



VET notes

YOUR TOTALLY VETS NEWSLETTER ALL ABOUT ANIMALS ON YOUR FARM

JUNE 2010



Above Some of Greg's workmates waiting for the first heifers

Get it right!

Having recently been through several discussions with clients regarding leptospirosis vaccination protocols of dairy stock, it is apparent we are not all getting it right.

There are well-researched reasons for following the recommended vaccination schedule in all classes of stock. All young spring-born calves require two vaccination shots, four weeks apart, before their first winter. All other classes of stock require an annual booster no greater than 12-14 months apart.

Failure to comply with this regime greatly reduces the effectiveness of leptospirosis vaccine in protecting animals and people from leptospirosis. Failure to comply exposes you to far greater risk.

Totally Vets Fishing Competition

Barny Askin

We have been lucky for six years but 2010 was not to be our year. Standing at the Wanganui bar at 6.30am, watching the white caps, with the forecast predicting 35 knot westerlies made the decision to cancel fairly easy.

There was no contingency plan but this was soon resolved after a call to the manager of Murray's Irish Public House in Feilding. Many fishermen had leave passes for the day and were reluctant to waste them!

Thank you all so much for still supporting the event. It made for a most enjoyable afternoon. We warned the pub that about 40-50 people might turn up and ended up with about 130. Somehow everyone was catered for on one BBQ...just!

The prizes that had been donated were

absolutely awesome, so a huge thanks to all of our sponsors. They are all listed below so please try to support them. Without their generosity it would not be possible to run this event. Thank you also to Murray's for accommodating us at such short notice.

Sponsors of Totally Vets fishing competition:

Allan McNeill Chartered Accountants, Annandale, Bayer, Beaufort, Bernard Matthews, Blackmore & Associates, Bomac, Caffeinate, Central Auto, Ethical Agents, Garratt Motor Group, Hills Pet Nutrition, Hunting and Fishing NZ, Intervet Schering-Plough Animal Health, the Mad Butcher, Makoura Lodge, Mars New Zealand, Masterpet, Merial-Ancare, Mobile Outboard Services, Murray's Irish Public House, NRM, Phoenix Pharm, Premier Breeding Services, Provet, Scotts Pumps, Shoof, Stockguard, SVS, Totally Vets Ltd, Turners Sports, VetPack and Virbac.



Guy overseeing Barny presenting to Alan Dalziel at the fishing competition prize-giving



Totally Vets current stock health

Dairy

Monitor cow body condition scores to ensure "gainers are gaining" and "maintainers are maintaining". Adjust mobs and feeding if necessary and review feed budgets.

Check the trace mineral status of your herd. Liver biopsies are ideal to identify what is happening in terms of copper levels in "normal" cows and different classes of stock.

Make life easier! Start training your heifers through the shed if you are planning to use Teatseal®.

Clean out the calf sheds and spray with a virucidal disinfectant before laying in 300mm of bark, shavings or sawdust. Fix leaky water systems.

Book a vet for staff training. Totally Vets offers staff training on a range of topics including



HA HA Spelling is important!

A young monk was helping the older monks to copy old canons and laws. He noticed they were copying from copies and approached the abbot to point out that if even a small error was made in the first copy, it would never be picked up and would be perpetuated in all of the subsequent copies.

The abbot said, "You make a good point, my son. We have been copying from the copies for centuries". He went down to the cellar where the original manuscripts were held in an ancient vault.

Hours went by and nobody saw the old abbot. The young monk went to look for the abbot and found him banging his head against the wall. His forehead was bloody and he was crying uncontrollably.

The young monk asked, "What's wrong, father?"

With a choking voice, the old abbot replied, "We missed the R! We missed the R! The word was...CELEBRATE!"

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Urea poisoning

Peter Aitken

We tend to see urea as a common farm product, but often forget the downsides to this helpful little additive. One of the big negatives is that it can kill our cows quickly if we happen to get it wrong or for some reason get distracted when applying it.

Recently I was called to see some cows that had eaten urea; by the time I arrived, two cows were dead and a third needed to be euthanased. While investigating how this had occurred, we discovered a large rut in the paddock which the cows had been grazing and where the urea was still visible on the ground; spreading had been done over 48 hours prior with a rainfall greater than 15mm since spreading. It was likely that the spreader had been slightly overfull and the rut had caused a jolt, resulting in a urea spill. There was also a small amount of urea in the bucket of the tractor with some palm kernel which the cows

had passed on the way to the shed. This was possibly the urea source for the cows that died in the yards.

Signs of toxicity can commence from as little as ten minutes after urea is eaten and include abdominal pain, frothing at the mouth and nose, bloat, muscle tremors, incoordination, weakness, bellowing, lying down and struggling. Fatality rates in cases of urea toxicity are high. Treatment is often unsuccessful but a weak acid such as vinegar (4L) needs to be given as soon as signs are noticed to have any effect.

Simple rules can be followed to ensure this doesn't happen:

- Make sure any equipment used to spread urea is cleaned after use
- Ensure spreading on paddocks is even - don't rush

If you have any questions about urea poisoning, please don't hesitate to contact your farm vet to discuss them.





calving, first aid, calf-rearing, lameness, milk quality and stockmanship.

Avoid the emotional drain and cost of calf scours. Arrange to have your cows and heifers vaccinated with Rotavec® Corona vaccine three weeks before the planned start of calving.

Sheep

Tail-end ewes need to be identified and prioritised. It is more profitable to lift the

bottom 25% of the flock by separating and preferentially feeding them, than to try to lift the average by feeding the whole mob well.

Liver fluke may be contributing to the tail-end. An autopsy or two can provide considerable insight into the many possible causes of ill-thrift.

Scanning time is a good time to assess ewe condition and worm level - a faecal egg count a week out from scanning will help decide whether any worm treatment

is necessary at this time.

To avail yourself of the Totally Vets ewe-scanning service, contact Guy Haynes on 027 455 5424.

Remember to treat for lice off the shears if mid-winter shearing.

Deer

For greatest accuracy, scan hinds 30 days after the stag was removed and before 120 days after the stag was introduced.



Guidelines for colostrum storage and feeding

Paul Wiseman

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. In addition, the concentration of antibodies in the colostrum diminishes rapidly after the cow has calved and is reduced markedly after two milkings.

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 half the calves born do not get adequate colostrum. 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. If it is suspected that a calf has not received this, colostrum should be given to the calf within 24 hours of birth.

Although antibodies cannot be absorbed by the calf beyond 24-36 hours after birth, colostrum, either fresh or stored, should be fed for at least the first four days of the calf's life, as it can provide local immunity in the gut and is a highly digestible, high-quality food.

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 2-7 litres per day), 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 a local protection from scours in the intestine and is rich in nutrients.

Natural fermentation is an excellent way to store colostrum. It must be handled in clean containers with lids (remember, bloat oil is lethal for calves). If stored below 20°C, natural fermentation will make the colostrum acid, stopping 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 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!).



What the new code means for you

Paul Wiseman

The dairy cattle code of welfare (2010) encourages all farmers to adopt the highest standards of husbandry, care and handling. It sets out general principles of care and will be enhanced by industry good practice guidelines.

Very few of us, be it members of the public or those more directly associated with the dairy industry, would disagree with prohibiting the use of a vehicle to assist a calving. Fortunately, it is now some decades since I was last told "you can do your caesarean after I have tried the tractor!"

The code contains limited information on how to ensure that welfare standards are met. In fact, some may consider it a rather "soft" document, lacking in detail. Rather than being a textbook on health and welfare, the code identifies minimum acceptable measurable requirements for various parameters

associated with optimal health, production and welfare of all classes of dairy stock.

The code also addresses the issue of appropriate body condition scoring (BCS) for dairy cattle and establishes the lower threshold BCS where urgent action has to be taken to improve condition.

Veterinary-managed procedures have rapidly become "normal". Consider the use of CIDRs to reduce the perennial problem of non-cycling cows. The importance of feeding and its impact on reproductive performance seemed to get lost with the advent of the CIDR. Many farmers just wanted access to "the drugs to make my cows get in calf", not a lecture on feeding. Perhaps this attitude is simply a reflection of today's instant gratification society?

We all know that improving cow condition reduces CIDR use, improves submission rate and lowers empty rates. Are we meeting our obligations when we insert CIDRs into cows with a BCS of less than 3, expecting them to respond as if they were in good health?

Minimum standards in this code cover:

- Stockmanship and the requirement for adequate training
- Adequate daily quantities of food and water

- Requirements for adequate shade and shelter
- Appropriate design, construction and maintenance of handling and housing facilities
- Stand-off areas and feed pads
- Requirements for milking and milking equipment
- Requirements for calving
- Appropriate management of calves (including hand-rearing and feeding)
- Effective prevention and treatment of any ill health (including lameness)
- Requirements around pre-transport selection of animals
- Emergency humane destruction procedures

While calving and BCS are easy to focus on, there are many other areas of farming practice where veterinary input and education of industry staff can assist in ensuring that welfare standards are achieved.

The code may not make riveting reading but take the time to read it and ponder the impact it has on you.

www.biosecurity.govt.nz/animal-welfare/codes/dairy-cattle

What's the goss?

Greg Smith is now being kept extremely busy in Vietnam caring for 9000 heifers. Half of these heifers are in-calf to a fixed-time insemination. The other half are being prepared for a further round of insemination. Working long days, seven days a week, did

not prevent Greg from noting it with some local celebrities:

"On Easter Sunday the farm was visited by the President of Vietnam. This generated a lot of excitement of course, except perhaps for the President. The speeches were in a pavilion outside the front gate and then the presidential party made a tour of inspection, but the media scrum gave little chance for any handshakes. Not sure if it made the

evening news as power cuts are a bit endemic at the moment, so my headlamp has been very useful. Tam Biet, lehitra-ot, Goodbye Greg."



Above Some of the 9000



Pros and cons of dairy herd parasite treatment

Anita Renes

There is substantial evidence that gastrointestinal parasites 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 leads to production losses.

Dairy herd anthelmintic treatment may lead to improvements in milk production, body condition and reproduction.

The average response that can be expected by treating is 0.35-0.6kg of milk (approximately 0.35-0.6L) per cow per day. This figure comes from an analysis of 87 studies about drenching adult dairy cattle. Eighty percent of these herds showed a positive milk production response, though the range was between 0.0 to 2.1 kg 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 was reduced by 4.8 days in a large Australian trial drenching during the dry period and one in New Zealand reduced it by 9 days. 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 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.

The most reliable test we have for assessing worm burden and likely herd response to anthelmintic treatment is the measurement of *O. ostertagi* antibody levels in a bulk milk sample (B-sure test).

It has been suggested that one reason anthelmintic resistance developed more slowly in cattle than sheep is because the use of drenches is less intensive and fewer adult animals are treated. A consequence of unnecessary drenching of adult cattle may be

the risk of encouraging the development of anthelmintic-resistant parasites, so it makes sense to target anthelmintic treatment to herds 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
- Pastures that were dominated by young stock prior to dairy conversion may take several years for the numbers of worm larvae to fall
- Higher-producing cows
- 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.

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.

Paula O'Reilly is departing Totally Vets. Paula's ability to move seamlessly between companion and production animals will be sadly missed, as will her editorial accuracy and contributions to this newsletter. Paula's short-term agenda, after a surprise visit to her folks in South Africa, is to pack up her house and put it into storage. She and Dan will then endure a few months in the Mediterranean (you have to feel sorry for them), before settling in South Auckland. We all wish Paula and



Above Paula and cheetah

Dan the very best and thank them for their memorable contribution to Totally Vets.

The Meat and Wool Monitor Farm community day 2 was a great success. Sixty or more people attended, including a high percentage of younger people. The Monitor Farm days, run by **Trevor, Ginny and Greta**, and ably assisted by **Charmaine**, are proving a great success. If you're not already attending "you jus gotta be there". Check out www.totallyvets.co.nz for the next event.

Behaviour and stock handling

Dairy Code of Welfare 2010

Distress and risk to both animals and their handlers are decreased when good facilities reduce the need to apply pressure to the animal in order to handle them.

When handling dairy cattle, remember they have the following behavioural characteristics:

1. They have poor vision for both distance and detail and should be given time to adjust when being moved into shadowy areas. Exposure to sudden movements of nearby objects should be avoided.
2. Their hearing is similar to that of humans, so they should not be subjected to loud noises.
3. Their instinct to herd is strong, so they should not be isolated unnecessarily.

Understanding those things that cause stress in dairy cattle can lead to an appreciation of how they may react to other cattle, humans, strange noises, sights and smells. Dairy cattle must not be prodded in the udder, eyes, nose, anus, vulva or testicles.

Keep safe out there!

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, low birth weights and poorer wool production.

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 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 eighty cents per dose.



Money for dead sheep

Barney Askint

Scrapie is a progressive, transmissible, fatal neurological disease that is the sheep

(and goat) equivalent to "mad cow disease". It is currently exotic to New Zealand.

For New Zealand to maintain its status as scrapie-free, samples from sheep and goats over two years of age demonstrating signs of nervous disease are needed for the surveillance programme. MAF Biosecurity New Zealand will pay \$50 for the animal's head.

There are however a couple of catches - sample numbers are limited to two per farm and the animals need to have been dead less than a day.

If you have any animals that meet these criteria, please give us a call and we can arrange collection. If you cut the head off, please ensure that the back of the animal's throat is included as the test is carried out on some lymph nodes from that area.



Transition time for dairy cows

Lindsay Rowe

The transition period is defined as the period from three weeks before calving until three weeks after calving. This period is fundamental to the whole season's production and reproduction. Managed well, it can set the scene for top milk yields and maximum fertility. Managed poorly, it will limit potential production and adversely affect herd fertility.

The focus of transition management is to:

1. Physically prepare the cow for a change from the dry state to that of a lactating cow. The Golden Rule is to maintain appetite! During the week prior to calving there is a natural decrease in the cow's dry matter intake - often by as much as 30% and it is

occurring at a time when her requirement for energy is dramatically increasing. Dry matter intake in the two to three weeks pre-calving is the single most important factor in managing the transition cow. She requires at least 11-12 kgDM of a high-quality ration daily through until calving. After calving, intakes must become totally ad-lib if cows are to perform to their potential.

2. Plan and manage feed carefully to avoid any sudden changes in the diet for the cow as she moves from the dry mob through the springer mob (transition cow), the colostrum mob and finally into the lactating herd. Done well, this will promote efficient rumen function and appetite.
3. Prevent hypocalcaemia (low blood calcium) over the calving period. Hypocalcaemia is a very significant problem in our lactating cows, 'milk fever' just being the tip of the iceberg. Cows with low calcium levels are also much more likely to experience other problems: calving trouble; retained foetal membranes; uterine infections; mastitis; lameness; reduction in appetite and ketosis.

Reduce the risk of cows experiencing these problems by minimising the drop in blood calcium around calving through the provision of a near ad-lib high-quality ration along with the recommended level of anionic salts. Calcium-enriched drenches given immediately after calving are beneficial as is the addition of lime-flour to the post-calving diet.

4. Prevent immune suppression over the transition period. The majority of disease in dairy cows occurs in the second half of the transition period when the cow's natural defence mechanism is reduced following insufficient energy and protein intakes. Working hard to maintain intake through the transition period is crucial to minimising the risk of disease. Ensuring a surplus of available trace minerals is also critical at this time as they may boost the immune system.

Totally Vets Intelact Dairy consultant, Lindsay Rowe, or one of our dairy veterinarians is able to assist you to manage the transition of your herd from a dry state to one of top milk yields and higher fertility.

Monitor Farm on a roll!

Ginny Dodunski

A stunning autumn day added to the enthusiasm of all who attended the second Meat & Wool NZ Monitor Farm day at Simon & Dennis Wishnowsky's Halcombe farm.

Following on from community feedback, the business plan to take the farm to the next level was presented. This involved a mix of policy changes and 'doing old things better'.

A tour of the farm took us to look at the new ewe-flock policy, cattle feeding options and the cropping and regrassing programme.

On return to the woolshed, groups of farmers discussed ideas for achieving targets for the ewe

flock, the cattle-finishing enterprise and the forage programme. Many great ideas were presented and no doubt some will be added to the mix.

Trevor then presented his signature 'five minute take home message' covering winter ewe management.

Circle August 4 on your calendars and come to the next community group day to be part of the progress!

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