



# VET notes

YOUR TOTALLY VETS NEWSLETTER ALL ABOUT ANIMALS ON YOUR FARM

OCTOBER 2013



## Totally Vets Client & Staff Christmas BBQ

Join us on Friday 13th  
December 2013

At our Feilding, Palmerston  
North and Taumarunui Clinics

Timings to be confirmed in  
our November newsletter

We would love to see you!

## Veterinary use of antibiotics

**Chris Carter**

The ongoing increase in the notification of antibiotic resistant bacteria in human medicine continues to put the spotlight on the use of these products.

The Centers for Disease Control (CDC) in the US recently released the statement that over 2 million people in the US are infected annually with drug resistant bacteria and of these, 23,000 die as a result.

In its report, the CDC noted that about half of human antibiotic use is unnecessary, and such overuse could be leading to heightened resistance among circulating bacterial strains. The agency also noted that "antibiotic use in animals is unnecessary and inappropriate," and might also contribute to increased drug resistance.

Such comments are not restricted to the US. The Netherlands has also actively pursued a policy of reducing the veterinary use of antibiotics. Since 2009, The Netherlands have achieved a 51% decrease.

Many overseas production systems are very different to those that we operate here in New Zealand but the sentiment of concern and

greater regulatory control cannot be dismissed simply as a passing trend.

Since the introduction of antibiotics for agricultural use in the 1950s, these drugs have allowed advances in production that our great grandparents could not have imagined as being possible.

We now have sound principles of use.

Antibiotics should only be used when it is known or strongly suspected that susceptible bacteria are present and causing disease. Before antibiotics are used, every effort should be made to find the origin of the problem and to determine the most effective treatment. In many cases, this will involve taking samples for culture and sensitivity testing.

The effectiveness of all treatments needs to be monitored and instructions on storage, dosage and duration of any use needs to be followed.

While these principles serve us well, the ongoing use of antibiotics in veterinary work will require us to heighten our awareness of integrating these products into disease control programmes. This will involve a variety of biosecurity measures such as hygiene and disinfection, alterations to management systems and vaccination.

Examples of such approaches are becoming more common, such as the use of teat-sealants in heifers and when drying off cows. Programmes for the control of BVD reduce losses from the virus itself, as well as from secondary conditions associated with this immune-deficiency disease.



# Totally Vets current stock health

## Dairy

October is all about mating for dairy farmers. A successful mating is measured in terms of the 6-week in-calf rate. The 6-week in-calf rate is a key economic driver on any dairy farm. And what drives the 6-week in-calf rate? Right now it's submission rate and conception rate. Your influence on the latter has already bypassed

you. But you can influence submission. Ensure you and your team are all expert heat detectors and use every available aid to help identify cows in season.

If cows are slow to come in season, should you wait in hope that they will cycle? They will eventually, but when? Early intervention with non-cycling cows is well recognised as being far

HA HA

## Who needs cell phones?

After a tiring day, a commuter settled down in his seat and closed his eyes. As the train rolled out of the station, the young woman sitting next to him pulled out her cell phone and started talking in a loud voice:

"Hi sweetheart. It's Sue. I'm on the train."

"Yes, I know it's six thirty and not the four thirty, but I had a long meeting."

"No, honey, not with that Kevin from the accounting office. It was with the boss."

"No sweetheart, you're the only one in my life."

"Yes, I'm sure, cross my heart!"

Fifteen minutes later, she was still talking loudly. When the man sitting next to her had enough, he leaned over and said into the phone,

"Sue, hang up the phone and come back to bed."

Sue doesn't use her cell phone in public any longer.

## The importance of starting them off right

Helen Sheard

Hoon is now an 8 month old Beardie x Huntaway with long legs, a fast run and showing lots of natural talent. At 6 weeks old however, he was nearly put down because his hind legs were bandy, he was in pain when he walked, his kneecaps clicked in and out and he was knuckling over on his front legs.

The reason? He was being fed an inappropriate diet of weet-bix and cow's milk, and was absolutely chock full of intestinal worms. After only two months of being fed a commercial large breed puppy diet and being wormed regularly, his legs were straight, and he was no longer in pain when he walked.

The white dotted lines in the picture show the bowing of the femur and tibia (thigh bone and shin bone) from behind - you can also see the knuckling over in the front right leg.

From the side, you can see the relative disproportion of the leg bones - the femur (yellow line) is shorter than it should be, resulting in a very upright leg and unstable knee. The blue line follows the tibia.

This highlights the importance of starting any pup off right - not just working dogs. Commercial puppy diets are balanced in calcium and phosphorus for correct rate of bone growth, and have adequate energy to meet their requirements.

*Toxocara* roundworms can lie dormant in the bitch's muscle tissues until they whelp; the roundworm larvae then migrate to the mammary glands, infecting the puppies as soon as they feed. For this reason we recommend starting your worming programme when the puppies are two weeks old. Worm every two weeks until they are 12 weeks old, then once monthly until they are 6 months old. From this age they can go on the farm programme with the rest of the dogs.



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.





more financially beneficial than waiting for the end of the first round of mating.

## Sheep, Beef & Deer

As an alternative to Lamb Vaccine (which is unavailable) for the prevention of tetanus and pulpy kidney in your lambs, Ultravac 5-in-1 vaccine can be used at docking to reduce the risk of disease. A booster will need to be administered 4-6 weeks later for longer-term protection. Lamb vaccine, or 5-in-1 vaccines

administered to lambs at docking are only required if the ewes did not receive an annual booster pre-lambing.

Do your ewes need a docking drench? This will depend on the following: ewe body condition, age of ewe, available feed, likely worm challenge, and impact of stressors such as weather and dagginess. In terms of faecal egg counts, be aware of 'daggy' ewes with a low or zero faecal egg counts. This could still be worms

as the ewes' immune system may be beginning to reduce the worms' egg-laying around this time. Ewes who have had a pre-lamb controlled-release capsule will probably need an 'exit' drench around weaning.

**If you are planning to treat hinds with Bayticol for ticks prior to fawning, be aware that this product may be in short supply due to the *Theileria* outbreak (see article on page 5). Come and talk to us about treatment options.**



## Mastitis review

Joao Dib

**We have had a very good spring, somatic cell counts seemed to have improved on many properties with many reporting counts under 80,000.**

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.

Again, those who used a teat-sealant in heifers before calving have mostly reported excellent response with a reduction in heifer mastitis. Some have seen an increase in heifer mastitis so consider using teat-sealant for the next round of heifer calving. Combination dry-cow antibiotic and teat-sealant 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.

Have the best people milking cows - watch for excessive cups-on time so take time measurement and aim for no longer than 6 minutes per cow.

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. Aim to change the liners once they have been used around 2300 times.

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.**

# Get the most out of your bull team

**Barney Askin**

We have seen several bull team failures in the last few years, all of which were avoidable. For a hassle-free tailing-up after AB has finished, please take heed of the following recommendations.

Ensure bulls arrive on farm a minimum of 6 weeks, but preferably 2-3 months, prior to intended use.

Bulls should be blood-tested negative for BVD antigen **before** arrival. Ensure you receive or visualise an official copy of the paperwork to confirm this.

If not done so already, bulls should be vaccinated on arrival and 1 month later with BVD vaccine, preferably a combined BVD/IBR vaccine.

Bulls should be selected to be of an appropriate size for your cows or heifers and ideally have been fertility-checked to ensure they do not have any libido, conformational or semen defects that will render them infertile.

Bulls should have a temperament that makes them easy and safe to handle.



How many bulls do you need?

For both yearling heifers and cows, use the 3% +1 rule. That is - if you have 100 animals to mate, then you will need 3 bulls and 1 spare.

Don't forget - if bulls are being used following synchronisation, the ratio will need to be doubled, ie approximately 1 bull per 15 heifers.

It is a good idea to assume the worst and estimate that 50-60% of the herd is empty after 6 weeks of AB and calculate bull requirements based on this.

Where possible, always have some spare bulls in case of breakdowns.

So you now have a sufficient number of amicable, fertile, appropriately sized bulls that are fully vaccinated, well adjusted to your property and their paddock mates and are raring to go. What could possibly go wrong?

- Bulls become lame because they are walking long distances they are not used to

- Bulls and cows become lame because there is sexual activity on the yard
- A lame bull is often useless as a sire
- Bulls gain access to a milker ration or other concentrate feed, consume too much and become acidotic which can render them infertile
- Bulls become tired from overuse and walking long distances

The solution to all of the above is to train your bulls to stay behind in the paddock, and have sufficient bulls so that you can rotate them and allow for a period of rest every few days during a busy mating period.

Another issue that might be faced is that an aggressive dominant bull may prevent other bulls mating and become infertile from overuse himself. Ensure that bulls within a mob are well matched for age and size.

**Please give us a call for advice on how to put together and manage your bull team.**

## Gossip

Congratulations to proud parents **Ryan Carr**, and his wife **Catherine** on the birth of their daughter **Niamh Elizabeth** on 16th August. Niamh weighed 9lbs and both mum and daughter are doing well.

**Chrissy Williams'** son **Kyle** played at the National Ripa Rugby tournament, held in Wellington. His Lytton Street School team won the regional games and represented the Manawatu at the tournament, where players got to mingle with the All Blacks - what an experience! Kyle and his brother **Nikora** are also Manawatu representative players, both picking up awards at their recent Saturday Morning Rugby Club prizegiving.

**Jo Nesdale's** son **Jack** has also done exceptionally well this year, winning the Saturday Morning Rugby Club U13 Player of the Year as well as Club Member of the Year, a huge achievement. To top it off, he has also been selected for the Manawatu U13 Rugby Team.

**Aimee** is off to Hawaii again, giving the October Ironman World Championships in Kona, Hawaii, another crack this year. Having the opportunity to compete at a 'once in a lifetime' event doesn't usually happen twice, so Aimee is even more determined than last year to make the most of the race.

A huge well done to **Charmaine**, who picked up MVP for her College Hockey team. This is the second year in a row for this talented player - the pressure's on for next year Charmaine!



Jack Nesdale, with proud Granddad KJ Nesdale

# Stop Press... Tropical disease getting a grip in the North Island

**Barney Askin**

We have recently been informed of a disease known as Theileriosis occurring in a dairy herd from the Whanganui region. This outbreak has resulted in over 50 clinical cases in the last few weeks. The outcome has been many deaths, several blood transfusions and a considerable proportion of the herd has become anaemic.

Until recently, this disease had only been recognised north of the Waikato, apart from one case in Canterbury. In these Northern regions, the disease is fairly well established in the cattle populations and there is a considerable amount of immunity in herds. The problem is when naïve (non-exposed) cattle are moved in from outside of the area. These cattle have no immunity to the disease and experience severe clinical symptoms. In our region, we will experience the opposite problem

- our cattle population is naïve so when the disease is brought into our area by way of infected cattle, the effects are potentially devastating as in the case described above.

## SO WHAT IS THE DISEASE?

*Theileria* is a parasite which is spread by ticks and lives in the red blood cells of the cow. This results in the destruction of these red blood cells causing severe anaemia, jaundice and possibly death. It is believed that there has been an increase in the tick population following a long hot dry summer, so the potential for spread of the disease by large numbers of ticks is well established.

## WHAT ARE THE SYMPTOMS?

Reports from those experiencing outbreaks suggest that one of the first symptoms seen is cows straggling behind on the race and reluctant to eat when returned to the new break after milking. When cows are anaemic they will appear very pale, weak and lethargic and can become recumbent. In the latter stages, cows will become jaundiced as the body tries to deal with all the broken down red blood cells.

## IS THERE ANY TREATMENT?

There is at this stage no effective treatment in NZ. Drug companies are currently working on registration of an effective product that is available in other parts of the world. Some of this drug has been imported into NZ under special licences to treat severe outbreaks. The most effective treatment other than this product appears to be blood transfusions for severely affected animals.

## WHAT CAN I DO TO REDUCE THE RISK?

Have extremely good quarantine practice. The threat will be from animals coming into our area from other regions where the disease is well established.

- Obtain a history of where the animals have come from. Are they from an infected area?
- Recommend Bayticol pour-on to kill ticks (preferably before they leave farm of origin).
- Quarantine animals on arrival for at least a week. Inspect for ticks. Treat if this has not been done at source. Consider arranging for a vet to check the animals for signs of anaemia. Bulls arriving on dairy farms could be a potential source.
- Ensure boundary fences are good. Not that this will stop ticks!
- Don't forget to treat your own animals coming back to the farm from grazing, as they may be potentially affected.
- Biting flies are possibly implicated in spreading the disease, so practice good fly control.
- Consider having a community approach to dealing with the risk.

**This disease will affect both dairy and beef cattle alike. Please take it seriously - it is a real threat.**

**If you have any questions or concerns regarding this disease, please don't hesitate to contact us at the clinic.**

## Lloyd Smith working dog training day 14th October

Totally Vets is delighted to bring Lloyd Smith to the Manawatu for a working dog training day.

This will be held on Monday 14th October, from 10am to mid-afternoon, at Shane Carroll's, No 2 Line, Pohangina. The property will be sign-posted.

Lloyd lives in North Otago, has trained countless working dogs and personally achieved 39 trial placings in both Huntaway and Heading classes. Lloyd enjoys sharing his learnings about the training of dogs and is the author of "From Pup Pen to Paddock".

Ten lucky people will also win one-on-one training with their own dog and Lloyd. These people will be contacted before the day and need to bring their dog, current vaccination card and worm certificate. A BBQ lunch will be provided and the cost of the training day is \$10.

Spaces for this event are limited and prior registration is required. To register, or for more information, please phone Catherine or Eliza at the Feilding clinic on 06 323 6161.





# Long-acting ewe treatments: minimising the risk

Ginny Dodunski

For those of you who gave ewes or hoggets a long-acting drench treatment (capsule or injection) pre-lamb, please read this article because there are some things you can do after the fact to minimise the risk of this practice accelerating drench resistance on your property:

## CHECK THE PRODUCT IS DOING ITS JOB

### If you used capsules

You will have been offered a free faecal egg count from treated animals (thanks Merial Ancare). Docking would be a sensible time to collect samples for this. Egg counts should be ZERO (let's see if I can start a scrap over this recommendation!). If they are not, a larval culture should be performed to see which worm species is involved. With this information in hand, we'd do some further testing in summer to get to the bottom of the situation and set you up with some decent recommendations.

### If you used a long acting injection (e.g. Cydectin LA, Exodus LA)

Long-acting moxidectin only controls *Trichostrongylus* for about 7 weeks (this is longer for the other main species of worm). Thus if you gave it 2 weeks pre-lamb, to be safe, faecal samples need to be collected within 5-6 weeks of your planned start of lambing. This will avoid a false positive result from *Trichs* coming back in, as they can start laying eggs quite quickly, though we don't

expect high numbers of this species in spring. Again, if done at the right time, egg counts should be zero.

### If you used an 'ordinary' injection (e.g. Eweguard or Dectomax)

The period of protection from these is quite short, especially against *Trichs*, so egg counts to check these should really be done within 2-3 weeks of treatment, which might not be feasible now!

## GIVE TREATED EWES AN EXIT DRENCH

The purpose of an exit drench is to remove any resistant worms that have established in the face of your long-acting product. A highly effective combination to which there is no resistance on your property is the product of choice. Timing of the exit drench to some extent depends on the product you used pre-lamb but for most farms, it would be a start to do an exit drench **at all**, and weaning is likely to be a convenient time.

### Even if egg counts were zero, it is still good practice to do an exit drench

In some cases resistant worms are not killed by the LA product and simply stop laying eggs whilst it is active. This applies particularly to white drench products. In addition, you will be aware that the moxidectin-based products have a long 'tail' where the drug hangs around in the body at low and declining levels - when you did your FEC, things may have looked OK, yet partially resistant worms can have established during the 'tail' period.

### Your friendly TVL sheep vet will be happy to help you fit these recommendations to your own situation

# Check rams for brucellosis

Barny Askin

In the past, we have 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.

# Is she or isn't she?

Greg Smith

A missed heat means three weeks less milk the following season and a lost opportunity to produce a heifer replacement calf.

Although the cow will have time to cycle again before the end of mating, the value of each missed heat has been calculated at \$200, so accurate heat detection is a key mating activity.

There are two types of heat detecting errors - missing a cow that is having a heat and identifying a cow that is showing heat-like behaviour but is not in heat.

The signs to look for in a cow that is in heat are:

- She is standing steady to be mounted by other cows (not moving away)
- Tail paint has been entirely removed
- A heat mount detector has been triggered

A cow may be in heat if you see the following:

- She attempts to mount other cows
- Tail paint is rubbed but not removed
- She is restless or bellowing

- She has poor milk letdown
- There is mucous around the vulva
- There is mud on the cow's flanks
- The heat mount detector is lost

Cows with two or more of these signs are possibly in heat but showing weaker signs, or alternatively, are not in heat or are coming into heat. The farm should have a policy on what to do with cows showing weaker signs. The first step is to check the current heat records for this cow.

If the cow has not been inseminated since the start of mating but you believe the signs to be reasonable, then inseminate. Make a note in the AI book (a question mark is sufficient) that there was some doubt with this insemination.

If the cow had a previous insemination and it was 20 or more days ago, then inseminate.

If the cow had a previous insemination and it is less than 20 days, then inseminate if the previous heat was weak (marked with a question mark). If the previous insemination is not marked with a question mark, then look for more evidence of heat and either wait if further signs are not seen or inseminate if further signs are observed.

If more than 10% of inseminations are marked with a question mark or more than 13% of inseminations are occurring at intervals less than 18 days, then the farm needs to review current practices.

As heat detection is a key activity, this should be managed by experienced staff but other staff should be included in the process. Use the pre-mating period to explain the signs of heat and make paddock visits to observe cows in heat with less experienced staff.

The best times are two hours after the morning milking and again in the early afternoon. All staff can contribute during mating by carrying a notebook during normal daily farm activities to record cows in heat.

These observations can then be added to a communal site (eg white board) at the shed for the staff responsible for cow selection to use together with their own observations.

For larger herds, but also relevant to any herd, use the week before mating to rehearse drafting procedures.

Make sure drafting gates and holding areas are operating properly. Cows detected at the afternoon milking can be drafted the night before and kept in a paddock close to the shed to reduce the morning workload.

The AI technician will need assistance to load cows in the AI facility, so make sure staff are clear on who is responsible for this and are ready at the appropriate time.

The facilities provided need to be safe for cows and people; AI conception rates are also better when facilities are good.

The main points to remember about brucellosis are:

- 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



# TEATX<sup>®</sup>

## ADVANCED CHLORHEXIDINE TEAT SANITISER

### 3 KEY BENEFITS

- 1 FAST PENETRATION AND LONGER BACTERIA KILL
- 2 DELIVERS SUPERIOR TEAT CONDITION TO HELP PREVENT MASTITIS
- 3 MULTIPLE DILUTION RATES 1:4, 1:7, 1:9



New Zealand's leading chlorhexidine teatspray delivering superior teat condition to help prevent mastitis. It is the only teatspray on the market which has all the following components:

- Longer killing power during calving period
- More emollient for better teat condition
- Most stable against hard water & chemical contamination
- pH neutral to be kinder on teats
- Approved dilution rates of 1:4, 1:7 and 1:9 to save money
- < 2 second penetration

**PRESENT THIS ADVERT TO PICK UP A FREE 10L SAMPLE FROM YOUR NEAREST TOTALLY VETS CLINIC.**