

## DEER SECTION

### Unexpected Death in Farmed Deer

A recent study analysed laboratory submissions to get an idea of the range and frequency of the causes of sudden and unexpected death in farmed deer.

Fever. Whilst these results were unsurprising, they highlighted the need for progress to be made in reducing the impact of such preventable diseases as Yersiniosis and parasitism.



Notable omissions from the list are Johne's Disease and Clostridial Disease (Blackleg & Gas Gangrene), most likely reflecting the on-farm diagnosis of these conditions at the time of post-mortem without the requirement for laboratory testing.

If you would like to discuss Johne's Disease Control or Parasite

The most common causes of unexpected death were Yersiniosis, parasitism, reactions to Xylazine sedation and Malignant Catarrhal

Management on your farm, please contact the clinic and speak to one of our vets.

### Grazing Strategies to Assist Parasite Control

Recent studies have demonstrated that:

- cross-grazing deer with cattle or sheep in Autumn was effective in reducing the lungworm burdens in weaner deer, and
- cross-grazing with cattle was effective in reducing the size and effects of gastrointestinal nematode burdens in young deer.

did not provide enough control to completely remove the need for anthelmintic treatments. However, deer cross-grazing with either cattle or sheep required fewer treatments than deer grazing alone, which should help to reduce the rate of development of anthelmintic resistance.

The study did not look into the effects of cross-grazing on the sheep or cattle, which will need to be considered in future studies.

Whilst these strategies were effective in reducing worm burdens, they

## REMINDERS

### Sheep

#### Lambs

- FEC Lambs and drench if required
- Mineral check if ill thrift
- Book Faecal Egg Count Reduction Test.

#### Ewes

- Mix replacement stock with MAE at least 2 months pre-mating (HSD risk)
- *Toxovax* vaccinate Two-tooths (and/or hoggets if mating them)
- *Campyvac*<sup>4</sup> vaccinate Two-tooths (and/or hoggets if mating them); two doses prior to mating, 4 - 8 weeks apart
- Consider *Androvax/Ovastim* vaccination or annual booster
- Pre-mating *Flexidine* Injection or Potassium Iodide drench
- FEC pre-tup and drench if indicated
- Avoid any injections/dipping/shearing etc in the three weeks prior to joining
- FEC Hoggets (*Trichostrongylus* risk) plus 5-in-1 vaccination.

#### Rams

- Palpate Rams and vaccinate dogs
- Teaser Rams in 14 -17 days before joining.

### Cattle

#### Calves

- Lepto/Clostridial booster vaccine; vaccinate beef calves at weaning
- Worm drench/Weaning drench (beef); interval depends on product used
- BVD booster vaccination.

#### Cows

- Tail paint cows to detect empties
- Pregnancy test 6 weeks after bulls removed and mark/tag empty cows
- Arrange Mastitis Review/Dry Cow consultation
- Mineral check cows; preferably by Liver biopsy.

### Deer

- Sort dry hinds for culling
- Consider mineral check through the works
- Copper & Selenium supplement pre-mating if needed
- Drench fawns for lungworm and vaccinate with *Yersiniavax*
- Certified Velveters must return all unused drugs together with completed and signed record book.



Otautau Vets  
OVL VET NEWS



## Issue FEBRUARY 2015

### SHOP TALK

#### Hill's Metabolic Diet

Almost 50% of the pet population is overweight and even a little extra weight can impact your pet's quality of life, affecting mobility and general health. Hill's Science Diet has developed a Metabolic Diet for dogs and cats aimed to promote weight loss and prevent weight regain.

The diet helps pets feel full and satisfied between meals and is clinically proven to avoid weight regain following a weight loss program. Trials showed that 88% of pets on Hill's Metabolic Diet lost weight in two months at home. If you would like more information about this Diet or would like to discuss a weight loss program for your pet, please contact the clinic and speak with one of our vets.

#### Skyla

We now have our own in-house blood analyser machine for dogs and cats. This service will be particularly useful for those pets on long-term medication or those with chronic disease, as results are instant and blood monitoring costs will be reduced. Routine blood screens should also be considered for your older pets to allow early identification of any potential health or disease issues. If you would like more information about this service, please contact the clinic and speak with one of our vets.

#### Toxovax & Campyvac Reminder

By now, all of you should have received

your Toxo and Campyvac order forms. As you are all aware, we do require some notice to supply your Toxovax, so please return your forms to Chelsea as soon as possible.

#### Yersiniavax

Just a reminder to get your Yersiniavax orders in early. Please return your order forms to Chelsea if you haven't already done so.

#### Merial Ancare Drench Promotion

The 2014 Merial Ancare summer drench promotion was drawn on Christmas Eve, with the fantastic outdoor bar and stool setting going to Dave and Ruth Edge. Hopefully we will continue to enjoy a late summer so that it can be put to good use.

#### Boss Pour-on Prize Draw

Congratulations go to Willy & Amanda Buchanan who were the lucky winners of the Boss Pour-on promotion and are now the happy owners of a Pizza Oven.



### STAFF NEWS

By now, many of you will have met Sam and Andrew who both started at OVL last month. For those of you who didn't get a chance to read the last OVL newsletter, Sam has joined us from Scotland where he has been working in mixed practice for the past 7 years. He has a particular interest in Sheep & Beef Medicine, but is keen to learn all about NZ dairy practice. Andrew originates from Belfast and has recently graduated from University College Dublin. Andrew is a keen rugby player, surfing enthusiast and in what spare time he has left, a budding photographer.

We will also have another experienced Veterinary Surgeon joining us next month. Emma Parkinson graduated from Glasgow University in 2012 and has been working in mixed practice (predominantly small animal) for the past two years. Emma hails from the North of England and is yet another outdoor enthusiast, enjoying horse riding, skiing, rock/ice climbing and mountaineering. Emma will be starting at OVL in mid-March.

Finally, our congratulations go out to Ashleigh and Mark who welcomed a daughter, Carmen Rose at the end of December. We wish them all well for the next few months and hope Troy enjoys having a little sister to keep him entertained.

## OVL SNAPSHOT

Due to the fantastic response we received for the OVL 2015 Calendar and the unfortunate shortage of months in the year, we have decided to start a photo section in the newsletter. In keeping with the theme of the inaugural photo, we would like photos of you and/or your pets wearing your OVL hats.....and unlike the calendar, they don't need to be restricted to Southland!!

Please email your photos to:  
jen@otautauvets.co.nz

Teagan Ashley and her prize-winning pet calf Daisy ▶



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Best Wishes from the vets: S Giles Gill BVMS&S, Louise F Ingram BVMS (Hons) MACVSc, Jen E Gordon MA VetMB, Rosemary R Gill BVMS&S, Teresa A Skevington BVSc, Ashleigh S Braithwaite DVM, Julia E Nuttall BVSc, Ruby A Davidson BVetMed, Jennifer Campbell BVMS, Jenny Paterson BVSc, Sam M Hutchinson BVMS BSc, Andrew C McQuade MVB.



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## CATTLE SECTION

### Copper Levels in Cattle

Over the past few years, we have seen a trend of increasing liver copper concentrations within the New Zealand cattle population, along with several cases of copper toxicity. Consequently, copper deficient farms have become less common, although we have recently seen cases of clinical copper deficiency in first calving heifers.

There are many sources of copper available to cattle and it is important that all sources are considered when assessing the copper intake on each farm. Pasture, forages, feed concentrates, drinking water and mineral supplements all contain varying levels of copper and the 'availability' of this copper also varies between farms.

Copper supplementation of dairy cattle has become routine practice in New Zealand, however so has the use of Palm Kernel Expeller (PKE) as a supplementary feed. PKE contains a relatively high concentration of copper

per kilogram of dry matter and virtually all of this is available to the cow. A 500kg cow producing 30kg of milk per day has a daily copper requirement of 180-200mg. A daily PKE ration of 4-5kg DM provides around 100-150mg of copper, which is more than half the daily requirement. If copper is also supplied via the dosatron, any excess intake over the daily requirement will be stored in the liver and if levels continue to accumulate, sudden death can occur as a result of toxicity.

Liver biopsy from live cattle is the preferred method to assess copper levels and is recommended when checking the liver copper reserves going into winter. Whilst it is possible to assess current copper levels through blood sampling, this gives no indication of the copper stores within the liver; an animal can have adequate blood copper levels reflecting daily intake, but excess or alternatively, low copper reserves in the liver. In periods of low copper intake, animals use their liver stores

to maintain blood copper concentrations. If copper intake remains low, the liver copper concentration decreases, but the blood levels may remain within normal range. Eventually, the liver copper stores are exhausted and at this stage, blood levels will start to decrease. Blood samples can be used in combination with liver biopsies to assess the copper status at other times of the year, but additional liver samples may be required if excess or deficient concentrations have been detected.

Regular monitoring and assessment of the copper status of your herd identifies any potential problems of toxicity or deficiency and also avoids unnecessary supplementation. Ideally, pasture samples should also be analysed throughout the year to profile the levels of copper, molybdenum and sulphur. Please give us a call if you would like to discuss copper monitoring on your farm.

### Heifer Rearing

Your heifers are the future of your milking herd and every effort should be made to ensure that their future in the herd is long and productive. Having well-grown, healthy replacements entering your herd is vital for their lifetime production, reproductive performance and for your business performance. Feed shortages, mineral imbalances and disease can all have a significant impact on growth rates and the overall health of your young stock. These areas need to be managed through regular assessment of feed allowances, weight monitoring and mineral checks. Regular contact with the people responsible for your heifers is also essential to ensure they stay on track to reach growth targets.

Heifers that haven't reached target weights over summer will struggle to reach their liveweight and BCS targets by 22 months (90% of expected mature liveweight & BCS 5.5). Failure to reach these targets results in reduced first lactation production, increased calving-mating interval and reduced lifetime within the herd. A New Zealand study showed that only 80% of heifers with a liveweight of 315kg at 18 months would make it to the end of their first lactation, compared

0.1-0.2kg milk solids (MS) are seen for every 1kg liveweight gain at first calving. This production advantage is due in part to increased body reserves, which can be utilised to produce milk in early lactation, and also to their lower energy expenditure for growth; heifers closer to their mature body weight at calving require less energy to be partitioned for growth in order to reach their mature weight.

First-Calvers already have significant challenges when they enter the herd; their first lactation, new surroundings and fitting in with the herd hierarchy can all put pressure on heifers. Don't compound these challenges with size or health issues secondary to poor young stock management. Software such as MINDA weights allows you to monitor the progress of your young stock and track their growth against individual targets based on liveweight breeding value. This is especially useful in monitoring mobs of mixed breeds where target weights can vary significantly. The results are plotted on a graph, with underweight animals or those with slower rates of weight gain easily identified, enabling early action to improve growth rates.



with 100% of heifers weighing 385kg at the same age. Only 55% of the lighter heifers remained in the herd at the end of the fourth lactation, compared with 70% of their heavier herd mates.

Liveweight at the time of first calving also has a significant effect on lifetime performance, with heavier heifers having higher milk yields for their first and subsequent lactations. On average, production gains of

We are available to answer all of your heifer rearing and health questions and can provide mineral and weight monitoring services or programmes to ensure your heifers get the attention they need. Please call the clinic and speak to one of our vets for more information about our services.

## SHEEP SECTION

### Being Wormwise in the New Year

#### Faecal Egg Count Reduction Test

January to March is the optimal time for starting a FECRT; earlier in the season may miss *Haemonchus* and later can result in *Trichostrongylus* dominance, whilst missing *Teladorsagia* (*Ostertagia*). It is still recommended that a FECRT is performed every 2-3 years to assess the changing resistance status on your property. For more information, please contact Teressa.

#### Targeted Selective Treatments

The sustainability of drench based worm control strategies depends on a proportion of the worm population remaining unexposed to treatment ("in refugia"). This can be achieved by minimising the number of drench treatments, whilst not compromising productivity, and targeting treatment towards a proportion of the mob. This approach requires identification of those individuals that will benefit from treatment based on production/live weight gain, individual disease susceptibility or parasitological markers. The use of targeted treatments for those animals requiring treatment on the basis of their relative performance against the rest of the mob, shows promise and confirms the value of assessing the parasite risk prior to drenching.

#### Worm Management Decisions

- Drench only when required i.e. Expectation or evidence of a worm burden,

- Young stock grazing contaminated pastures will need regular drenching as the challenge is high,
- Faecal Egg Counting (FEC) is a useful tool for young stock grazing clean/low contamination pasture or forage crops; FEC four weeks after introduction to such feed will indicate how clean it is,
- Natural immunity to infection starts to develop from around 9 months of age, at which stage drenching decisions based on FEC results are useful,



- Use a fully effective, oral combination drench based on the FECRT results for your property,

- Injectable products should be used sparingly and only with supporting drenches such as an exit drench,
- Mature animals require less drenching and treatment should be based on FEC results unless risk factors related to the level of worm impact suggest otherwise. Animals under nutritional stress are more susceptible to worms and although worm challenge in a summer drought is likely to be low, the rain following a drought is high risk,
- When drenching stock, always leave a proportion of the mob untreated "in refugia" to prevent selection for resistant worms. How many to leave undrenched is a common question. If you are using a known, effective combination drench based on your FECRT results, as few as 5% may be left untreated, however a drench of unknown effectiveness requires greater than 25% of the mob to remain untreated. The one exception to this recommendation is during high risk situations e.g. a *Haemonchus* outbreak, when all individuals should be treated,

- Use grazing strategies to reduce both the requirement for drenching and selection for resistance; expose young stock to lower levels of worm challenge and graze undrenched ewes with drenched lambs to decrease the selection for resistant worms.

### Lucky Lamb

Aria the pet lamb was brought to OVL when she was found in the back garden grinding her teeth and unable to stand.

On examination she was found to have abdominal pain and neurological signs, and based on the clinical signs, "polio" or cerebrocortical necrosis was suspected. This condition is caused by Thiamine (Vitamin B1) deficiency and is often seen in lambs and calves that have gone from rough to lush feed, and may also be associated with excess Sulphur intake. However, Aria wasn't showing typical signs of polio as affected lambs usually appear blind and throw their heads back ("star gazing"), whereas Aria could see. We also considered that her clinical signs were secondary to her eating something toxic in the garden.

We started treating Aria for polio with large doses of Thiamine and drugs to reduce the swelling in her brain and ease her abdominal pain. Bacteria such as *Listeria* and *Clostridia* can also cause neurological signs so we

covered her with antibiotics. Aria was put on a drip as she was dehydrated and unable to drink due to her neurological signs. Later that day, Aria started fitting and additional medication was administered to control this.

The following morning she still couldn't stand without help and would grind her teeth every now and then, but she was more alert and aware of her surroundings. We put her outside for some sunshine therapy and continued to treat her for polio, seeing steady improvement throughout the day.

The next morning Aria was standing at the gate to greet us as we arrived at work and she went home later that day. We all hope she has a very long and happy life with lots of babies for her dedicated owners!

– Louise Ingram & Jen Campbell



Aria the lucky pet lamb

#### Uddering Ewes

Checking udders should be done any time from at least one month after weaning. If you are not sure what is normal or abnormal, our vets are available to help you make important culling decisions. Please give us a call if you would like a vet to come and assess any doubtful udders you find.