this course is a real feather in Kayla's cap. We look forward to getting updates while she is away, and welcoming her back in July.

On the sporting front, **Kirk's** children, **Connor** (4) and **Lauren** (3), both tried their hand at the Splash and Dash race at the recent Whanau Triathlon event in Palmerston North. Both Connor and Lauren got a finishing ribbon, but it was dad Kirk who was shattered, after dealing with equipment malfunctions, running with the kids and pushing the bikes round the circuit! Huge congratulations to **Chrissy** who completed her very first triathlon on the day.

It's official - **Margaret** is the fastest woman on a mountain bike - she won the Porirua Grand Traverse, a whopping 29 minutes ahead of the next female contestant. The course was 28km, with a 900m elevation gain. Margaret's finishing time was 1h44m20s. You are unstoppable Margaret!

Winter ewe feeding 2013

Ginny Dodunski

In the April newsletter, we discussed the need to quantify autumn pasture cover on the farm and compare this with what we would like to have going into winter, on the first of May. In most cases there was going to be a big gap.

So here we are in early May and how are things looking? When the rain came we

certainly got a good flush of green, especially in the lower country, as the improved soil moisture saw the mineralisation and release of nitrogen from the soil organic matter. But this will be used up now, and as predicted on most farms, has come nowhere near lifting average pasture cover to where it should be.

Soil temperatures are hopefully still above 10°C with the reasonably mild and wettish April we had, so it is not too late to apply nitrogen (N).

Rationing the feed that grows from an autumn N application is really critical through winter, and now is the time to keep ewes on a long rotation and let feed build up. From the end of the first cycle (earlier in late-mated flocks), it is safe to shut MA ewes' feed levels down. Contrary to popular belief they will not lose pregnancies if underfed for short periods in

early pregnancy. You would need to literally starve them to do this.

Also given the fact that we have had grass growing under ewes during mating of the later flocks (so maybe some body condition gain going on in early pregnancy), we need to be mindful of the need to control bodyweight gain in the first trimester to avoid setting up the risk of bearings in the spring.

Plan ahead now to be able to start increasing feed levels to multiple-bearing MA ewes from 5 weeks pre-lamb.

On some farms there may be a need to further de-stock or look at a period of supplementation or apply N pre-lamb to get things back on track for this most critical period of the year. Have a chat to us for help with assessing and planning this.

Pregnancy-scanning hinds - what do you want to know?

Ginny Dodunski

It is easiest to diagnose hinds in fawn from one-month pregnant until around four-months pregnant.

Prior to one month pregnant, the pregnancy can be too small to see, and after the four-month mark, the pregnancy drops down into the abdomen, and for a period will be difficult

to see with our scanner. Later on, as the pregnancy gets bigger and fills a lot of the abdomen, it becomes easy to visualise again.

We will never call a hind dry without being able to see the empty uterus, but in that four to approximately six-month window, you can spend a lot of time trying to decide if a hind is dry or is hiding her pregnancy away! If there are a number of these, it really slows the job down, and you may end up with a group of hinds to re-check, which may or may not be easy to do later on.

For a three-cycle mating, these constraints leave only a three-week window for scanning if you don't want re-checks or uncertainties:

Stags in	10th March
Stags removed	13th May
Scanning date	13th June to 8th July

However this year, if you are looking at a tight winter feed-wise, it might not be such a big deal if a few late-pregnant hinds (less than a month pregnant) get sent off with the dries, so an earlier scanning could still work.

If you wish to have pregnancies aged (i.e. early versus late fawners, or those pregnant to AI), then scanning needs to be done as early as possible (as close to 30 days after stag removal as possible). If hinds are a big proportion of the stock you winter, being able to run early and late mobs can be a useful management strategy.

If you are planning to scan your hinds for pregnancy, please book with us well in advance.





Rotavirus: planning for a stress-free season starts now

Hamish Pike

Calving may still seem a long way off, but decisions made now could help ensure your season gets off to a smooth start, without the added hassles of rotavirus scours in your calves.

Rotavirus is still New Zealand's most important cause of scours in calves*. An outbreak at the start of the season can cause a huge amount of stress at a time when you are focused on calving and dealing with other health issues such as early-season mastitis.

There is little you can do to reduce calves' exposure to the virus. It is shed by cows around calving and infected calves shed it in huge quantities. Any calf-rearing facility, especially the larger ones, provides ample opportunity for the virus to spread quickly.

It is labour-intensive, expensive and emotionally draining trying to nurse scouring calves back to health. They spread the virus, many will die, there is often permanent damage to the gut lining of survivors and they never seem to reach their full potential as adults. It also opens up calves to infection from other organisms such as *Cryptosporidium*, coronavirus and *E. coli* K99.

Animal health labs frequently return a diagnosis of a mixed infection from calf scours cases, and most commonly rotavirus is one of the chief culprits.

Fortunately, with a planned calf-rearing programme that includes annual vaccination of your herd, you can minimise the effects of rotavirus on your calves. The time to vaccinate pregnant cows is between 12-4 weeks pre-calving; this timing is important, so it is already time to start planning to protect next spring's crop of calves.

The increasing number of rotavirus vaccine doses sold nationally tells us that prophylactic vaccination is becoming well established in the animal health programmes of well-planned dairy operations. There are countless examples of farms that have experienced a dramatic fall in calf-scour problems once a vaccination programme has been set up. A common remark is that the protection brings a huge sense of relief and peace of mind.

Because the protective antibodies are passed onto calves through colostrum milk, vaccination also fits well with recommended best practice for colostrum-feeding.

Whether you are to continue your existing rotavirus vaccination programme, or you are thinking about vaccinating for the first time, please talk to us now so that we can help you fit vaccination into your animal health programme.

*While much of the focus is on dairy calves, beef cattle also benefit from protection because it is very difficult to separate and treat scouring beef calves.

Nitrate poisoning

Leisa Norris

Nitrate poisoning threatens both the cow and her unborn calf. Nitrate only becomes a health risk when plant levels become extreme (>2.0g nitrate/kg dry matter). The risk of nitrate poisoning can be managed.

Reducing risk factors

The best approach is not to feed high-risk feeds until nitrate levels decline. In reality, by following some basic principles you can minimise the risk.

1. Feeding risk factors:

- Don't put hungry stock on a high-risk crop. Fill them up first with hay or grass.

- Provide a shallow break that is long across the face so all animals have access. This controls the amount and rate at which feed is eaten.
- The greatest risk is in the first few days of feeding, so introduce stock gradually over 7-10 days.

2. Plant risk factors:

- Rapidly-growing forage and fodder crops can accumulate excess nitrate. Allow the crop to mature but feed before flowering.
- Grazing level of plant. Nitrate levels tend to be higher in the lowest third of the stalk.
- The first grazing of newly-sown perennial ryegrasses, short-rotation ryegrasses, forage crops, and brassica crops may be particularly dangerous.

3. Environmental risk factors that may increase plant uptake of nitrate are:

- Drought stress - a potential issue this year.
 - Reduced photosynthesis following temperatures <12°C, plant damage (frost or disease), and cloudy days.
 - Nitrogen fertiliser, particularly if plant growth is limited by other factors, such as drought or low temperatures.
4. Ensure stock always have access to fresh, clean water.
5. MONITOR STOCK! Symptoms of nitrate poisoning will show within an hour or two of eating excess toxic feed. Look for increased salivation, pain, diarrhoea, muscle tremors, and open-mouth breathing and sudden death.

At first sign of any trouble, remove animals from suspect feed quickly and QUIETLY. Offer good quality hay or silage, and call Totally Vets.

Copper and selenium - look before you leap!

Allie Quinn

Getting the right balance and level of trace minerals is an important part of animal health and production. As the end of the season approaches, most farms will be planning for trace mineral supplementation. But beware! Before using copper and selenium products, make sure you have enough information to get supplementation levels right.

Several cases of copper/selenium deficiency and toxicity have been reported. Here are some examples from this season and last autumn.

- A number of acute deaths occurred in cows over four weeks. The most significant finding was extremely low blood selenium levels consistent with severe selenium deficiency.
- Blood samples from ill-thrifty yearling heifers identified severe selenium deficiency.
- After drying off, six adult cows died unexpectedly. Chronic copper poisoning was diagnosed. Palm kernel expeller feed was analysed and found to have a copper concentration of 22 mg/kg (recommended level <20).

- In another case, three dairy cows died in a 12-hour period. A week later, two more deaths occurred and both animals had high kidney copper levels. One more death due to copper poisoning occurred a day later.
- In the Waikato, a farmer visited the clinic to purchase 30g copper capsules for his 240-cow herd as he had done "for the past few years". The prescribing veterinarian noted that the most recent liver biopsies were done five years earlier and recommended further tests before treating the cows. The veterinarian also established that the cows had been supplemented with 0.5g/cow/day of copper sulphate in the drinking water up until Christmas and that palm kernel was fed out throughout the season. When the farmer refused further testing, the veterinarian prescribed and dispensed the copper capsules based on the perceived safety of "slow release" capsules.

The capsules were administered when the cows were dried off in mid-May but within 10 days, six cows had died and another two cows became sick and were dried off. There was no indication that facial eczema predisposed these cows to copper poisoning.

This last case appears to be the first recorded case of acute copper toxicity following the administration of copper capsules.

These cases show that we should never assume the trace mineral status of a herd. Every season is different and circumstances on the farm change from year to year. This season in particular, livestock have been under stress and high levels of supplementary feed have been used to fill pasture shortfalls.

Ensure you have adequate information by:

- Taking liver samples on farm by biopsy or requesting liver samples from cull cows.
- Taking follow-up blood samples at pre-calving and/or pre-mating to ensure the trace mineral programme is on track.

Don't forget about young stock, carry-overs and bulls!

Contact your vet to discuss the requirements for your herd.

A few words about using copper injections in combination with other treatments

We often receive calls from clients about giving other treatments at the same time as copper injections.

Most injectable copper products have warnings such as "Do not administer at the same time as other treatments, e.g. drenches or vaccines. Do not use in animals with impaired liver function..."

For a number of years, there have been sporadic reports of reactions and deaths where animals have been given copper injections in combination with other products. The mechanism of these reactions is not known. In spite of this warning, many farmers have administered copper injections at the same time as other products (such as a single active pour-on drench) and reported no adverse effects.

Recommendation: wherever possible, the best course of action is to follow the manufacturer's labelled instructions.

Also talk to your vet about using oral copper capsules as an alternative to using copper injections. Although more labour-intensive, using copper capsules is likely to be a safer and longer lasting option than copper injections.



SOMETHING TO CHEW OVER FROM TOTALLY VETS



Receive a **FREE ½ CUBE ROLL OF SCOTCH FILLET** (RRP \$40.00) when you purchase either 1x20L EXODUS Se or 1x20L GENESIS Ultra Oral Hi-Min to combat Barbers Pole this Autumn. **WHILE STOCKS LAST.**



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