TARARUA VETERINARY SERVICES

VetNews

MARCH 16

WHAT'S INSIDE?

Whats happening

Rachael Foughy

The predicted El Niño weather pattern has left the Tararua region mostly unaffected, and farmers have had very good pasture growth during early January. However it is starting to dry out in some areas now and a few inches of rain would set a lot of people up for a cracker autumn.

The unseasonal weather pattern has thrown a few curve balls animal health wise. There have been some Barbers Pole outbreaks and spore counts are already very high. All dairy farmers should be supplementing with zinc.

On the dairy front many farms are still producing well and transitioning to once-a-day or 16 hourly milking intervals. All sheep farmers should be preparing their ewe flocks for tupping. If you are not happy with the condition of your ewes, make some decisions re the number of lambs you are carrying.

Milk quality after December

Greg Smith

Controlling the bulk milk somatic cell count (BMSCC) is a problem common to many herds in later lactation.

All herds will experience a rise in BMSCC after December each year but the level of this rise depends on the starting point. If the BMSCC is high around peak lactation then the rise will also be correspondingly high in the second half of the season. If your BMSCC is currently sitting around 300,000 cells per ml or above then action is required now.

Firstly, keep teat spraying. This means every cow after every milking for the rest of the season! Teat spraying reduces the new infection rate by 50% which is a large benefit in anyone's language.

Secondly, identify your high somatic cell count (SCC) cows and decide what to do with these. Young cows and cows with a recent infection, during the current lactation, are worth treating. Contact your vet to decide on the best treatment options for these cows. Other cows with a strong positive (that being a rating of three and best described as "snot" hanging from the tray!) to the rapid mastitis test (RMT) should be treated as well. Cows with a moderate RMT score are, in most situations, not worth treating during lactation but are definite candidates for dry cow therapy.

The next and hardest step is deciding on what to do with all the remaining high SCC cows. If cows in this group are low producers it is a "no brainer" to dry these off so they are no longer spreading the bugs. After pregnancy testing the empty high SCC cows can be culled now rather than waiting for the same reason. Removing the worst of the cows from the supply should drop the BMSCC to more manageable levels. If not then you are probably best to dry off some of the remaining high SCC cows early to avoid grading issues later on.

The lowest grading penalty is equivalent to five percent of the milk supply so work within the five percent range of the herd for drying-off, or separation from supply, and don't hesitate to contact your vet for further advice.

Looking ahead

Potential **animal health issues**, tasks to consider and reminders for March include…

Dairy

- **Cow condition** - as feed tightens monitor cow condition. Do not let it fall too low - **article below.**
- **Facial eczema** - preventative zinc treatment should be in place as spore counts on monitor farms have risen - **reminder article P1**.
- **Pink eye** - monitor for early signs of discharge from, or white spots on, eye(s) particularly if there's hot dry dusty weather.
- **Clinical mastitis** - monitor cows and be aware of rising **bulk milk somatic cell count** (BMSCC) particularly now feed is tightening and milk volume is decreasing - **article P1**.
- **Autumn calving** - prepare calving equipment in case of need. Plan calf disbudding and 7 in 1 vaccination.

Ha ha

A cocky road-worker stopped at a farm and talked with an old farmer. He told the farmer, "I need to inspect your farm for a possible new road".

The old farmer said, "OK, but don't go in that field". The road-worker said, "I have the authority of the Government to go where I want. See this card? I am allowed to go wherever I wish on farm land".

So the old farmer simply gave a "humph" and went about his farm chores.

Later, he heard loud screams and saw the road-worker running for the fence and close behind was the farmer's prize bull.

The old farmer called out, "show him your card!!!".

TVL prints this newsletter 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.

FSC CERTIFIED CERTIFIED MIXED PULP · WOOD FIBRE FROM SUSTAINABLE FOREST · ECF ELEMENTAL CHLORINE FREE · ISO ISO 14001 CERTIFIED · pH NEUTRAL ARCHIVAL

Benefits of body condition scoring

Charlotte Gibson

Body condition score (BCS) is one of the most important drivers of productive and reproductive performance in a herd.

With drying-off approaching the question comes up about how far into autumn you should continue milking - but what is the best strategy when you consider your herd's next season performance? There are a number of questions that should be asked to ensure you have weighed up the possible benefits and the potential risk with a longer lactation. These include:

- Have you had a different pair of eyes helping you BCS your herd?
- Do you know how meeting BCS targets affects production and reproduction next season?
- Do you have a dry-off plan for this autumn?
- Do you know what the Dairy New Zealand dry-off rules are?
- Did your herd meet BCS targets at calving? These being 5.0 for mixed aged cows and 5.5 for first and second calvers with less than 15% of your cows either side of these targets.

For cows in your herd that are not meeting the BCS targets there are a number of options you can take, including drying-off early or changing to once-a-day (OAD) milking. On average you can expect cows to gain 0.5 BCS per month once dry, except for the last month of pregnancy. With OAD milking, on average, you can expect 0.2 BCS per month as long as feed quality is good and intakes are high. .

The first place to start is to get to know what the BCS of your herd is so you can make informed decisions about what your next step should be. We have a service in place to help you with this, so if you would like any further information, or to book an appointment, then please don't hesitate to give us a call.

Sheep and Beef

- **Barbers pole** - continue to monitor for signs of disease (pale gums, depressed, exercise intolerant, increased breathing) and drench appropriately - **article P7**.
- **Mating begins** - ensure all ram palpations/testing have been completed and reproductive vaccinations done. Monitor plane of nutrition and ensure adequate ram ratios - **article P6**.
- **Facial eczema** - as per under dairy.
- **Fly/Lice** - remain vigilant for signs of flystrike (restless, rubbing, twitching tail, "wet" patches on wool) and apply fly/lice prevention at shearing if not done already..

Deer

- **Leptospirosis** - depending on birth date, now is a good time to give fawns their first lepto shot, along with Yersiniavax® for Yersiniosis - **article P3 (Lepto), P6 (Yersinia)**.

Equine

- **Weanling management** - consider need for branding, identification/registration and vaccinating, and ensure excellent nutrition over this potentially stressful period.
- **Parasite control** - now is a good time to ensure elimination of tapeworms and cyathostomes with a good drench!
- **Dental care** - the next couple of months are a good time to get your horses teeth checked. Firstly, with low grazing residuals due to the dry conditions horses are forced to graze down low. Secondly, and particularly for elderly horses, having teeth in good order before winter helps maintenance of body condtion through the winter months - **article P5**.

Leptospirosis

Mark Eames

Leptospirosis or "lepto" is a disease caused by bacteria known as Leptospira and it can affect almost all mammals.

Despite numerous investigations and control efforts, leptospirosis is still the most important zoonosis (animal to human transmitted disease) in New Zealand (NZ). There are around 100 notified cases per year, but the actual number of people that get ill from lepto is estimated to be 40 to 50 times higher than this.

The dairy industry has largely confronted the lepto issue by adopting widespread vaccination programs. However, a study of urinary shedding in dairy herds with a history of regular vaccination that was carried out in 2010/2011, showed there was evidence of leptospiral shedding in 30% of the herds and in 13% of animals from positive herds. Age at first vaccination was the only significant factor associated with the probability of shedding at the herd level. The results suggest that leptospiral challenge of calves at an early age and potential human exposure still exists on dairy farms using vaccines. So, in summary, we need to get better at vaccinating!

The recommended policy is two initial shots four to six weeks apart with the first being at the time of disbudding (ideally at four to eight weeks of age). This is followed by annual boosters. If the main herd is boosted in autumn, then spring-born calves need their first annual booster in the autumn as well, even though they may be only six to seven months of age. This is because annual boosters must be given within 13 months of each other to be effective.

The focus also shifts to sheep, beef cattle and deer as the major source of infection to meat workers and people in other at-risk occupations. While the great risk factor of standing under animals rear ends to milk them is not present, there are plenty of other opportunities for human infection. These include:

- Shearing/crutching
- Assisting with dystocia
- Home slaughter for both human consumption and/or for dog tucker
- Pregnancy scanning
- Tailing/docking
- Other animal health engagement (e.g. drenching)
- Changing climatic patterns, wet/dry spring, standing water

A recent, as yet unpublished, NZ wide survey (Dreyfus, 2012) from 161 sheep flocks demonstrated that 97% of the flocks had exposure and 51% had ewes currently infected. This is rather sobering and should be a warning to all workers involved in the farming and processing of sheep to be careful with hygiene. It also begs the question - should we be vaccinating

these other farm animals for leptospirosis to protect workers? While widespread vaccination may be a step too far at this point, maybe those people that have been directly affected by Leptospirosis, or indirectly affected by a close family member or colleague being infected, may have a different opinion.

Discuss your likely lepto risk with your vet and ensure you have a solid prevention plan in place for you, your family and workers.

The importance of trace elements

Steve Harvey

If you notice that, despite feeding them well, your sheep or cattle are "just not doing", it may be an indication that there is a deficiency in one or more trace elements.

As well as energy, protein and water, animals need at least fourteen different minerals in order to maintain good health and production. Some of these, such as calcium and phosphorus, are required in relatively large amounts, and as such these are referred to as macro minerals. Whilst others are called trace minerals and these are required in very small amounts, and are often involved with enzymes to aid in the body's chemical reactions.

In New Zealand (NZ), the most economically important trace elements are cobalt (Co), selenium (Se), iodine (I) and copper (Cu). Despite our small size NZ has a lot of varied soil types and many of our soils have quite different mineral compositions. With our pastoral-based grazing systems, the minerals available to the animals are determined by the mineral content in the plants that are ingested which in turn is influenced by the local soil composition.

As well as soil composition there are climatic factors (such as soil moisture), farming practices (such as fertiliser use - for example molybdenum and application of lime), grazing practices and the use of different plants or crops that can all affect the availability of trace minerals to the plants.

Some trace minerals are also affected by the presence of different components of the diet. This can mean that, even though there may be sufficient amounts in the ration, the animal may not actually have access to it and so doesn't absorb it from the feed, which is often the case with Cu.

Many farmers are aware of issues with trace mineral deficiencies that exist on their property, but every now and again they can be caught out by one or more of the above factors differing from what they have historically been, so issues certainly arise from to time to time.

Diagnosis of trace mineral deficiency can take different forms but will undoubtedly involve taking of samples and having them submitted to a laboratory for analysis. This could involve both live and/or dead animal (blood and/or tissue) and herbage samples. In some cases the use of soil samples may also assist. Production response trials may be indicated when the results are in the "marginal" range.

Animal tissue analysis (especially of liver reserves) has a role in the prevention of some deficiencies, particularly over winter. The timing of this sampling is important as animals have different demands in different seasons. Routine sampling of dairy cattle, particularly pre-winter and pre-mating, is recommended as they are especially at risk due to the demands placed on them as a result of milk production. Sheep and beef cattle should also be routinely monitored and should definitely be checked as soon as possible if you suspect a problem.

For further information and/or to arrange testing for your stock drop into your nearest clinic or give your vet a call.

The future of antibiotics

Chris Carter

Antibiotics have been integral to human health since the discovery of penicillin by Alexander Fleming in 1928 and now the global concern is on protecting their effectiveness. In 2015 the New Zealand Veterinary Association (NZVA) published their statement on lowering our dependency on antibiotics and preserving usefulness of antibiotics for use in humans.

New Zealand (NZ) farmers and veterinarians have always had a responsibility to ensure the responsible use of antibiotics. This is embodied within a licensing and authorisation framework.

On-going compliance with these rules and regulations has allowed a wide range of antibiotics to be available in NZ for treating animal conditions. This position is important as we see strong moves internationally to significantly reduce antibiotic availability and use in farming systems.

In the past 30 years approximately 75% of new diseases that affect humans have come from animals and in that time no major new types of antibiotics have been developed. There is significant evidence, and consensus among major scientific and medical groups, linking antimicrobial use in companion and food producing animals to antimicrobial

Horse dental care

Joao Dib

Having regular dental check ups are essential to the on-going health of your horse.

The general health and condition of your horse starts with good nutrition, however optimising good nutrition relies on healthy teeth that do their job well for your horse - allowing effective chewing, digestion and nutrient absorption. This then creates a healthy, happy and willing companion.

ARE BAD TEETH CAUSING PAIN TO YOUR HORSE?

Horses have evolved as prey animals and as such are able to "hide" pain-indicating behaviour. This is a natural response useful to minimise the chances of being picked upon by a hungry predator. A good dental exam is the only way to make sure your horse in not suffering unnecessarily.

A horse's teeth grow continually and only slow down late in life. By the age of nine months most deciduous teeth (milk teeth) will be "in-wear". By five years all permanent teeth should be present.

Some common problems that can occur and often go untreated are:

- Sharp enamel points that can lacerate the cheek and tongue leading to painful ulcers.
- Erupted or retained wolf teeth.
- Retained milk teeth that can interfere with permanent teeth emergence.
- Inflamed and painful gums (developing periodontal disease).
- Dental impactions, hooks, ramps and wave mouth.

At Totally Vets and Tararua Vet Services we have the expertise to address many of the dental problems your horse may have. During the initial visit we will:

- Carry out a full exam, identify and treat most dental conditions including the extraction of loose and/or damaged teeth.
- Administer a preventative tetanus vaccination if necessary.
- Collect blood for selenium testing if required.
- Offer help on any other issue(s) you may need help with.

All our dental procedures are carried out under sedation. Sedation allows for:

- A calm, stress-free, and efficient procedure.
- Minimising of pain. Local anaesthetic is also used if any teeth need to be extracted.
- High quality of diagnosis, followed by correct treatment.
- The owner being able to observe the procedure being carried out.
- Increased safety for us as vets, you as the handler and the horse.

DOES SEDATION INCREASE THE COST OF A DENTAL?

No! In fact sedation allows for a quicker procedure as much less time is spent controlling the horse. It is also important to remember that procedures such as wolf teeth and/or molar and incisor extractions are painful to the horse and MUST ALWAYS be carried under sedation and local analgesia. .

So, if your horse has not had a dental check recently, please give us a call and we'll be happy to assist you.

resistance in humans. Transmission of antimicrobial resistant bacteria from animals to humans, involving infections like Salmonella, Campylobacter and E. coli, is well documented.

For the future the goal is to continue to reduce and refine the use of antibiotics, particularly those used in food producing animals. On a practical level this means:

- Responsible antibiotic prescription by vets and prudent administration by farmers.
- Increased focus on disease prevention programmes with greater attention to hygiene, disinfection procedures, biosecurity measures and changes in stocking rates.
- Reduction/elimination of use of antimicrobials in farming that are of critical importance in human medicine such as fluoroquinolones (such as Baytril®, Marbocyl®), macrolides (Tylan®, Tyloguard®), and third generation or higher cephalosporins (such as Calefur, Cefaguard™, Excede®LA, Excenel®RTU).
- Reduce metaphylactic use of antimicrobials (i.e. the wide scale preventative administration of antibiotics to at-risk groups of animals) such as using Tetravet in calf milk in the absence of actual disease.

Together we need to work towards a safe and sustainable future for our animals, ourselves, industry and country.

Source: NZVA Strategic Position Statement on Antimicrobial Resistance, released Tuesday 21st July 2015

Ewe hogget mating

Juan Klue

Mating is not too far off into the future. With ewe hogget mating there are a number of pros and cons that need to be considered, and a number of best practice on farm actions that are required before embarking on it in order to get good results.

Therefore, not every sheep farming system will be suitable. The **pros** include:

- Increased numbers of lambs sold
- Increased lifetime performance of ewes
- Higher flock fertility
- More efficient utilisation of feed

The **cons** include:

- Poorer performing two-tooth ewes if not done well
- Higher death rate in lambing hoggets
- Extra feed consumed from July to February
- Reduced wool at hogget and two-tooth shearings

Best practice on farm actions include:

- Ensuring ewe hoggets to be mated are selected early and become a priority stock class, which requires preferential feeding throughout the summer and autumn, such that they are at 40kg or over at the beginning of mating. To achieve this outcome requires a live-weight gain schedule to be planned, with targets set, which can be used to monitor progress (using regular weighing and checking). This requires scales and a suitable yard set up.
- Vaccinating against Campylobacter and Toxoplasma, ensuring proper technique and storage of the vaccines, and the correct timing of the vaccination. Campylobacter vaccines need to be given before mating to get the most value, with the gap between the sensitiser and booster injections to be between four and eight weeks. Toxovax® is a one off injection which must be given early, at least four weeks before the introduction of teasers or the start of mating.
- Ensuring hoggets have sensitiser and booster injections of a clostridial 5-in-1 vaccine with a pre-lamb booster given four weeks before the planned start of lambing.
- Using teaser rams from 17 days prior to the introduction of entire rams at the planned start of mating (PSM). This means more hoggets are in their second more fertile cycle at the PSM which equates to a higher scanning percentage. Teaser rams require vasectomising at least three weeks before introduction to the hoggets.
- Mating hoggets separately to mature ewes using a minimum ratio of 1:80 for adult rams and 1:50 for ram hoggets. Ram hoggets have smaller sperm reserves than adult rams hence the increased numbers required. Hence using adult rams is recommended.
- Mating hoggets in easier country in smaller paddocks which will increase their chance of being mated. Ewe hoggets are shy compared to adult ewes.
- Monitor parasites by way of faecal egg counts and be aware of clinical signs, especially of Barbers Pole, and drenching appropriately.

If you are considering mating your hoggets this season then make sure you do it right and remember we are always here and keen to help if needed.

Yersiniosis

Craig Dickson

Yersiniosis is a bacterial infection that can affect all mammals and birds, but is especially problematic in young farmed deer. It is one of the most serious and common diseases of farmed deer in New Zealand (NZ).

BACKGROUND

The bacteria, Yersinia pseudotuberculosis, is widespread in the environment and carried by birds, rodents, rabbits, hares, sheep, cattle and pigs so exposure is inevitable but it is concurrent stress to the animals that can show up as clinical disease. Stresses can include transport, bad weather, poor nutrition, trace mineral deficiency and/or parasites.

SYMPTOMS

The signs of clinical disease in young deer are foul-smelling, watery diarrhoea that progresses to bloody diarrhoea and death. Deer may also appear to go off their food, stand alone and become dehydrated and weak. Typically it will be seen in four to eight month old fawns in their first autumn/winter. An outbreak will often see up to 20% of a mob affected but those that appear unaffected may still be shedding high numbers of bacteria.

TREATMENT

During an outbreak, vaccination is of little value, so the best option can be to treat all deer with antibiotics. Sick animals may also benefit from fluid treatment if given early enough.

Knockout drenching

Trevor Cook

We go on about drench resistance on a regular basis because it is an important threat to livestock farming.

Even at a level of drench failure that the eye will not detect, we know there is a significant productive cost of using a drench that is not fully effective. For example, if using a 90% effective drench on lambs, costs are:

- Lambs have 20% lower growth rate
- Lambs 2.8kg lighter at end of March
- Summer finished lambs have 14% lower carcass value
- Autumn/winter finished lambs are 9kg lighter (around $25 lower value)
- **The loss for a 2000 ewe flock is around $20,000 per annum!**

Such cattle data is not available but the impact will be similar. At 90% effectiveness there is nothing that will visually indicate this level of production loss and yet the financial loss is substantial.

The actions that we can use to reduce the selection for drench resistance are well defined and effective. Commonly listed actions include:

- Leaving some not drenched
- Extending drench intervals
- Sharing summer/autumn grazing areas of lambs with ewes
- Using combination drench products

But one that seems strange, and to date has been not widely implemented, is the **use of a knockout treatment**. This action has been shown to be very effective in slowing that resistance selection.

Knockout drenching can apply to two different situations:

1. **When used after a persistent acting product has been used.** These are drench capsules (sheep and cattle) or moxidectin. By the time a drench capsule or a moxidectin injection has run out there will be a population of worms that have either survived treatment or have established during the treatment. So the only worms contaminating at this point are resistant ones. Since most of these products will run out in the late spring or early summer the rate of re-infection of these treated animals will be slow. Hence the resistant worms could dominate for a long time. Giving a knockout drench when the product has nearly finished, or has finished, will prevent on-going contamination from resistant worms.
2. **In young animals that have been regularly treated over the summer.** By the early or mid-autumn a growing population of resistant worms will have accumulated in these animals. That population becomes a significant contamination source in the autumn, a contamination that is taken into next season. Giving a knockout drench in the early to mid-autumn takes that resistant population out before it becomes a significant contributor to the worm population that will seed next season's worm challenges.

So what is a knockout drench? **It is one that is most likely to remove the resistant worm population that is resident in these animals.** For sheep it needs one of the new actives that we have had available for the last seven years or so - Zolvix® and Startect® are the two options. For cattle such options do not exist so an oral triple combination is the only option. **The rules around leaving some not treated or just using combinations do NOT apply when achieving the objectives of using a knockout drench.**

Removing these accumulated resistant worms may seem an insignificant risk, but studies show clearly that using persistent acting products and frequent drenching over the summer/autumn of lambs and calves are high risk actions for selecting for resistant worms.

Using a knockout drench in either of the above situations has been clearly shown to reduce this risk so don't hesitate to talk with your vet to find out more on this really interesting and important topic.

PREVENTION

Management of young deer during and after weaning will determine whether they will succumb to disease. Aim to reduce stress levels as much as possible in young deer. Keep them well fed, watered and sheltered, and avoid long periods in the yards and try to avoid transport. Also ensure there is a parasite control plan in place and trace mineral levels are monitored.

Vaccination with Yersiniavax® is a good preventative approach, alongside the avoidance of stress factors as much as possible. Yersiniavax® has been available since the mid-90s and has shown good protection against outbreaks. Two shots, three to six weeks apart are required and the timing of the first dose is critical. Ideally it should be done in autumn, before the bad weather and the mobbing together of young deer. Weaning date has the greatest bearing on when to vaccinate. Vaccinating before weaning can be a challenge, but leaving deer unprotected until after the rut may be risky.

Vaccination will not stop all outbreaks but will decrease death rates in the event of there being one.

time to include the impact player in your drenching game plan.

You want to knock out worms and delay resistance - that's why you should include STARTECT. It's the novel combination drench which knocks out worms that are resistant to other drenches.

And using STARTECT strategically for Quarantine, Knockout or Exit drenching can extend the useful life of the rest of your drenches.

So to prop up your drench team and keep them working harder for longer, be sure to send in the big guy.

It's Exit Drenching time, so talk to your vet about your drenching game plan.

www.startect.co.nz

STARTECT
THE KNOCKOUT DRENCH

Zoetis New Zealand Limited. Tel: 0800 963 847; www.zoetis.co.nz. STARTECT is a registered trade mark of Zoetis Inc, or its subsidiaries. ACVM Registration No. A10353.

zoetis

15340