



VET notes

YOUR TOTALLY VETS NEWSLETTER ALL ABOUT ANIMALS ON YOUR FARM

JUNE 2014



Equine is now on Facebook and Twitter!

Totally Vets Team Equine

In addition to our Companion Animal page we are excited to welcome you to **Totally Vets Equine** on Facebook and Twitter!

Check us out www.facebook.com under "Totally Vets Equine" and also on Twitter @TotallyVetsEQ. We hope to bring you current news, equine health information and updates.

We would love to hear about your great times and your challenges! Please share your photos or posts on our page. We're sure there are many who have had super successes at events this season, so tell us all about it and start following us now.

We look forward to hearing from you!



Perceptions and Reality

Chris Carter

With easy and affordable access to communication, almost everyone can have an opinion on any topic and have their ideas aired. You no longer have to front by way of a letter to the editor or dial in to talk-back radio!

When the inhumane slaughter of calves in Chile was highlighted in the Chilean parliament earlier this year it prompted a swift response, not only from the NZ owners of the company (Manuka Farms), but also from a range of commentators within the NZ dairy industry.

For the dairy industry, handling excess numbers of calves born each spring has been a sensitive topic for many years, particularly as our attitudes toward the rearing and transport of "bobby" calves have changed.

The emerging information that some NZ farmers have been slaughtering calves by a blow to the head has prompted the Government with the support of Federated Farmers and other major industry players, to move and outlaw this technique except under emergency situations.

Nathan Guy, as Minister for Agriculture, has referred this matter to the National Animal Welfare Advisory Committee (NAWAC) to



consider an amendment to the Animal Welfare (Dairy Cattle) Code of Welfare 2010. This is a work in progress.

Dairy NZ has published an excellent publication of on-farm guidelines for the "Practical Emergency Humane Slaughter of Cows and Calves".

For calves, if slaughter is required, the preferred methods are the use of a captive bolt or the use of a firearm (0.22 calibre) or shot-gun (4, 5 or 6 shot cartridges). With all three of these methods bleeding out is required. Persons using these techniques need to be trained and, in the case of a firearm, a firearms licence must be held.

Our vets are willing to give advice & training on the humane slaughter of any stock. This topic will be covered, among others, in this year's calf rearing seminar which Totally Vets will host on Wednesday 25th June at our Feilding clinic.



Totally Vets current stock health

Dairy

Dry cow therapy (DCT) treatment and teat sealing is in full swing. When using long acting DCT ensure that you have an adequate dry period to cover the with-holding period and, if in doubt, check first!

If you are intending to use a teat sealant in heifers do so at least four weeks out from

calving, and remember it is much better if you shed train them prior to treatment (run them through the shed at least a couple of times beforehand).

If using rotavirus vaccine on the herd, remember that it needs to be given no closer than three weeks prior and no further back than 12 weeks from calving. It pays to split the

HA HA

A farmer goes in half shares with a friend to buy a bull as he's wanting to increase his stock numbers.

A couple of weeks later the friend comes by to see how his investment is doing. The farmer complains that the bull just eats grass and won't look at the cows. His friend suggests that a veterinarian have a look at the bull.

The following week his friend returns to see if the vet helped. The farmer sounds delighted and says "the bull has taken care of all my cows, broken through the fence, and has even serviced all my neighbour's cows!"

"Wow," says his friend, "what did the vet do to that bull?"

"Just gave him some pills," said the farmer.

"What kind of pills?" asked his friend.

"I don't know, but they taste a bit like peppermint."

PS: don't try this at home!



New information on iodine in breeding ewes

Ginny Dodunski

Many of our Manawatu farmers are familiar with the winter 'routine' of drenching ewes with iodine at scanning and/or pre-lamb to prevent lamb losses associated with low iodine levels in the ewes.

Work done in the early 90's by the then young, ever-keen Trevor Cook highlighted that 'sub-clinical' iodine deficiency was an issue in our district and was one factor contributing to lamb mortality. Conversely, in more than 20 years of looking, I am told that the keen sheep vets up here in the King Country have only ever seen 'one or two' cases...

In addition to a well-fed mum who wasn't losing weight immediately prior to lambing,

a new born lamb needs to have a properly functioning thyroid gland to help with energy production and heat retention in its first days of life. This requires the ewe to have a certain base level of iodine in her system from mid-pregnancy onwards, but especially around day 70, when the foetal thyroid is developing.

When ewes are really short of iodine, lambs are born with obvious 'goitres' - a swelling under the throat from having enlarged thyroid glands. Some of these lambs are born alive but many are born dead. Traditionally these cases are associated with winter brassica feeding, but not always.

Until recently we have not had a blood test available to accurately assess ewe iodine levels and have relied on post-mortems of dead lambs. However we have now developed a blood test (serum inorganic iodine) that is showing promise as a way of assessing ewe iodine status, say in autumn or winter. It is still pretty expensive (at an eye-watering \$42.00 a sample), and needs more data around it for us to have a bit more confidence in it.

Watch this space for further information. In the meantime, if you're really keen to take a closer look at the issue on your own farm, don't hesitate to have a chat to one of our friendly sheep vets!

Totally Vets prints **Vet Notes** on paper using FSC certified mixed source pulp from Well Managed forests and other controlled sources. The paper is produced under an environmental management system ISO 14001.





herd into early and late calvers to maximise the benefit of this vaccine.

The first cases of Theileria in the Manawatu have occurred. If introducing cattle from tick/Theileria areas, such as the Waikato, ensure all animals are treated against ticks (such as with Bayticol®) at least five days before shipment.

Sheep & Beef

Ewe scanning is also an opportune time to examine their body condition. It provides an

opportunity to separate out light ewes, and also those carrying singles versus multiples. This allows drafting into various mobs and hence differential management.

Faecal egg counts should be done a week prior to scanning to decide which classes of ewes may benefit from drenching.

Now is a good time to do cow liver biopsies to check trace element status, particularly in breeding cows, going into late winter/early

spring, and hence calving. Alternatively, liver copper and selenium testing can be done on cull cows at the works.

Deer

Scanning of hinds is a useful management tool to get rid of unproductive mouths. Remember the window for scanning is at least 30 days after stag removal, and not more than 120 days after the stag was introduced.

Planning for Spring

Greg Smith

Even when going well the days over calving are long and full, so the time spent by staff attending cows in trouble (calving and metabolic) will quickly add to the day. While the interruptions are inevitable, a well maintained spring first aid kit will save time.

CALVING KIT should include:

1. Two leg ropes/chains
2. One head rope/chain (twice the length of a leg rope)
3. Calving jack or pulley
4. Lube
5. Disinfectant
6. Clean bucket

The importance of the final two items are often underestimated. Ropes and chains quickly become contaminated so having a bucket of water with added disinfectant to clean gear before, during and after use is important. The hands and arms of the operator should also be considered part of the gear!

METABOLIC KIT should include:

Bags have made life a lot easier these days as the needle and tubing are supplied with each

bag. A guide to which bags to use and when is as follows:

1. Calcium borogluconate 375 - can be given under the skin (SC) or into the vein (IV).
2. Calcium/magnesium combinations
 - Products containing 4-5% magnesium plus dextrose (eg. Glucalmax™ and Glucalphos™) - administer **IV** as the dextrose slows absorption from SC injection sites.
 - Products containing 8% magnesium (eg. Calpromag™ and Glucalmag™) - administer **SC** as the higher magnesium concentration increases the risk of cardiac arrest when given IV.
3. Magnesium sulphate - **SC** only as the risk of cardiac arrest is high to extreme.
4. Dextrose - administer **IV** due to slow SC absorption and the risk of abscesses.

Metabolic cases within 48 hours of calving are predominantly due to milk fever so will respond well to calcium borogluconate. For metabolic cases in cows calved longer than 48 hours a combination is a better first choice option. Down cows not yet calved are more likely to have complications and are best assessed and treated by a vet.

YOUR STAFF

A pre-calving meeting with your staff is a good time to discuss the spring period ahead.

- For new inexperienced staff it is valuable as a training session.
- For new but experienced staff it is an opportunity to explain current practices



which may differ from the previous farms they worked at.

- For your experienced staff, a meeting will act as a refresher but is also an opportunity to discuss past experiences.

Staff at the coalface are in the best position to provide feedback on your operation. They will be able to identify inefficiencies and provide suggestions for possible improvements. Staff that are listened to and given the opportunity to make changes are a more engaged and motivated team member. If you have reservations about their ideas spend time working alongside them to see the work from their perspective. You'll be surprised at what you might see and learn!



Guidelines for colostrum storage and feeding

Helen Mather

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. The newborn calf can absorb antibodies from the colostrum, but begins to lose this ability from about six hours after birth.

Not all calves receive adequate colostrum from mum, even when left on the cow for days! Heifers and older cows produce poorer quality colostrum and not all calves drink sufficiently within 12 hours of birth. Calves receiving adequate colostrum have fewer disease problems and a higher survival rate.

Every calf should receive at least two (preferably four) litres of colostrum as soon as possible after birth, preferably within six hours, but definitely within 24 hours of birth. Colostrum, milk or milk replacer should be fed at the rate of 10-15% of bodyweight per day during the first week after birth (i.e. about 3-7 litres), preferably divided into two or more feeds per day.

Although antibodies can't be absorbed by the calf beyond 24-36 hours after birth, colostrum, either fresh or stored, should be fed for as long as possible, AT LEAST for the first four days of the calf's life. Colostrum provides local immunity in the gut against scours and is a highly digestible, high-quality food that is rich in nutrients.

Vaccinating cows using Rotavec® Corona or ScourGuard® 4(K) vaccine boosts colostrum quality and can provide significant protection against calf scours. However good results still rely on calves getting adequate amounts of that colostrum!

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, so calves receive local gut protection for as long as possible.

Collect and store colostrum from the first and second milkings (the best stuff with highest antibody concentration) separately from colostrum from later milkings. To get the best immunity, use this high antibody colostrum as calves' first feeds.

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 acidic, 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. Calves will continue to drink smelly 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!).

Gossip

Barney and **Hamish** attended a Bayer sponsored workshop in May on cattle repro in Argentina. This workshop included sessions on reproductive physiology as well as learning embryo transfer techniques, both in theory and hands-on.

Congratulations to **Leisa** who has been selected to attend a Foot and Mouth (FMD) training session in Nepal next year. Leisa was one of 20 people selected from 100 applicants. Leisa is an Initial Investigating Veterinarian for exotic disease call-outs in NZ and the experience in Nepal will be invaluable training for this role. The program has been put together by the Ministry for Primary

Industries in conjunction with the Australian government and the European Union. Five Nepalese veterinarians will double as interpreters for the field work component. Recommendations will be made to the Nepalese government regarding the control of FMD in the area visited.

In April we welcomed **Reuben** Harland our new Territory Manager for the Manawatu. See his profile on page 5. **Megan** Wishnowsky joined the Feilding reception team in May. Megan is working closely with **Eliza** prior to Eliza taking maternity leave. Megan has a wealth of experience in marketing as well as farming locally with Simon and is a co-owner of a lawnmower business in Palmerston North. **Katrina** Ross has joined the business in Accounts Payable, taking over from **Glenda**.

Prior to joining Totally Vets, Katrina held financial management roles at Massey University. **Heidi** Pihama has been appointed to the Team Leader role for Feilding reception and the Customer Service Centre. Heidi starts on 26 May and is moving down from the Waikato where she had lead positions in two hospitality and function businesses.

We farewell **Fraser** who will leave us on 20 June. Fraser will be missed, not only by us but our dairy clients. **Greg** will now be based out of the Awapuni branch and his experience and knowledge will be appreciated by all. **Jackie** Cunliffe has accepted a customer service role with Provet. Jackie has been with us for nine years and in addition to her current role as Purchasing Officer has held roles in reception. We wish Jackie all the best.



Introducing Reuben

Hi I'm the new guy around the traps, my name's Reuben Harland and I recently joined Totally Vets in the new role of Territory Manager. This role will support the great work the vet team do by providing you quality information regarding product queries and services.

I grew up in rural Bay of Plenty on the Kaimai ranges where we grew kiwi fruit and had a few sheep, cattle and plenty of pets on our 20 acre lifestyle block. Although not from a big farm both my brothers and I have all dairy farmed at some point in time and I've worked on deer and hill country sheep and beef properties, so always intended a career in the agricultural sector.

I studied Ag Science at Lincoln University where I focused on animal production and health, and farm system management, in

both the dairy and dry stock sectors. I am passionate about all production animals from dairy cows through to deer, and I'm also interested in all farming systems from hill country through to lifestyle!

After studying I continued down the research path into ruminant nutrition and health at Agresearch in Palmerston North for a couple of years, followed by a stint in the Waikato with a dairy chemical and health product manufacturer before returning to the Manawatu.

As well as a passion of farming I also like to know where our food comes from, so in my spare time I'm a keen hunter, gatherer and gardener. When I get time I hunt for venison, wild pork and game birds; fish for trout (poorly!); and dive for crays if I'm lucky. However, as much as I would like to, I can't survive on protein alone so also grow, gather and barter for fresh fruit and veges where possible.

So if you see me around don't hesitate to give me a wave or drop me a line and I can always come for a visit if you would like more information about our products and services.

Mid-pregnancy shearing

Juan Klue

It's just about time to decide whether to shear ewes mid pregnancy or not.

To achieve a birth weight response from mid pregnancy shearing, ewes must have:

- the potential (those destined to give birth to light weight lambs) and;
- the means (those that have an adequate level of maternal reserves i.e. those that have good body condition and/or those offered a good level of nutrition).

A positive survival response from shearing during pregnancy is most likely to occur in lambs born as twins or triplets when birth weights are otherwise destined to be below

4kg. Shearing during pregnancy can increase birth weights of these lambs 300-500g which can make a big difference to the survival rate of lambs which would otherwise be born less than 4kg. The response appears to be most consistent when ewes are shorn between days 55 and 100 of pregnancy, the optimum time being 88 days after the introduction of the ram.

Shearing later than 100 days of pregnancy increases the risk of exposing ewes to conditions that may cause pregnancy toxemia. Shearing during pregnancy of single-bearing ewes is unlikely to increase survival of lambs but may increase costs if a twice-yearly shearing policy is undertaken. Scanning ewes just before shearing can identify those carrying multiples as compared to singles, and so help with your decision making processes.

In years with low feed availability (such as after a drought) and/or in ewes which are in very poor condition (body condition score <2) a birth weight response, thus the survival rates



of lambs, from mid pregnancy shearing may not occur.

A policy of shearing mid-pregnancy is best suited to high fecundity flocks, or in situations where single and multiple-bearing ewes can be managed separately. Management around shearing is important because cold stress can affect the survivability of pregnant ewes. Shearing should be done while the weather is settled, use a cover comb to improve insulation, ensure they have sheltered paddocks and offer extra feed for 3-5 days to help them to manage the temporary cold stress.



Ewe management from scanning to lambing

Trevor Cook

Pregnancy scanning ewes sets the potential production. How much of that potential is captured is largely management driven.

The weather is blamed too much for the losses that occur between scanning and docking, when in fact most of the impact of bad weather is very sensitive to two factors; the body condition of the ewe and the feed that multiple ewes have in the 35 days before they lamb.

It is useful to have a picture of what happens when a lamb is born. Whatever the weather, lambs will be born alive and their instinct is to get up and suckle. To encourage the ewe to be interested, those lambs will vocalise. This is an important event in the whole mothering up process. So it is not surprising then that trial work shows that if a lamb stands and suckles within fifteen minutes of being born it has a 95% chance of being alive 90 days later. The vigour of the lamb at birth also has a huge effect on its survival. In the face of bad weather, a lamb that gets up quickly and suckles is much more likely to survive compared to one that is slow to get up and does not vocalise. Of course nothing will help a lamb survive really extreme weather!

It is not trace element or vitamin supplements, or giving the ewe two weeks to find a lambing site... It is the previous two factors, body condition and pre-lamb feeding that largely determine how vigorous a lamb is at birth. Management of ewe condition and ensuring that multiple ewes do not lose condition

in the five weeks before lambing has been shown to massively lift lamb survival. To get both of these right requires intervention early on. Ideally low condition ewes will have been rescued before mating. But taking light ewes out at scanning, so they can be treated preferentially, is one of the most valuable interventions that there is. The feed needed to lift a multiple ewe of condition score 2.0 at scanning to be score 3.0 at lambing earns 35cents/kg of dry matter. Nothing else on most hill country farms earns that.

We cannot do much about the feed supply to the flock once into the spring, but we can control what they get before they lamb. But this can only happen if it is planned to be there. It is not too late to take actions to lift the feed being taken into the winter. Alongside of that must sit a feed allocation plan to ensure that enough is there when needed. Finally, enlist the person who is pushing the ewes into the scanning crate to condition score them as they come through and mark those below 3.0.



Spring grass and ponies

Joao Dib

The effects of lush, carbohydrate-rich spring grass on our equine friends are well recognised and many of you will be aware of potential risks of diet related laminitis (inflammation of the soft tissue

beneath the hoof) with or without the onset of founder (when the pedal bone in the hoof rotates).

Despite the focus being on ponies (and all small equine alike), horses and donkeys can also be affected.

In the spring, grass is loaded with higher than normal soluble sugar content, called non-structural carbohydrates (NSC). The amount of NSC exceeds the small intestine's absorptive capability and so reaches the large intestine, primarily the caecum. This excess

Transition Time for Dairy Cows

Lindsay Rowe

In a recent article in this newsletter we highlighted the critical aspect of the time from 3-4 weeks before calving through to 3-4 weeks following calving, the transition period.

During this period as much as 80% of the herd's disease costs are generated and up to 4% of cows are culled from the herd as a consequence of problems arising at this time. When managed well the transition period can set the scene for top milk yields and maximum fertility but, if managed poorly, can severely limit potential production and will adversely affect herd fertility.

The key aims of the transition diet, particularly in the pre-calving period are to:

- **Adapt the rumen to the milking diet and reduce rumen disruption** as this will improve the energy and protein metabolism of the recently calved cow:
 - The rumen will take up to six weeks to fully adapt but introducing the ingredients that will be in the post calving diet (e.g. maize silage, palm kernel) from three weeks before calving will start this process before the real pressure comes on.
 - The use of Rumensin® from this time and through the early part of the lactation is

likely to provide an added lift in the energy efficiency of the rumen.

- **Reduce macro-mineral (calcium, magnesium, phosphorus) deficiencies** at the onset of lactation:
 - For every milk fever case that you treat there will be 15 or 16 other cows in the herd that will also be suffering from low blood calcium levels. This will trigger a reduction in appetite and ultimately lead to a loss in production and reduced fertility.
 - Management of the dietary intake of macro-minerals along with an understanding of the likely intakes of sodium, potassium, chloride and sulphur is the key to minimising the risk.
 - Magnesium oxide, MagC and MagS are commonly added to the diet at this time but often the dose rates are poorly calculated so take care to be accurate, especially as the mob size is changing daily.
- **Boost the immune system:**
 - Generally a cow with an adequate intake of energy and protein will effectively resist disease but for some herds, where intakes are compromised or where the herd is producing at very high levels, there may be a case to boost their mineral and vitamin status.
- **Increasing dry matter intake before calving:**
 - Typically the dry matter intake of the cow decreases dramatically in the week

leading up to calving and it can take up to 12 weeks after calving before she reaches peak intake again.

- This situation can be improved by getting the cows as close as possible to their calving target body condition score by drying off or very early in the dry period so that they can be put on a "restricted" diet for the majority of the time they are dry. When intakes are then allowed to lift in the transition period, and offered ad-lib following calving, the cow will then naturally eat more in early lactation and reach higher levels of production with less weight loss.
 - When planning the feed intake for the dry mob remember that cows close to calving will eat less vigorously than those calving later - ideally draft cows into a springer mob from 3 weeks before calving and ensure feed is available all day. Feed quality is crucial as poor quality feed at this time, e.g. an excess of hay, will restrict intakes.
- **Set up the cow for an early positive energy balance** so she has significant ovarian activity and an obvious expression of heat with a good conception rate.

Given the number of tools now available (eg. diet checking software programmes, cow-side and laboratory tests for blood, liver and feed stuffs) as well as a broad range of products, this period can now be managed with much more accuracy than in the past... talk it over with your vet sometime soon!

NSC shifts caecal fermentation to a state of acidosis (due to proliferation of certain bacterial types). The net effect being reduced blood flow and nutrient supply to the foot leading to laminitis and/or founder.

The levels of NSC in spring grass vary during the day. Concentrations tend to rise in the morning, reach maximum in the afternoon, and decline overnight. There are also seasonal variations associated with varying energy demands at different stages of growth. Concentrations are highest in late spring, lowest in mid-season, and intermediate in autumn.

To help prevent problems due to spring grass:

- Make available a good supply of quality, summer hay.
- Monitor and control the weight of the animal. Excessive weight adds mechanical pressure to the feet so, if laminitis occurs, chances of pedal bone rotation are much higher.
- Ensure teeth are in good condition by investing in regular dental checks.
- Ensure good hoof condition by regular trimming.

- Monitor trace element status, most importantly selenium.
- Provide a suitable environment, including, if at all possible, having a "mud free" area where animals can stand.
- Plan a suitable grazing rotation. Do not starve your animal but limit the supply of fresh, NSC rich grass in early spring. Graze grass early in morning but limit access in the afternoon.

Eprinex

SPECIAL PRE-CALVING TREATMENT PRICING

**PURCHASE AN
EPRINEX 5L FROM
TOTALLY VETS
FOR JUST
\$515.00***



**NIL WITHHOLDING: MILK, BOBBY
CALVES AND MEAT**

**PLUS A FREE SCOTCH FILLET CUBE ROLL WHEN PURCHASING
4 X 5L OF EPRINEX - APPROXIMATELY 4KG.**

*Netted back 3+1 FREE deal. Conditions apply and while stocks last.



PROUDLY AVAILABLE FROM YOUR LOCAL VET.

Merial is a Sanofi company.

MERIAL NZ LTD | LEVEL 3, MERIAL BUILDING, OSTERLEY WAY, MANUKAU CITY, WWW.MERIALANZ.CARE.CO.NZ | REGISTERED PURSUANT TO THE
ACVM ACT 1997 NO. A7191 | SEE WWW.FOODSAFETY.GOV.NZ/ACVM/ FOR REGISTRATION CONDITIONS | NZ-12-EPR-077



“Class of 2017” ...their future is in your hands

**We're holding a special 'Ladies Day' for all
dairy women in our area**

- Focus on calf rearing
- Wednesday 25 June 2014
- Morning seminar at Totally Vets Feilding followed by a practical on-farm session
- Limited numbers - first in, first served!

Contact Gaye.Stein@totallyvets.co.nz to register

