



VET notes

YOUR TOTALLY VETS NEWSLETTER ALL ABOUT ANIMALS ON YOUR FARM

JUNE 2017

Retired Working Dog Adoption New Zealand

Helen Sheard

Totally Vets works with Retired Working Dog Adoption New Zealand to help treat and rehome working dogs that are retired through age or injury.

Recently working dog Midge presented with a badly broken femur. Her injury, which was repaired at our Feilding branch, meant that she would probably not have been able to keep up on steep hill country but after repair she should now manage fine on a smaller flatter property.



Midge before and after surgery

She is recovering in foster care before hopefully finding a new home on a small block.

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New graduates at Totally Vets

Helen Mather

Totally Vets welcomes Caitlin Jackson and Katy Johnson to our team.

Caitlin joined us in December 2016 in our Taumarunui branch as a mixed practice veterinarian.

Caitlin grew up in Taranaki where her parents were sharemilkers on a small dairy farm; this and her passion for horses lead her to become a veterinarian. Throughout vet school she lived with her partner on a large sheep and beef station near Hunterville where she developed a special interest in sheep and beef production systems and the wellbeing of the working dog. In Caitlin's spare time she enjoys riding her horses or pottering in the garden.



Caitlin Jackson



Katy Johnson

Katy Johnson started with Totally Vets in February as a production veterinarian based out of Feilding. Katy grew up on a small sheep and beef farm outside of Tauranga and decided to follow the successful career paths of her parents who are both veterinarians.

At her graduation ceremony on 9th May Katy received the Veterinary Science Medal which is awarded to the top performing student throughout the Veterinary Science Degree. This is a huge honour!

During Katy's five years at Massey she was awarded:

- The Theriogenology Prize
- The Frank Parsons Prize in Veterinary Preventative Medicine
- The Veterinary Clinical Studies Award
- The Chapter of Veterinary Pharmacology Prize
- The Prize in Feline Medicine and Surgery
- The Merial Prize in Medicine
- The Shoof International Limited Prize in Dairy Cattle Medicine and Preventative Medicine
- The Shoof International Welch Allyn Award in Clinical Pathology
- The Wellard Annual Cattle Health and Production Prize
- The Wellard Annual Sheep Health and Management Prize
- The WJ Pryor Prize in Veterinary Parasitology
- The NZ Veterinary Association Prize in Anatomy
- The Veterinary Women's Auxiliary of NZ Prize in Physiology

We are privileged to have both of these talented veterinarians working at Totally Vets and will enjoy watching them grow to their full potential.

Looking ahead

Potential animal health issues, tasks to consider and reminders for **June** include...

DAIRY

- **Drying off** – has carried through to this month as feed has not been such a limiting

factor this season. It is still important to keep a good eye on cow body condition to ensure it doesn't drop too low. Also beware of falling production levels and potential increased risk of inhibitory substance grades.

- **Trace Elements** – For those that haven't started yet, test herd mineral status – this needs doing before winter sets in.
- **Vaccinations** – Salmonella vaccine may be advised during the dry period – **see article page 3**, and plan for calf scour vaccinations – see our Colostrum management **article**

on page 4. Don't forget Leptospirosis vaccinations need doing prior to drying off.

- **Teatsealing** – For those that have teat sealed historically or are interested in exploring the option, ring us to make a booking. Standard recommendation is six weeks before planned start of calving. Consider the benefits of a dry period drench.

DEER

- Continue to monitor general health over this quiet time of year.

Antibiotics – Appropriate Use

Chris Carter

Alongside climate change, antibiotic resistance is identified as one of our biggest threats for current and future generations and the World Health Organisation is prompting us to change our attitudes to the use of these products.

These warnings have already led to changes we are familiar with; a visit to the doctor with a heavy cold is more likely followed by advice to go home to bed rather than being prescribed antibiotics.

Because bacteria in animals that develop antibiotic resistance can transfer to humans, the veterinary use of these products is also under scrutiny. The catchcry is appropriate use.

By international standards, antibiotic use in New Zealand farming systems is modest; we are ranked third to lowest but as an exporter we are very in-tune to how our markets perceive and react to what is a major international concern.

In responding to the need to continue to reduce on-farm antibiotic use, examining farm practices and putting into effect preventative measures through improved nutrition and vaccination is the first line of defence.

When antibiotics are required national guidelines now classify how vets are to prescribe these products:

1. Green - those that are the first line of use
2. Orange - those restricted to specific indications or as a second line of therapy
3. Red - antibiotics that are important for treating stubborn or refractory conditions in human and veterinary medicine

When prescribing antibiotics for use on your farm, we will discuss any changes that may result from this new classification.

One of the products which is currently widely prescribed for use in farm animals carries a "red" classification because it contains the active ingredient tylosin. The veterinary products containing this ingredient trade under the names Tyloguard®, TyloVet, Tylar® and Tylofen™. In humans tylosin is essential for treating infections in humans who are allergic to penicillin.

This season is the third year we have been implementing systems which allows our dairy farmers to avoid blanket antibiotic treatment when drying off their herd. With lower levels of mastitis and on-going herd testing, farms are



adopting Smart SAMM guidelines endorsed by Dairy NZ. These guidelines and on-farm practices allow cows to be differentiated between those that need antibiotic treatment at dry-off and those that only require a teat sealant.

Robust vaccination programmes for leptospirosis, clostridial diseases and Salmonella all assist to diminish antibiotic use and for cattle controlling or eradicating Bovine Viral Diarrhoea (BVD) is a key component to lifting herd health and lessening the need for treatments.

Sustainable farming practice is a topic on all our lips and the appropriate use of antibiotics contributes to this discussion.

Antibiotic failure for an individual is one thing but the World Health Organisation is reminding us that the consequence of resistance to antibiotics will impact on global health, our food security, and the world's on-going development.



- Hind pregnancy scanning is recommended to get the most out of your fawning.

SHEEP and BEEF

- **Ewe Scanning** – This will begin this month. Ring the clinic to book this in. The rams need to be out 45 days.
- Keep an eye on late season **fly strike**.
- With **cull cows** that are going to the works, now is an ideal time to check mineral status.

EQUINE

- **Teeth** – Now is a great time to book in and have teeth done while they are out of work over winter.
- **Feed** – Ensure they have a good quality hay that is mould and dust free. If you have difficulty maintaining your horse's weight during winter you may need to increase the fat component in their diet. Please phone the clinic to discuss a suitable feed plan with one of our equine vets.



Salmonella in Cattle

Chris Carter

Last spring there was wide spread discussion following a severe Salmonella epidemic in a Manawatu dairy herd.

While the size of this epidemic was unusual, the annual occurrence of Salmonella outbreaks is common particularly in spring calving herds when a cow is at its most susceptible late in pregnancy or in the month or two after calving.

Salmonella bacteria are widespread both in bird life and animals and carrier states exist, i.e. given the right conditions, clinical disease will follow.

In ruminants, the critical factor is the creation of conditions that lead to a slowing of gut mobility. As part of normal ruminant function the bacteria and protozoa produce volatile fatty acids (VFAs) which the cow uses for energy. These VFAs are also lethal to salmonella. An upset digestion lowers the VFAs and increases the risk of developing Salmonellosis.

WHEN IS AN OUTBREAK MOST LIKELY TO OCCUR?

Outbreaks can occur around calving as we go through the transition from late pregnancy through calving and into the first month or two of lactation.

In recent years concern has been raised over magnesium (Mg) supplements and whether these are associated with an increased occurrence

of Salmonellosis. The discussion around this is not clear, but comment has been made that the size of Mg granules when too large or not finely milled may lead to digestive upset.

HOW DOES SALMONELLOSIS PRESENT?

The first sign can be a sick cow and sudden death. Typically affected cattle will be obviously sick with severe and bloody diarrhoea, often with intestinal lining being passed. These cases are not pretty.

Treatment of clinical cases can be attempted as long as the disease has not progressed too far. Routinely we use lots of fluids pumped into the rumen plus antibiotic cover as well as injections of non-steroidal anti-inflammatories (NSAIDs). Treatment outcome is often poor with a high death rate in those clinically affected. Separation of the sick cattle from the healthy members of the herd is critical.

Prevention by vaccination is by far the most cost effective way to avoid an outbreak of Salmonellosis; you will only need one

epidemic and you will be converted for life. We will recommend vaccinating into the face of an outbreak.

Because Salmonella is a Gram-negative bacteria, vaccination for prevention is best undertaken during the dry period. Following vaccination, an elevated temperature for a day or so is common and if the cow is milking you may see production temporarily drop.

The vaccine is not expensive (around \$1 per vaccination per cow) with two shots required initially and an annual booster thereafter.

Most cases involve *Salmonella typhimurium* and these bacteria will cause disease in humans; the disease is highly contagious. Never drink unpasteurised milk from salmonella infected cows and never feed this milk to calves.

For what can be a devastating disease at a time of the year when time is precious, the solution for avoiding this risk is simple. If you want further advice, please call one of our veterinary team.



Colostrum Management

Sarah Anderson

Calves rely on the passive transfer of antibodies from colostrum to establish immunity. Failure of this process can lead to calf disease and death, affect growth rates, milk production and reproductive performance in the first lactation.

Prevention of failure of passive transfer is summarised by the three Q's of colostrum management:

1. Quickly

Timing of the first colostrum feed is crucial. Over the first 24 hours of life the ability of the gut to absorb antibodies decreases. The first feed of colostrum should be in the first six to 12 hours of life.

2. Quantity

Minimum of 10-15% of calf live weight. A 40kg calf would need 4L. As the stomach capacity is approximately 2L, this would need to be split into two feeds.

3. Quality

Good quality colostrum has high antibody levels and low bacterial contamination. Colostrum antibody levels can be measured on farm using a brix refractometer.

The first two Q's are easily controlled with good calf management. The third Q is where many farms struggle. A recent New Zealand study found that only 9.7% of farms surveyed had adequate colostrum antibody levels, and only 8.9% achieved the threshold for contamination. When both criteria were applied, only 1.8% of samples were of adequate quality!

Colostrum antibody levels depend on several factors. It is important that colostrum fed to newborn calves is **FIRST MILKING** colostrum. In addition, the **calving to first milking interval** and **milking to feeding interval** should be minimised, as antibody levels decline over time



in both the cow and the bucket! Pre-calving herd vaccination with vaccines such as Rotavec® Corona or Scourguard® 4K will boost specific antibody levels in the colostrum.

Bacterial contamination of colostrum prevents absorption of antibodies in the gut. The importance of hygiene during collection, storage, and feeding cannot be stressed enough! Potassium sorbate has been found to be the most effective method of preserving colostrum quality.

Remember – Colostrum management is key to reducing the incidence of calf disease (including scours). Plan ahead to avoid issues!

Are you prepared to take a hit?

One shot could save a hiding

Scours can knock you sideways – hurting your calves, your family and your income. And it can strike on any farm. With Rotavec® Corona, a single shot before calving helps protect your calves against three of the most common causes of infectious scours – rotavirus, coronavirus and *E. coli*.

Talk to your vet today about Rotavec Corona – the easy, one shot way to help your calves stand up to scours.

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