



VET notes

YOUR TOTALLY VETS NEWSLETTER ALL ABOUT ANIMALS ON YOUR FARM

OCTOBER 2010



Above Dirty cow tools

Stock outages

When at the last moment, a supplier advises that a high demand, very seasonal product will not be available, "who ya gonna call?"

Few manufacturers of pharmaceutical products have the capability of dropping everything, starting afresh and still meeting strict quality assurance standards in a short space of time.

So when the usual drugs for treating 'dirty cows' are not available, what can a vet do? They review the literature, they consult with colleagues of repute, they pester the pharmaceutical companies, and they make rational and practical decisions that will best meet the needs of the 'dirty cows' and their owners.

We've moved!

A reminder that the Feilding branch has now moved to 25-29 Manchester Street, right across from the saleyards. We are having a celebratory opening week from 11 to 15 October - we would love to see you all.

Photosensitivity in livestock

Photosensitivity in livestock, commonly referred to as 'eczema', is sunlight-induced swelling, reddening, scabbing and/or peeling of white or unpigmented areas of skin.

This is a recognised disease in New Zealand which causes major financial loss for farmers through decreases in animal development and productivity, and animal death.

Most farmers, especially those in the North Island, are familiar with **facial eczema**, which is caused by fungal spores and occurs during warm, wet conditions in autumn. There are a number of less common and sporadic types of eczema, however, including **spring eczema** (Sept-Nov), **Brassica (turnip) photosensitivity**, **St. John's wort photosensitivity**, and others including **rape scald**, for which the cause is unknown. Additionally, many of the photosensitivities are misdiagnosed or not reported at all. This makes it difficult to gain insight into the geographical spread and prevalence of the affliction, and subsequently the likely cause.

Not knowing the cause makes this affliction difficult to treat and raises problems with the development of early prevention, treatment and/or curative methods.

In order to investigate this, Zoe Matthews, a PhD student of Massey University, is working on methods to identify unique compounds in blood samples from adult cattle, calves and sheep with signs of photosensitivity with the overall aim to gain insight into the likely cause.

Zoe is really interested in hearing of acute, severe cases, involving a number of animals, but information on all cases is helpful and appreciated and may help to derive a pattern in the disease process, subsequently elucidating to a likely cause.

Any information, or samples, you can provide would be much appreciated, and any questions or suggestions are most welcome. Please contact Zoe Matthews at Massey University, Palmerston North on 06 356 9099 ext 3525, email z.matthews@massey.ac.nz, or Mark Collett, email M.G.Collett@massey.ac.nz, ext 7884.



Above Farm near Clinton, SI. Rape scald



Above Dannevirke, NI. Brassica photosensitivity



Totally Vets current stock health

Dairy

Lame cows are a continuing headache with the wet and muddy conditions - true foot rot, white line disease, and stone injury being the main culprits. Be patient!

Now is the time to give 5-in-1 and early lepto vaccinations. While you are on the job, remember to vaccinate your special lamb

before the school pet day - they have a habit of succumbing to pulpy kidney the day of the parade!

Pink eye: be alert for this irritating eye condition which has been persistent this spring. Pink eye can be introduced to a property by carrier animals (e.g. bulls), and is spread by flies and contact between



HA HA Husband down in aisle 4

A husband and wife are shopping in their local supermarket.

The husband picks up a case of beer and puts it in their trolley.

“What do you think you’re doing?”, asks the wife.

They’re on sale, it’s only \$20 for 24 cans”, he replies.

“Put them back, we can’t afford them” demands the wife, and so they carry on shopping.

A few aisles further on, the woman picks up a \$40 jar of face cream and puts it in the trolley.

“What do you think you’re doing?”, asks the husband.

“It’s my face cream. It makes me look beautiful”, replies the wife.

Her husband retorts: “so does a case of beer and it’s half the price”.

Checking your rams for brucellosis

Barry Askin

Last season as a clinic, we had to deal with several outbreaks of brucellosis in three different regions of our practice.

One of these outbreaks resulted in an entire ram flock being culled because of a very high infection rate. The others took longer to get under control because of a lower level of infection within the ram flock and a slower rate of spread. Such cases often require multiple blood tests several weeks apart before the disease can be eradicated from the ram flock.

Over the last few seasons, the number of you contacting us about checking rams has increased, which is encouraging. Traditionally, rams have always been checked prior to mating. The problem with this is that if a problem is identified, there is often insufficient time to test and cull rams and ensure a *Brucella ovis*-free flock prior to mating. The disease can then spread like wild-fire during tupping, which can have dramatic effects on scanning percentages.

Your rams can be checked at any time and any infection that spreads during the previous mating season should by now be detectable. Outside the breeding season, when rams are sexually inactive, it can be much easier to eradicate the disease with minimal blood tests.

See previous newsletter articles for more details on *B.ovis*, or contact us at the clinic if you need to know more but remember:

- Always purchase rams from a *B.ovis*-free source (rams purchased should at least have been palpated)
- Avoid sharing or borrowing rams
- A community approach works best for preventing spread of disease within an area - talk to your neighbours and have a plan
- The disease is not carried from season to season in the ewe flock
- There is **no** treatment



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.





animals (e.g. yarding). Outbreaks are common. Early diagnosis and treatment is important to avoid loss of eyes.

Ensure adequate nutrition for heifer replacements during their first, and second, November to March periods. Failure to meet growth targets at these times can be critical. In the first year, pasture may not be enough to meet the nutritional needs of heifer calves between 3 and 8 months old. Calves need to be supplemented with a mix of quality

proteins and sufficient energy to maintain daily live weight gains of 0.7kg (Friesian) and 0.5kg (Jersey).

Sheep & Beef

Reminder - part of Scabby Mouth vaccination is checking for vaccine 'take'. Eight to ten days post-vaccination, there should be a raised 'angry' scab along the scratch line.

Many ewe flocks will wean in lighter condition this year. 2011 may be a year where

Androvax/Ovastim is a useful tool. Planning for these fertility-boosting vaccines needs to start now.

Deer

Plan now for managing ticks in deer: often a combination of pasture 'grooming', cleaning out paddocks with other stock and chemical control on the deer is the most effective approach. Depending on the timing and tick burden, you may have to treat the 'other' stock once they've done their job.



VADD - Veterinarians Against Dangerous Drenching

Hamish Pike

All cattle and sheep worm drenches (anthelmintics) can be harmful whether they are an oral, a pour-on or an injection.

It can be particularly dangerous to drench calves under 8 weeks of age and lambs under 4 weeks of age. Animals rarely need drenching

pre-weaning (while on milk). Those that are sick or debilitated should be drenched with caution.

Anthelmintics can be fatal to your animals if label recommendations are not strictly followed. For example, do not mix anthelmintics with milk, milk replacer or colostrum for feeding calves; do not apply the drench differently to what is recommended on the label; only use the product for the species that it is licensed for unless advised by a veterinarian; and do not use closantel-containing drenches (e.g. Genesis Ultra) in goats, as it may cause permanent blindness.

Dose to the weight of the heaviest animal in the herd or mob. However, do not overdose, and be aware of the dose when drenching the 'poor-do'ers'. Ensure that you have a system for identifying those animals that you have already drenched in order to avoid multiple dosing.

Check that your drench gun is delivering the correct dose by squirting a dose into a syringe before you begin drenching the herd or mob. This is also good practice to ensure that you are not under-dosing!

Anthelmintics that also contain copper and/or selenium should not be used in conjunction with other products e.g. vaccines, containing copper and/or selenium.

Ask for veterinary advice if you are unsure about the product you are wishing to purchase.

Finally, if you do experience any adverse reactions in relation to drenching (up to 48 hours post-drenching), please contact Totally Vets. We have an obligation to notify adverse reactions to the manufacturers of the animal health product used.



Mastitis review

Joao Dib

As far as mastitis is concerned, the typical 70% prevalence of a season's cases in early lactation (i.e. around calving mastitis) will have occurred.

Once again, most early cases of mastitis have been caused by the usual culprit, *Strep uberis*. Overall, cure rates have been good, but there have been the usual exceptions of repeat offenders which can be a challenge to cure. We have also seen some 'black mastitis' around calving, with very swollen, painful udders, the quarter(s) going blue and in most cases, the cow becoming very sick. 'Black mastitis' requires very rapid intervention, using both systemic and intramammary antibiotics, plus anti-inflammatory and often fluids just to salvage the cow.

Those who used Teatseal™ in heifers before calving have mostly reported excellent response with a reduction in heifer mastitis. Combination dry-cow antibiotic and

Teatseal™ in mixed-age cows has also provided some good results. If your herd has been affected by mastitis in heifers and/or MA cows around calving, Totally Vets can identify likely problem areas. Once the problems have been recognised, and all that can be done is prioritised and implemented, mastitis ceases to be a major problem in your herd.

FROM NOW ON...

Environmental mastitis will still be present, but the risk of spreading infection during milking time becomes an additional concern. The SAMM plan has stood the test of time, so putting it into practice should be second nature to you. From now on, contagious bacteria, such as *Staph aureus*, are likely to be involved in more cases of mastitis.

Important measures to help prevent new infections are:

- Effective and prompt identification of infected cows and separation from main herd.
- Effective teat-spraying to reduce cross-contamination. This is achieved by having the spray mix at the correct concentration with added emollient AND applying it to the

whole teat. Observe carefully - if not all teats are adequately covered at all times, revise teatspray technique.

- Adequately functioning milking machines and best practice milking management. Keep liners in prime condition, ensure the pulsation ratio is correct, quarters are being milked out, there's no cup slippage and that there is a minimum number of teat lesions caused by milking.

- Where possible, collect and freeze mastitis samples before treatment for later culture and sensitivity-testing if required. We can't go back in time to collect samples and knowing the cause of mastitis in your herd reveals a lot about the 'why'.

- Select the correct antibiotic to deal with the mastitis-causing organism. Laboratory testing is the gold standard for finding the most appropriate treatment. The stage of lactation, age of the animal, whether she is a repeat offender and clinical signs are only broad guides to best treatment options.

Milk quality is a big and expensive issue and can only be maintained with constant vigilance.

What's the goss?

Our very own **Jackie** swooped the pool at the Feilding Yellows prize-giving, winning 'Most Valuable Player' AND 'Netballer of the Year'. The highlight for Jackie was accepting

the awards and getting to kiss **Jason Eaton** not once, but twice - rumour has it she was in the kitchen eating ham when her second award was announced! Well done Jackie (for the awards, not the ham)! We have another star in the hockey world. Congratulations to **Charmaine** who picked up 'Best and Fairest Player'. Her team also won the Manawatu Division 1 Senior Women's Club Competition.

Beware of Charms if she has a stick in her hand - she's good!

We welcome **Julie** back from three weeks' holiday in Perth. A marriage proposal from her partner **Nick** on her return indicates that she wasn't just missed by the team! Congratulations to them both and watch out for the glare from Julie's finger.

Healthy heifers

Anita Renes

Replacement heifers are the future of your herd. Their health and nutrition need to be carefully managed to ensure they reach their target weights, get in calf and have a successful life in the herd. If heifers are too light at their first mating, they will calve late, be in poorer condition at calving, produce less and their fertility at the subsequent mating will be reduced.

Monitoring growth rates is key to determining the success of any heifer-rearing programme. Target liveweights at different ages need to be set for each individual farm. This can be calculated by weighing adult cows in April or May or by using Liveweight Breeding Values. Heifers should then be at 30% of their mature liveweight at 6 months of age, 60% at 15 months (mating) and 90% at 22 months (pre-calving).

Target weights are only reached when heifers are consistently well fed on high-quality feed from weaning until calving. If low-quality feed is offered, the heifers must eat more to gain the required energy for target growth. However,

heifers can physically only eat a certain amount of dry matter per day - approximately 3% of their bodyweight. This means that often heifers cannot consume enough to grow to targets when feed quality is poor. It is very important to consider the quality, or energy content, of the pasture and not just the amount being fed. As the plant matures beyond the three-leaf stage, the cell-wall (fibre) content increases, and the digestibility declines.

Inadequate nutrition is the primary reason heifers fail to reach their target weight. Illness however, both clinical and subclinical, can also have a significant effect on growth.

Gastrointestinal worms are the most common non-nutrition reason for failure to gain weight and ill-thrift in young stock. The optimal parasite management plan will vary between farms but most calves will need regular drenching from weaning until 15 months of age with a combination oral or pour-on drench. Carrying out regular faecal egg counts will determine the need for drenching and probably reduce overall drench use. The same paddocks on dairy farms are often grazed by calves year after year allowing worm numbers to accumulate. Alternatively grazing these paddocks with other stock classes will help reduce the worm burden. Drench resistance is present on some dairy properties. Carrying out a faecal egg count reduction test is a good way of assessing what drench families will

be most effective on your farm. Totally Vets offers this service.

Bovine Viral Diarrhoea (BVD) virus causes scours and ill-thrift similar to those caused by parasites, but calves may also have ulcers in the lips and mouth. The virus suppresses the immune system, making calves more susceptible to other diseases such as pneumonia and yersiniosis. Recent testing by Totally Vets has shown a high incidence of BVD in our region. Outbreaks of BVD in weaners can be a recurrent problem on some properties with devastating effects. Very good tests and vaccines are now available.

Facial eczema can have devastating effects on mobs of calves. Don't forget this group in your facial eczema prevention plan. Many other diseases can affect heifers including clostridial diseases, polio, ryegrass staggers, coccidiosis, yersiniosis, pneumonia, bloat, pink-eye and Infectious Bovine Rhinotracheitis (IBR). Most of the diseases that occur in weaned cattle will be prevented by achieving target growth rates.

Visual assessment of heifers is very important to ensure problems are picked up early. Do they look well? Are there dirty tails? Coughing? Poor coats? Weepy eyes? Snotty noses? Are they bright and alert or listless and dull? Do they have a nice bell-shaped abdomen or are they slab-sided?

Keep a close eye on your heifers and give them the best chance.



It's great to have **Greg** back from six-months in Vietnam - we have all missed him. We are all looking forward to seeing his pictures and commentary of what life was really like.

Craig Dickson, who joins **Craig Tanner** in Vietnam for a month, is all settled in. His feet had hardly touched Vietnamese soil when he was whisked away on farm to get started on the fourth shipment of 1275 cows.

Once **Craig Tanner** finishes his stint in mid-January, he will take a well-deserved break, returning to the Palmerston North branch at the beginning of February.

We are delighted to have **Leisa Norris-Spring** back with us on a permanent basis. Leisa has rejoined our production animal vet team and will be based at our Palmerston North branch.

Leisa is now mum to **Kobe, Haana** and **Olivia**, so has no trouble filling her days!

You will also see a new face in our small animal hospital. We welcome the lovely **Helen Sheard**, who will work Saturdays, our late night on Wednesdays, as well as covering holidays and leave.



Managing a pasture surplus

Lindsay Rowe

The big issue to be focusing on in this early stage of the season is to ensure that the milking herd is being ad-lib fed - that is to say, the cows are being allowed to eat as much as they can so that they have a chance to reach their peak milk production potential.

To achieve this, the post-grazing pasture residual levels need to be left higher than would be the case if pasture quality at the next grazing was the primary objective. While we can live with this situation through September, the post-grazing residual pasture levels certainly need to be back on the target

of 1500kg DM/ha (25% of the paddock with some clumping left and a tiller height of 3-4cm between the clumps) by the start of October.

If pastures are allowed to become stalky, then feed quality will decrease, leading to a fall in the herd's milk production in late spring and early summer, even though there appears to be plenty of pasture available to graze. A rapid fall from peak production is usually an indication that there has been poor pasture control leading up to this stage of the season. In fact, many trials have demonstrated that production is affected right through the summer period if target post-grazing residuals are not achieved through the period of spring surplus.

Crucial to this aspect of pasture management is the early recognition of a developing pasture surplus and a plan to deal with it. Failure to react quickly will lead to a deterioration in the pasture sward as well as a reducing ability to convert any surplus into quality silage. Proof of the difficulty in getting this right are the

surveys that show that more than 70% of the silage made in NZ is of poor quality and will not meet the needs of a lactating dairy cow.

When is there a surplus and how big is it? The Three-Leaf Principle can be used as the basis for this assessment by firstly establishing the speed for the rotation, which in turn determines the area that can be grazed by the herd each day. If this area will provide more pasture than the cows are capable of grazing to the target 1500 residual, then the area allocated for grazing can be reduced - the balance of the area is a surplus that could be harvested for grass silage.

If quality silage is the goal, aim for a maximum period of closure of 5-6 weeks from the last grazing, as from this point on, the protein and energy levels will be steadily falling. The Golden Rule is that if it is not suitable to feed to a milking cow before conservation, then it will certainly not be suitable after conservation!

Sheep measles

Hamish Pike

Sheep measles are small tapeworm cysts found in the meat of sheep at slaughter.

As you can imagine, this is particularly undesirable for consumers, and has the potential to threaten our export industry.

Sheep ingest tapeworm eggs from the pasture. These eggs then develop into cysts in any muscle tissue (e.g. diaphragm, heart and skeletal muscle of sheep). If dogs are then fed the infected raw meat, a tapeworm will develop in the dog's gut, mature and start producing eggs in about 35 days. Tapeworm eggs will then appear in the dog's droppings, and so the cycle repeats.

Killing a sheep for 'dog tucker' is an effective and cheap food source. However, farmers do run the risk of feeding their dogs meat infected with sheep measles cysts.

Never feed raw meat or untreated offal to dogs. All sheep (or goat) meat needs to be treated before being fed to dogs. Treatment involves two options:

1. Freezing - freeze meat at -10°C or below for at least seven days before feeding. Write the date (+8 days) the meat went into the freezer on the bag so that you know when the meat is ready to be fed.
2. Cooking - heat meat to a core temperature of 72°C or greater until brown all the way through. Tinges of red indicate inadequate treatment, and further cooking is necessary.

Remember:

1. Dose your dogs regularly with an effective tapeworm drug. Call Totally Vets to discuss a worming programme for your dogs.
2. Require all dogs to be treated with tapeworm drugs at least 48 hours before coming onto your farm.
3. Do not allow dogs access to untreated sheep or goat meat, or sheep carcasses on the farm.
4. Restrain or tie dogs up when not working or exercising them under your direct supervision.
5. Have alternative dog food available if treated meat runs out.
6. Dog-proof offal pits and holes etc.
7. Dog-proof your killing sheds.

Hitting those weaning targets - more tricky this year

Ginny Dodunski

Given that many flocks went into lambing this year in lower than normal body condition, two things can happen from here:

1. We get good grass growth through the rest of spring/early summer, which we control well with appropriate management, ewes are fed to appetite and wean in Body Condition Score (BCS) 3, pastures are in tidy order and maintain reasonable summer quality, lambs grow well on our better grass and crops, and we're set for next year...
2. Nature does its usual balancing act and we get poorer than normal Oct/Nov pasture growth, ewes wean in light condition ... or we don't control rapid growth well. We are left with poor-quality summer feed which ewes can't gain weight on, and is hopeless for growing lambs.

And hold on - a unit of BCS in a ewe is about 5-7kg LW; if we body-condition scored these at docking there'd be many around BCS 1.5 - this requires 15kg to be gained on these sheep to wean at BCS 3. If we dock at Labour weekend and wean just after New Year, this is a growth rate of 215g/day.

Are we managing our ewes to achieve this? And we don't achieve it, what plan do we have in place to ensure those thin ewes do gain that weight over the summer? And do we know (objectively) who those ewes are? And how many? The answer to the last question will put some limits around what can be practically achieved if it is a large proportion of the flock.

So what can we do between now and Christmas to help get the ewes back on track and maximise the growth performance of the lambs? A lot will depend on how the feed situation pans out and how we manage that. But some ideas for consideration are:

AT DOCKING

- Tag and weigh some first-cycle lambs - an average growth rate for lambs on mum on hill country between docking and weaning is 180-190g/day, you can work out what they'll be at weaning, or look for strategies that will make them grow better than average.
- Drench light ewes - likely to be worth the effort given the high worm challenges that persisted through the winter. Go for a short-acting, highly effective combination drench.

AFTER DOCKING

- Start a rotation, especially if feed is looking like getting away, drop out paddocks that can be controlled in other ways.
- Once a rotation is underway, creep grazing of the lambs is an option, where there is reasonable subdivision (paddocks less than 16ha/40 acres). Straight bar gates with every 2nd bar sawn out can be moved from paddock to paddock for this job, to allow the lambs to get a fresh pick ahead of the ewes.
- Get your summer brassica crops in early, even if sowing method has to be a compromise. This ensures lamb feed comes on stream at the right time and reduces the temptation to keep grazing these in late summer when you know jolly well the new grass should be getting sown!
- Chat to your vet about the pros and cons of a pre-weaning drench of lambs. Where ewe condition and low feed has compromised milk production and persistence, this may help. Not necessary in all situations but something to bear in mind.

AT WEANING

- Identify, drench and look for strategies to improve light ewes.
- Ewes that were given a long acting (100+ days) worm treatment pre-lamb need an 'exit drench' by now if not done already. Talk to your vet about this.





Above Just checking progress - September

Where we're at...

Paul Wiseman

When some of us at **Totally Vets** started our veterinary careers, we could make 20 to 30 farm visits in day and see only a few more animals than that. Less than 100km of driving could cover a typical spring day's work attending to individual 'sick' animals of all species.

At the end of such a day, we might return to base and attend to the 'pets' that had come in for attention. It was not unusual to have four or five veterinarians all speying cats at the same time.

Since then, our knowledge and understanding of individual species has expanded to such an extent that no one veterinarian can be expected to know all there is to know about each type of animal. The types of animals have also increased.

In addition to New Zealand's traditionally farmed sheep and beef cattle, dairy cows, horses, cats and dogs, we are now expected to know about pocket pets - hamsters, rats, caviies, tortoises - and alpacas and ratites such as ostriches and emus.

The range of drugs and animal health products has also grown exponentially. The applications of new products to farming systems have enabled significant gains in animal production and welfare. These gains in veterinary medicine and surgery reflect advances in human health. The use of radiography, ultrasonography and even MRI scans has expanded out our ability to diagnose.

Newer techniques and safer anaesthetics allow for far more intricate surgical interventions. Fractures that could not be fixed with a plaster cast and necessitated euthanasia are now repaired using by-products of the space industry, titanium plates and screws.

Many cancerous conditions in animals are treated successfully with radiation and chemotherapy. Importing radioactive material in the 1980s to treat a stallion with a cancerous bone condition seemed pretty radical and exciting back then. Not so today!

The days of the general practitioner veterinarian catering to all and sundry are disappearing. More and more veterinarians have to focus their abilities and capabilities in far narrower fields. These fields are not only limited to species but also specialised disciplines such as parasitology, ophthalmology, pathology, orthopaedic surgery, reproduction and milk quality. Vets have always been and will continue to be proctologists. After all, so much of their income is derived from the back end of the animal!

The reactive service model in response to client demands is becoming less appropriate as we all move toward providing specialist knowledge and consultancy-type services to improve the future viability of farming. The 'James Herriot' vet who is on call 24 hours a day is becoming less common in the UK. There, and to some extent in New Zealand, rural veterinary practices are evolving into multi-disciplinary teams, which offer a whole range of farm consultancy services.

As well as calling on vets for their expertise in animal disease treatment, reproduction and preventative medicine, we are seeing a growing demand for advice on areas like data management, nutrition and the design of facilities on farm, particularly those that impact on the health and welfare of livestock.

Vets have a valuable role to play in our primary production industries as contributors to the productivity, sustainability and profitability of farm enterprises. Vets can be trusted advisors as well as advocates for animal health and animal welfare. With intensification on the increase, these functions will become increasingly important.

Continued professional development is important as veterinarians are asked for advice in new areas outside of traditional veterinary practice. We are continually looking at the role we have to play in the future of pastoral farming.