



# VET notes

YOUR TOTALLY VETS NEWSLETTER ALL ABOUT ANIMALS ON YOUR FARM

JUNE 2013

## Regional NZDIA award recipients

Huge congratulations to all our clients who won an award at this year's NZDIA event.

As well as **Michael & Raewyn Hills** winning Farm Managers of the Year, and the Merit Awards for AgITO Human Resource Management and Westpac Financial Planning & Management, **Richard McIntyre** won Sharemilker/Equity Farmer of the Year and the DairyNZ Human Resources Merit Award; **Shaun & Helene Kelly** were third in the Farm Manager of the Year category and **Amy Lowe** runner-up, as well as winning the Bell Booth Best Livestock Merit Award; **Renae Flett** was third in the Dairy Trainee of the Year category and also won the Horizons Regional Council Farming Knowledge Merit Award; and **Shane Edwards & Sherree Drysdale** won several Sharemilker/Equity Farmer of the Year Merit Awards - the Naylor Lawrence & Associates Best Financial and Farm Records Award, the Ravensdown Pasture Performance Award and the Westpac Business Performance Award.

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## Get the team together

**Craig Dickson**

Take some time to get the staff together and review the year. The good and the bad. How can the good stuff be emulated and the bad stuff made better?

Monitor cow condition through the late lactation dry period and ensure cows are on track for calving - body-condition score (BCS) 5 for mixed age cows and 5.5 for heifers. Be prepared to preferentially feed the tail-end.

Keep an eye on nitrate levels in green-feed crops and new grass coming out of an extended dry period. Even if you are still a bit tight for feed, keep the mouldy silage away from pregnant animals.

Book in a milking plant check and replace rubberware.

Have cows and young stock been leptovaccinated?

The rules around inductions have been in place for long enough now that hopefully everyone is aware of these. This needs to be a planned event.

Keep a close eye on recently dried-off cows for signs of mastitis.

Don't forget the young stock.

Keep an eye on stock grazing off. Ensure you and the grazier are coming from the same place as to what the expectations are.

Train heifers through the dairy. Once they are well trained, don't forget to teatseal them.

Book in rotavirus vaccination.

Set up a programme for magnesium supplementation starting three weeks before the planned start of calving. Check what the mineral status of the cows is going into winter, and set up a programme to deal with any issues that arise from the tests.

Keep an eye on facial eczema spore counts for a bit longer - we are not out of the risk period just yet.

**Book in some time for a holiday for you and the staff. I'm sure you deserve it.**



# Totally Vets current stock health

## Deer

Early scanning of hinds could be useful this year to get rid of unproductive months; though the usual guidelines are at least 30 days after the stag was removed, and not more than 120 days after the stag was introduced to the hinds.

Until a better 'deer specific' drench for weaners is produced, we believe a triple combination oral drench e.g. Matrix Minidose,

is the best solution for routine drenching of weaner deer in terms of anthelmintic sustainability. This can be more practical, and less expensive, than drenching regimes that involve both injectable and oral products.

Remember, when you are using any drench products which are not licensed for use in deer (most injectable and oral drenches), you must apply a default meat withholding period of 91 days to the product.

## The smartest dog ever

As a butcher is shoeing a dog from his shop, he sees \$10 and a note in his mouth, reading: "10 lamb chops, please."

Amazed, he takes the money, puts a bag of chops in the dog's mouth, and quickly closes the shop. He follows the dog and watches him wait for a green light, look both ways, and trot across the road to a bus stop. The dog checks the timetable and sits on the bench. When a bus arrives, he walks around to the front and looks at the number, then boards the bus. The butcher follows, dumbstruck.

As the bus travels out into the suburbs, the dog takes in the scenery, then stands on his back paws to push the "stop" button. The butcher follows him off.

The dog runs up to a house and drops his bag on the doorstep. He goes back down the path, takes a big run, and throws himself against the door. He does this again and again. No answer. So he jumps on a wall, walks around the garden, beats his head against a window, jumps off, and waits at the front door. A big guy opens it and starts cursing and pummeling the dog.

The butcher runs up and screams at the guy: "What are you doing? This dog's a genius!"

The owner replies, "Really? It's the second time this week he's forgotten his key!"

## Advantages of sheep scanning

### Hamish Pike

Scanning percentage is a key driver of flock efficiency in terms of producing lambs through to weaning. Making use of scanning data can also reduce ewe wastage, lamb losses and improve lamb growth rates which are also key drivers of flock efficiency.

Having information about barren ewes, and which ewes are carrying multiple lambs, also has the following advantages:

1. Identifying and culling dry ewes will obviously lead to increased cashflow, but will also reduce the overall demand for feed over the winter.
2. Lamb survival rates are likely to be improved by improving the birth weights of twin lambs from preferential feeding of ewes carrying multiple lambs.
3. Ewe deaths from twin-lamb disease and bearings in those carrying multiple lambs is likely to be reduced due to preferential feeding and better feed allocation.
4. Ewes carrying multiple lambs can also be allocated paddocks more suitable for lambing. Lamb losses through starvation and exposure can be reduced markedly through preferential provision of shelter to ewes having multiple lambs. Mismothering can also be minimized by lambing multiple bearing ewes on flatter paddocks.

5. By improved feeding of ewes carrying multiple lambs, lamb growth rates will be improved through higher colostrum and milking performance of the ewe. Also, ewes with multiple lambs will be in better condition which will impact on the following mating period.

6. Improved reproductive performance will result from using twin lambs for replacements in the breeding flock in the future.

7. Sheep scanning can also aid in the diagnosis of reproductive problems like toxoplasmosis and campylobacteriosis.

Scanning is also a good time to assess body-condition score of the ewe flock so that lighter ewes can be separated from the main mob. Light ewes can then be preferentially fed without penalizing the rest of the ewe flock.

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 wish to invest in the benefits of scanning, 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, please contact Ross Edwards on 0274 402 032 or Guy Haynes on 0274 555 424.**



## Sheep & Beef

Scanning is a great time to examine ewe body-condition. It provides an opportunity to separate out the light and multiple ewes, to preferentially feed them. A faecal egg count should be done a week prior to scanning the ewes to help decide which classes may benefit from a worm treatment. Post-mortem examinations can also be done at this time on a few skinny ewes to provide insight into what may be contributing to a tail-end ewe problem e.g. facial eczema, worms, Johne's disease, liver fluke.

If you didn't do any liver copper and selenium testing at the works on your cull cows, now is a good time to do cow side liver biopsy testing to ensure breeding cows have a good trace element status going into late winter/early spring, and hence calving.

### Dairy

If you are intending to use a teat sealant in heifers, start training them through the shed 4 weeks out from calving. If using rotavirus vaccine on the herd, remember that the vaccine needs to be given no closer than 3 weeks prior and no further back than 12

weeks from calving. It pays to split the herd into early and late calvers to maximise the benefit of this vaccine.

Calf pens need to be cleaned out for the coming season. Drains need to be unblocked, block off all drafts, ensure water is flowing, lime the floors and order in the bedding. Ensure the bedding e.g. sawdust or post shavings, is at least 100mm deep.

Now is also a good time to get ready for calving i.e. sort calving gear, buy metabolic solutions and organise staff training with your TVL vet.



## Mid-pregnancy shearing

Mark Eames

These days, there are a multitude of different shearing programs, and often these programs involve the shearing of pregnant ewes during the winter. Mid-pregnancy shearing comes with its pros and cons, but with some good management around shearing, we can help reduce the impact of the biggest risk, cold stress on pregnant ewes.

### PROS

It has been shown in a number of NZ studies that shearing ewes in mid-pregnancy can increase the birth weight of lambs. Trials at Massey University have shown 300-400g increased birth weights in lambs from ewes shorn any time from day 55 to around day 100 of pregnancy. A local on-farm study found an

impressive 1kg heavier lamb at birth (6.2kg vs. 5.2kg).

This increased birth weight can be a major factor in improved survival of twin and triplet lambs, if they would otherwise have been born too light (i.e. under 4kg). This outcome is obviously a bit hard to predict on an individual farm, but it would seem smart to bank the birthweight benefit in multiple ewes, as long as we minimise any potential negative impact on the ewes themselves.

Paul Kenyon's work at Massey has shown that the birthweight response requires a reasonable level of both ewe condition and feed availability. Ewes in BCS less than 2, who are likely to be fed below maintenance, are unlikely to produce bigger lambs. But there may be other good reasons to get the wool off these ewes - reduced casts at lambing is a big one, as is a reported reduction in bearings in ewes shorn mid-pregnancy.

Other benefits to mid-pregnancy shearing include improved wool quality and the financial benefit of reduced seasonal overdraft interest charges.

### CONS

The weather in winter is generally less settled, and together with shorter day length and reduced sunshine hours, it can be difficult to get sheep dry. Mustering in wet, muddy conditions can be more difficult. However the one major downside to mid-pregnancy shearing is the risk of cold stress on freshly shorn ewes. To follow are some points that can help reduce this risk.

### MANAGING SHORN SHEEP IN THE COLD

Shelter and feed are the main points to consider. It has been shown that pregnant ewes do not consistently increase feed intake to compensate for extra heat loss; in some cases mobilising fat reserves to provide extra energy. So common sense would suggest that both good feed and shelter should be provided. Ensure that there are feed reserves available in some sheltered paddocks for 3-4 days following shearing.

Don't bite off more than you can chew. Make sure your mob sizes are suitable so that you can get them into good feed and shelter well before nightfall. If caught out by a sudden cold snap, consider putting shorn ewes back in the shed or covered yards.

Use a winter comb - also known as a 'cover comb' or 'snow comb'. A winter comb should be used on any sheep shorn from May onwards. In some colder South Island areas, shearers also use 'lifters' which are plates that screw on under the winter comb, increasing the shorn staple length by another 25mm.

Keep an eye on the weather. This is important to not only get the sheep dry but also to avoid the risk of shearing immediately before a cold snap. Weather forecasting is getting better all the time with excellent resources available on internet sites such as [www.metservice.co.nz](http://www.metservice.co.nz).

Have a good relationship with your contractor or shearers. If you are changing to mid-pregnancy shearing, make sure they know well in advance.



## Minimum requirements for beef cows

Trevor Cook

Even though breeding cows on hills are generally considered to be the flexible stock class on those hills, to not allow them to meet some minimum objectives consigns them to be low earners.

Much of what we advise for ewes to increase their performance applies to cows as well. Unlike ewes, for which the whole package of conception rate, lamb survival and lamb weaning weight contribute reasonably equally to their profitability, for cows their profit lies mostly in their reproductive performance.

Weaning 300kg calves means little to no profit if only 75 calves are weaned per 100 cows

mated. For cows to be profitable, they must wean plenty of calves. If that is over 85 calves weaned per 100 cows mated then that herd's profit is largely in the bag.

By now the number of calves inside the cows is set so the total focus goes on maximising the survival of those calves. It just happens that the same feeding that maximises calf survival also supports a good lactation. Cow condition and feeding in the 3 to 4 weeks before calving is where the impact can be made. Not that it is possible to put condition on cows in the month before calving.

Before we get there though, it is quite okay to make cows work after weaning. In fact, losing some condition will increase their lifetime production. The problem with this message is how much condition can be taken off them. The objective is for them to calve in body-condition score 5 or more. Knowing how much condition they can lose over the winter should be driven by their required calving condition.

Sorting out the light ones that cannot lose any more condition, and will produce more if they

gain some condition, needs to start early in the winter. This means drenching them and then allocating extra feed. We have seen dramatic responses to drenching light beef cows.

The other key to maximising beef cow performance without going overboard in how much feed is allocated to them, is feeding them enough to enable them to reach their maximum lactation height. The total amount of milk that they will produce is driven by how high the peak lactation is. For most herds, the majority of cows will be reaching peak lactation over the 2 or 3 weeks starting 45 days after calving begins. This is leading into the time when mating begins, so maximising the peak lactation will also maximise the conception rate.

These dates should be put in the diary. At this stage, it is putting in the calving date, coming back 30 days and then another entry 45 days after the start of calving. These then become prompts that hopefully will trigger some management actions.

## What's the goss?

If you've been wondering what **Nigel** has been up to since retiring from Totally Vets in December, you will not be surprised to hear that he has making the most of his time travelling and catching up with friends and family. His latest escapade was an awesome hunting trip on Stewart Island.

It's lovely to get some baby news! Congratulations to **Emma and Marcel Scott** on the birth of **Natalie May**, 7lb15oz, born on 4th May - Emma worked as vet for Totally Vets and Manawatu Vet Services for a number of years. Natalie's siblings, **Aston, Hannah and Luke**, are delighted with their new sister.

We are delighted for **Brian and Rosalie Hunter** who celebrated their 50th wedding anniversary at the beginning of May - our best wishes to you both for the next 50!

A warm welcome to **Hayley Mayhew**, who joined the Totally Vets Business Support team in April. Hayley has a vet nurse/admin background, and is based at our Palmerston North branch.

Congratulations to **Cormac Chalmers, Mark Eames** and **Sarah Clarke**, our three new veterinary graduates based in Palmerston North, Feilding and Taumarunui, who graduated from Massey University in mid-May. **Natasha Smith**, also based in Taumarunui, graduated from Sydney University in

# Pros and cons of dairy herd parasite treatment

Allie Quinn & Ginny Dodunski

Gastrointestinal parasites (worms) can have negative effects on the productivity of adult dairy cows. Though adult cattle generally have good immunity to internal parasites, the challenge to the immune system required to counter parasites can cause production losses in some situations.

Anthelmintic treatment may lead to improvements in milk production, body condition and reproduction.

A combined analysis of 87 studies on drenching adult dairy cattle showed a response to treatment of 0.35-0.6kg of milk (not milk solids) or approximately 0.35-0.6L per cow per day. Eighty percent of these herds showed a positive milk production response, though the range was between 0.0 to 2.1kg milk per day. This range is likely to reflect variation in herd parasitism levels, age structure, farm system and location, production levels and time the drench was administered.

Calving to conception interval was reduced by 4.8 days in a large Australian trial drenching during the dry period, and by 9 days in a New Zealand trial. A more recent large Canadian study showed no effect on reproduction. However, the Canadian herds spent little time on grass and therefore their exposure to

parasites was likely to be considerably less than our pasture-based systems.

Unfortunately, diagnostic tests to accurately determine the level of gastrointestinal parasitism in adult cattle are still limited. Both faecal egg counts and pepsinogen (a blood test) are good, reliable tests in young stock but are of limited value in adult cattle. Positive faecal egg counts indicate the presence of worms but there is no correlation between egg count and actual worm burden in adult cattle. Blood pepsinogen measurement is also of limited value in adult dairy cattle but can occasionally be of use in high challenge situations.

A further test we have for assessing worm burden and likely herd response to anthelmintic treatment is the measurement of *Ostertagia* antibody levels in a bulk milk sample (B-sure test). However this also requires careful interpretation, and often an assessment of the farm's system and history is the best means of making a call on the likely requirement for winter worm treatment.

Not only is it costly, but a consequence of unnecessary drenching of adult cattle will be the risk of encouraging the development of anthelmintic-resistant parasites. It makes sense therefore to target anthelmintic treatment to herds/groups with a high larval challenge and reduced productivity.

Herd factors that may increase the likelihood of a positive milk production response include:

- Pasture-based systems, especially with cows of high production potential

- Pastures that were dominated by young stock prior to dairy conversion may take several years for the numbers of worm larvae to fall
- Systems where calves are grazed on the dairy platform after weaning
- In some cases, a greater production response is achieved when the whole herd is drenched at one time, probably due to a rapid decline in egg output and pasture contamination

## WHEN IS THE BEST TIME TO TREAT?

As increased milk production will decide the economics of treatment, it makes sense to treat at calving or early in lactation to capture the greatest benefit. Treatment during the dry period has also been shown to be effective but consideration must be given to meat and bobby-calf withholding times, depending on the product used. Eprinex® Pour-On has no meat withhold for bobbies born to treated cows.

Also bear in mind where cows have grazed over the winter. A stint out grazing on a run-off or grazing property that is dominated by young stock for the rest of the year could load cows up with extra worms that could best be removed pre-calving. Conversely, if they are heading to say a crop-feeding situation with the expectation of significant winter weight gain, it may be best to treat them prior to this.

Most pour-on, nil milk-withhold anthelmintics also have the additional benefit of controlling lice.

**Contact Totally Vets if you would like to discuss anthelmintic treatment of your dairy herd in more detail.**

December last year. We appreciate this is a big time for celebration and look forward to their 'celebratory stories'! We are also delighted for Sarah whose mare and stallion both won Grand Champion at the National Quarterhorse Show in Feilding, back in February.

**Barny Askin, Guy Haynes, Kirsten Dalziell**, joined by **Robyn How** from Tararua Breeding Centre, were involved in running a set of modules at the Future Beef New Zealand's Hoof and Hook competition at this year's Beef Expo at Manfeild Park. The focus for

the modules was parasite management, with lots of hands-on experience for the teams of young beef enthusiasts. Kirsten also ended up leading a Shorthorn steer for the steer judging competition!

Finally, congratulations to **Julie McNeill**, Feilding reception team member during the week, but now a marriage celebrant at the weekends! Julie, passionate about her new role, had her first wedding in May and is looking forward to many more.



# Colostrum storage and feeding

Allie Quinn

Colostrum is the first milk produced by the cow after calving and contains special nutrients and antibodies that are essential to protect the calf from disease.



Not all calves receive adequate colostrum from mum, even when left on the cow for four days! Heifers and older cows produce poorer-quality colostrum and not all calves drink sufficiently within 12 hours of birth. Surveys have shown that around 50% of calves born do not get enough colostrum. Calves receiving adequate colostrum have fewer disease problems and a higher survival rate.

Every calf should receive at least 2-3 litres of colostrum as soon as possible after birth, preferably within six hours. The newborn calf can absorb colostrum antibodies in the first 24 hours but this ability declines from about six hours after birth.

Although antibodies cannot be absorbed by the calf much beyond 24 hours after birth, colostrum, either fresh or stored, should be fed for at least the first four days of the calf's life and preferably for up to 4 weeks of age, as it can provide local immunity in the gut and is a highly digestible, high-quality food.

It's important to note that the concentration of antibodies in colostrum reduces rapidly, with highest levels in the first 2 days post calving. Collect and store colostrum from the first and second milkings separately. To get the best immunity, use this high antibody colostrum as calves' first feeds.

Vaccinating cows using Rotavec® Corona\* or ScourGuard® 4(K) vaccine is recommended and can provide significant protection against calf scours. Good results rely on early feeding of colostrum to newborn calves, correct colostrum storage and feeding of colostrum for at least the first 4 weeks of life.

Colostrum, milk or milk replacer should be fed at the rate of 10-15% of bodyweight per day during the first week after birth (4-6litres/40kg), preferably divided into two or more feeds per day.

A cow produces considerably more colostrum than can be consumed by her calf. Rather than discarding colostrum after a few days, preserve it for later feeding, as colostrum provides local gut protection from scours in the intestine and is rich in nutrients.

Natural fermentation is an excellent way to store colostrum. Colostrum must be stored in clean, rinsed containers, kept covered and positioned out of direct sunlight. If stored below 20°C, natural fermentation will make the colostrum acid, reducing spoilage for up to 12 weeks. The fermentation process can be sped up by adding non-pasteurised yoghurt. In warm conditions, preservatives may need to be added.

Stored colostrum should be stirred daily to maintain uniform consistency and fresh colostrum should be cooled before being added. Stored colostrum has a strong smell! However calves will continue to drink stored colostrum long after you can't bear to get too close to it!

Extremely bloody colostrum or colostrum from cows treated for mastitis should not be stored, although it can be fed fresh to heifer replacement calves (not bobby calves!).

# Pre-lamb treatment of ewes with iodine

Hamish Pike

A characteristic sign of iodine deficiency is an enlarged thyroid gland in the newborn lamb (goitre), while sub-clinical iodine deficiency in the ewe leads to a decreased twinning rate, an increased neonatal mortality, lower birth weights and wool yields.

Iodine deficiency tends to occur in high rainfall areas, including the Manawatu. Within each type of feed, considerable variation occurs from year to year, which is reflected in the incidence and severity of goitre in newborn lambs born to ewes grazing such feed.

In New Zealand, most occurrences of goitre seem to be associated with goitrogens in the feed, which block the uptake of inorganic iodide by the thyroid gland. Plants of the *Brassica* species i.e. kales (also low in iodine), cabbages, Brussels sprouts and broccoli may



# Don't wait till the scours hit the fan

Allie Quinn

## Do something about calf scours now.

Every spring, our vets deal with calf scours. Scours outbreaks can be difficult to control and they can be very costly and stressful for the calf rearers.

Most of the issues which lead to scours outbreaks are well understood and generally can be avoided, by implementing a few basic management principles.

So this season, we offer a proactive approach to the prevention of calf scours. A winter consultation can be arranged to look ahead to the calf-rearing season and make sure that you are in the best shape to rear healthy calves with minimal problems.

This involves a farm visit where we check off and discuss the key areas for successful calf-rearing. We identify any potential hazards and put in place a plan of action.

A follow-up visit early in the calving season can be arranged if required.

If you are interested in a preventative calf-rearing consultation and a stress-free rearing season, contact us now.

There are vaccines suitable for use to aid in the prevention of calf scours caused by rotavirus, *E. coli* and coronavirus.

These vaccines work by creating 'hyperimmune' colostrum, with greatly enhanced antibodies against the target viruses and bacteria. Effective colostrum management and feeding is essential to ensure calves receive the benefit of vaccination.

This season there are 3 vaccines available: Rotavec® Corona\*, ScourGuard® 4(K) and Rotagal®.

Rotavec® Corona only requires a single shot for heifers and a single annual booster, while the alternative vaccines requires two shots for heifers or for previously unvaccinated cows, followed by a single annual booster.

ScourGuard® 4(K) has the advantage of being water-based rather than oil-based. This has a major benefit in being injection-site friendly for cows and safer in the event of accidental self injection to humans.

Timing of the booster vaccinations before the planned start of calving (PSC) is critical. Rotavec® Corona provides 12-week duration of cover. In seasonal calving systems, a booster given three weeks before the PSC will cover all calves born in the first nine weeks of calving.

This will ensure calves benefit from a higher maternal antibody response to vaccination, which means that those born in the first nine weeks receive the highest quality colostrum, including your valuable replacement heifer calves. Research tells us the benefits for calves receiving adequate colostrum at birth include:

- More likely to achieve target mating weights
- More likely to calve at target weights
- More milk produced in their first and subsequent lactations
- An increased survival rate in the herd
- Saves you money in replacement costs
- Fewer scouring calves
- Much improved general health

Best results are achieved by splitting the timing of injections for early and late calvers.

**Contact us today about a pre-season calf-rearing planning session to ensure your calves get maximum security against scours. For more information on available vaccines, please contact your Totally Vets veterinarian.**

\* Note: at the time of writing this article, very limited stocks of Rotavec® Corona will be available due to manufacturing delays.

contain high levels of goitrogens. Certain NZ cultivars of clover also contain high levels.

It is recommended to drench ewes with potassium iodide 8 and 4 weeks pre-lambing for the prevention of iodine deficiency.

However, field experience suggests that if you are wishing to dose the ewes once only, treating around mid-pregnancy (i.e. at scanning) is better than closer to lambing.

This is because severe iodine deficiency in ewes causes a reduction in foetal brain development

and body weight from as early as 70 days gestation. Potassium iodide costs around five cents per dose.

Another option is an oily injection containing organically-bound iodine called Flexidine, which provides a long-term depot of iodine. It is recommended to treat ewes one month prior to mating, or not less than two months before lambing. If feeding a winter *Brassica* crop, Flexidine should be administered to ewes at least two months prior to feeding. Flexidine costs around 90 cents per dose.



# SOMETHING ELSE TO SMILE ABOUT



With BIONIC® Hi-Mineral you can rest easy knowing that your ewes and hoggets are getting the ultimate combination protection against all major parasites for up to 100 days. Talk to your vet about how you can use BIONIC® to improve lamb production and keep condition on ewes post drought.

Purchase now and get something else to smile about, the rain and this all-weather 'Amphibian' Jacket worth \$500.\* Fully breathable and seam sealed, this jacket will keep out any weather.

\*Qualifying purchases are 2500 x BIONIC capsules.



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