Veterinary Centre **Ewes**News

Alleviate Pain

Applying prescription pharmaceuticals for alleviating pain for tailing and castration of lambs.

Dave Roberston BVSc BSc - VETERINARY CENTRE Oamaru

This is quite a precedent. A wool marketing firm is now requiring that their suppliers use prescription pharmaceuticals across all lambs at tailing to comply with an overseas welfare standard and marketing concept to reduce painful aspects of these procedures. Veterinarians are now required to assist farmers with this. We can do this. And below is a list of the current options available. Please discuss with us what options may be right for your system.

Summary of tail docking and castration pain management options

Procedure	Option	Comments		
Castration	Numnuts	Approved tool that combines elastrator ring and consistent local delivery		
	Local injection	Separate local injection on vaccination needle. Require veterinary assessment for initial dispensation.		
Tailing with Iron	Local injection	As above		
	Tri-Solfen topical spray	Contains 2 types of local anaesthetic, adrenaline and disinfectant. Spray 1.5 -3mL on stump post tail removal.		
Tailing rings	Numnuts	As above		
	Local injection			
	Buccalgesic	Oral anti-inflammatory. Starts working after 20 min. Lasts 24hrs+.		



A Numnuts – ring and local anaesthetic injector tool B Tri-Solfen – topical anaesthetic gel

C Lopaine 2% – local injection

D Bussalgesic – oral meloxicam anti-inflammatory. It is a viscous paste given in the cheek pocket (not intended to be swallowed). No needles required.

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There is a fair bit of territory to traverse in order to get the requirements for pain management correct. Veterinarians are the professional connectors in this issue. We merge our pharmacology knowledge and understanding of animals and production systems with what is practical and cost

effective for the required outcome. Generally speaking farmers decide what is best for the health and welfare of their stock and enlist vet advice when needed. Vets do not want to be involved with sham prescriptions of products that are not going to be used correctly or when used do not make any meaningful difference. We also do not want to have farms awash with anaesthetic agents that are not accounted for or not used for the use prescribed. Vets want certain professional standards to be maintained across businesses. Farmers have to justify the options that they are going to make a difference to their sheep, not just be a compliance cost. So I think there is a fair bit to discuss other than just "what is the cheapest thing I can get to be compliant with this BS". Attitudes are always changing and this area is challenge to accepted norms.

A beautiful day at Mt Dasher with Kendall, Amy and Jack, checking out some cattle ... amazing panoramic views!



Have my cattle got nits? "They're scratching like crazy!"

Luke Smyth BVSc – VETERINARY CENTRE Oamaru



As the days get shorter and cooler, the grass stops growing and lice populations reach their highest levels.

Cattle with mild-heavy lice burdens show irritation and intense itching. One of the first signs of lice problems is cattle rubbing and scratching against fences, posts, gates, and troughs. This leads to hair loss and bare patches over the neck, shoulder, and rump.

In New Zealand there are 2 types of lice.

- Sucking lice which pierce the skin and suck blood.
- Biting lice which feed on the surface debris of the skin.

Lice are small well adapted ectoparasites, they have 6 legs which grip the hair shaft and they spend their entire life among the hair coat of cattle. They cannot survive for more than a few days off the animal. They cannot swim, jump, or fly and are spread by direct contact between cattle.

So why do lice populations peak in winter and become largely undetectable in summer?

 Development of lice is highly temperature and light dependant. When the ambient temperature drops in the autumn the skin temperature of cattle drops. This causes lice to start breeding and laying eggs. Numbers of lice peak in late winter/ early spring.

- The dense winter coat provides a more stable environment for lice development as they are protected from direct sunlight.
- Moulting of the winter coat in spring causes a dramatic loss of the immature and adult lice and eggs attached to the hairs. Furthermore, it reduces the insulating effect of the hair coat so that lice and eggs are exposed to sunshine. Lice drop to very low numbers over summer and survive by hiding in shaded areas under the tail or jaw

So how do we prevent a lice problem.

- Treat with a pour on, ideally in the earlymid autumn period when lice numbers are lower and coat thickness is less allowing greater amounts of chemical to contact the lice population.
- Nearly all lice problems begin from other infested cattle. This is important in the management of lice as all cattle need treating, especially if you are boxing up mobs to make wintering easier.

Treating a lice outbreak in winter.

- Treat all cattle with a pour on. But it is important to be aware that when any of these products are applied in winter to cattle with thick coats that are often covered in mud or faeces, only suppression of lice numbers will be achieved at best. Lice numbers will rebuild again over 4-8 weeks, often requiring another treatment. This is due to some lice escaping a lethal dose of drug in thick coats and none of the chemicals having a persistent effect on lice or killing eggs.
- Lice infestation will be worse in cattle in poor condition, especially if they are stressed from cold weather, under feeding or internal parasite infestations.



- Some chemical will be absorbed across the skin and sucking lice that fed on blood are poisoned as they feed.
- Any chemical that remains on the skin and hair coat will be spread around by cattle grooming themselves, killing biting and sucking lice as they come into contact with it.
- Although some injectable drench products have a claim for lice control, they only kill sucking lice and don't achieve biting lice control.

What pour on product should I use?

This depends on whether you are wanting to control both lice and internal parasites or lice only?

Lice control only

- Synthetic Pyrethroids: Blaze
- Organophosphates: Destruct

Both lice and internal parasites control

- ML's (Macrocyclic Lactones) Abamectin and Moxidectin which are the active ingredients in:
- Cydectin Pour-On
- Boss Dual Active
- Reflex
- Topline
- Blaze ACVM A008214 Destruct ACVM A005740 Cvdectin Pour-On ACVM A006203 Boss Dual Active Pour-On ACVM A010817 Reflex Pour-On ACVM A010817 Topline ACVM A010067



Mineral Check

Catherine Nelson BVSc – VETERINARY CENTRE Oamaru

Trace elements are the talk of the town at this time of year, when everyone is checking the herd and flock levels prior to winter. One very simple option for monitoring those mineral levels is checking the liver stores at the meatworks, with the help of a single piece of paper- the Mineral Check formthat goes with the truck driver. At least 10 animals are required to get a gauge of copper stores in the mob, as it can be variable, but just 5 samples are needed to establish selenium, cobalt and zinc levels.

One limitation of the Mineral Check option is that the cull animals are likely to be the worst-performing of the mob, so may have disproportionately low

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be followed up by liver biopsies and/ or blood tests for trace elements in live animals, to establish the average herd level. Mineral Check is an excellent starting point for establishing the lowest trace element levels and the process is very straightforward. Simply give us a call and we'll send you a form to fill out. This includes your farm details, the name of the trucking company and the name of the meatworks the animals are going to. Then email a copy to the meatworks, give the paper copy to the stock truck driver with the ASD form, sit back and wait for the results!

0800 VET 111 (0800 838 111) - www.vet111.co.nz



Jo Sutherland filling the details on the Mineral Check form before sending back to Dan Thurlow, Ranfurly. Stock class

- What to test
- Which works destination
- Prime Veterinary contact



Dan Thurlow handing his filled in Mineral Check form with the ASD docket to the truck driver. Pretty easy way to get some useful information on cobalt, copper and selenium levels this winter.



FEC Interpretation

Luke Smyth BVSc – VETERINARY CENTRE Oamaru

For the last 6 weeks I've been confined to clinic duties after a knee reconstruction surgery, but like Michael Jones I'm hoping to come back to farm work better than ever. The recovery phase has been a great chance to talk to many of you about your autumn faecal egg count results and what they mean.

While the diagnosis of clinical parasitism with FEC's is often relatively straight forward and usually follows a history of inadequate worm control/extended drenching intervals, inappetence, ill thrift and scouring. Low-level parasitism however can be much more difficult to assess and production losses can be significant even when FEC's are below 400-500 epg due to suppression of appetite and the immune cost of maintaining host resistance to the larval challenge. Well-fed sheep are less affected by worms than those under nutritional stress.

Just looking at an average FEC for a mob can also be a fatal error, particularly if there is a wide variation with a mix of high and low/ zero FEC's within the mob.

The overriding conclusion I've come to is that the worm situation on an individual farm is unique to that property and faecal egg count results must always be interpreted with a thorough background history of breed and age of the sheep, feeding, stock performance, body condition score, amount of scouring/dags, response to previous drenching and predicted larval challenges.



grass growth has continued well into May but it has also allowed parasite larvae to survive for extended periods on pasture. Once the pasture is contaminated it takes at least 2-6 months for larval numbers to decline significantly.

Contrary to popular belief this larval challenge can continue through winter.

- While it may be too cold for parasite eggs to develop to L3 larvae. The pasture may still have been heavily contaminated with L3 larvae that have developed in the previous 6 months during the warmer times, these can survive frosts.
- Depending on pasture larval contamination levels it is quite possible to acquire large worm burdens in winter especially as feed becomes tight and stock chew down into the bottom 2 inches of the sward where the bulk of the L3 larvae are concentrated.
- While we tend to think of a winter crop as "worm free feed" often there is a grass headland around the crop paddock or a runoff grass paddock being grazed.

The last point I'd like to mention is worms and drench resistance are not the only cause of scouring and dying sheep. We often see outbreaks of Yersinia/Campylobacter/Listeria in fine wool sheep during the winter. This is often associated with periods of feed shortage and while there may be a concurrent high parasite burden drenching alone will not solve the problem.

What is Nematodirus?



Vanesa Love BVSc – VETERINARY CENTRE Ranfurly

For our sheep clients who are regularly doing egg counts you would have noticed a column of 'Strongyles' (B photo

you would have noticed a column of 'Strongyles' (B photo below) and a column of 'Nematodirus' (A photo below), you may have also noticed that we don't really mention the Nematodirus column and they have

a separate total egg count, but that doesn't mean they aren't important!

÷	Haemonchus contortus	Small Intestine	Trichostrongylus colubriformis &	
oma	Ostertagia circumcincta		vitrinus	
Sto	Trichostrongylus axei		Nematodirus filicollis & spathiger	

Each type of worm has a part of the gut they like to live in, Nematodirus species are found in the small intestine of sheep. Nematodirus worms produce large hardy eggs and larvae that can survive in the environment for up to 18 months unlike other worm types. Nematodirus likes short cool summers and is well adapted to long cold winters, so it's more of a problem the further south you go. In fact some species of Nematodirus like N. filicollis like the cold so much that the eggs need to overwinter to trigger hatching. This is interesting because it means that last years lambs larval burden is directly infective to the following seasons crop of lamb hosts.

Nematodirus is different to other worms in that the development of the larvae to the third stage occurs inside the egg so it is protected from the elements and develops at a much slower rate. Because of its ability to overwinter, it is usually the most prevalent worm present in early Spring, until is overtaken by Ostertagia in late Spring.

Nematodirus larvae burrow deeper into the intestinal wall than Trichs do, and acute infection of lambs causes profuse diarrhoea and mucus production.

Nematodirus often has a poor correlation with egg count compared to other species, however it is also uncommon for it to cause deaths as a sole

parasite except in lambs in early Spring, it is much more common to be implicated in mixed infections.

Benzimidazole resistance to N. spathiger is widespread across New Zealand.



Combination Drenches in Cattle

We have extensively promoted the use of combination drenches in sheep, to increase efficacy and delay the onset of drench resistance. Extensive use of triple drenches (eg Matrix-white+clear+mectin) has resulted in many of our farmers extending the useful life of current active ingredients, especially in comparison to many other parts of New Zealand.

In cattle, selection pressure for resistance is lower, and the same pressure to use combination products has not always been present. However, worm resistance in cattle will always follow selection pressure from drench use, so it is good to promote the practice of combination products to slow the development of drench resistance.

The following products are available combination drenches for cattle.

Eclipse Pour-On ACVM A009270 A combination of abamectin and levamisole. This has been an outstanding "go to product" for drenching young cattle to control Cooperia worms, which the single active mectin products (Cydectin, Eprinex, Abamectin) don't control well.

Eclipse E with B12 & Se Injection A combination of eprinamectin and levamisole. ACVM A011151

Dectomax V Injection A combination of doromectin and levamisole. ACVM A011893

Combination products such as these should be considered for all cattle drenches (not just young stock) to protect the active ingredients, improve efficacy and production, and delay resistance.



Pre-lamb Talks

Simon Laming BVSc VETERINARY CENTRE Oamaru

The drench capsule solved many complex animal health issues for some ewe flocks pre-lamb. The recent pub talks were a chance to break down some of those complexities into their parts to look for new solutions.

It is a big deal for some sheep operations not to have capsules. They made such a big difference to ewe health over the pressure period of lambing and lactation.

The difference between long acting moxidectin injections (Cydectin LA, Exodus LA) and Bionic capsules may not be very significant. Moxidectin LA may only work for 42 days against Trichs, but it does work for 112 days against Ostertagia, and this is the predominant worm in the late winter. Moxidectin does have a "tail period" of low drug exposure, but we now know the capsules were releasing low levels of abamectin a lot longer than expected. Bionic is a combination capsule, but only a mectin+white combination. Moxidectin LA is a single active, but it is a very high dose rate (4 times normal) giving a very high head kill of susceptible and resistant worms.

In circumstances of significant larval challenge, long-acting worm control can give very significant gains in production, and reduction of dags. But farmers must make decisions which are sustainable. Is there a way to keep high production gains, and minimise the risks of drug overuse? Or is there a way to selectively use long-acting products when necessary, and minimise the risks?

There is a lot farmers have to consider when replacing the capsule technology. It will not always be straight forward. It may involve system or stocking rate changes, new forages, more monitoring (FEC, BCS etc), shift in genetics, application of existing products in more targeted/ strategic ways.



Dave Robertson gives a presentation to great crowd of sheep farmers at Kurow Hotel.



Dave Robertson gives a presentation to sheep farmers at Omarama Memorial Hall

Wintering your Pack

Anna McLeod BVSc – VETERINARY CENTRE Waimate

With temperatures dropping across the region as we head into the winter months, it is important to consider the impacts on your working dogs and what you can to do to ensure they stay in top condition

Diet – A working dog is a high-performance, endurance athlete, so feeding a high-quality, balanced and energy dense diet is essential ...

Ideal diet: 20% fat >25% high-quality protein >4000 kcal/kg energy content



A complete and balanced working dog feed should have a good source of both high-quality fat and protein.

Fat is the most important muscle fuel and is slow to burn. A high fat diet provides a large energy source for the endurance to support a full days work.

Protein is the basic building block for muscle, essential for normal repair and maintenance after hard work. High protein diets have also been proven to significantly reduce soft tissue (muscle, ligament and tendon) damage and injury – a recent study showing an 8x decrease with a 30% versus 20% protein content.

Unlike human athletes, working dogs don't need to 'carbo load'. Many poorer quality commercial diets are higher in carbohydrate but lower in protein. These tend to be bulky and filling, but many dogs cannot physically eat enough to meet their energy requirements.

Joints and mobility – With

everyday activities that are hard on the joints, arthritis is a common progressive problem for working dogs that greatly affects their performance and longevity. With colder temperatures, winter is often the time underlying niggles in our bodies start to become noticeable.

Some dogs may show an obvious lameness or change in performance, for example holding a leg up at rest or inability to jump on the back of the truck. Often dogs however do not show signs of chronic pain the same as we would do, and changes attributable to just 'slowing down' or 'getting old and grumpy' may be an indication of pain. This can often be a reason for early retirement. Assessing for and treating any pain will significantly improve the performance and maximise the longevity of an ageing working dog.

Specialised formulas within the diet (e.g. glucosamine and chondroitin) and joint supplements (e.g. 4cyte) can help protect joint cartilage to slow down these changes and keep joints healthier for longer. Pain relief medications, particularly long-acting Trocoxil tablets, may also be necessary to improve any discomfort and working ability.

Housing, bedding, jackets – The

impact of temperature on working dogs is often underestimated. The colder a dog gets, the more energy and muscle mass is burned to keep warm, and therefore a greater amount of feed is required to maintain body condition. Colder muscles and joints are also stiffer and slower to get moving in the mornings.

With overnight temperatures regularly dropping below zero in our region over winter months, insulated kennels, bedding, and coats are great options for ensuring working dogs stay in top condition.

Our staff are always happy to help with all aspects of your working dogs health, nutrition and husbandry.



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Veterinary Centre EWESNEWS EXTRA

Initiating Footvax Schedule



Anna Macfarlane BVSc VETERINARY CENTRE Oamaru

Footvax will reduce the amount and severity of footrot during high challenge periods e.g. during spring due to the increased moisture and warmth. If using footvax



warmth. If using footvax for the first time 2 vaccinations are required, and then

annual boosters are needed in subsequent years. Protection after the booster lasts for 2-4 months, hence timing is important so that the period of highest immunity is during the spring risk period.

Giving the 2nd vaccination at pre-lamb shearing is often the most practical option to achieve this goal. Hence the 1st vaccination needs to be given at least 6 weeks before (due June/July).

Important notes:

- Don't give within one month of mating or lambing
- Should not be used with moxidectin/Eweguard drench. (Cydectin LAI is ok)
- Care should be taken to avoid self injection.

Veterinary Centre

Farewell To



Charlotte Mercer

Charlotte Mercer finishes this week as Territory Manager for Waimate, a position she began in late 2018. Both the Veterinary Centre team and our clients will miss Charlotte's energy and commitment to looking after customers and their farming needs. Her passion for farming and the role was evident as she frequently went above and beyond especially on the most critical issues such as drench efficacy monitoring. We thank Charlotte for her work wish both her all the best in her future endeavours.

NEW Waimate Territory Manager



Rosalie Calder Waimate Territory Manager Waimate TM 027 434 5616

Rosalie Calder will be taking up the Territory Manager role in the Waimate district following a managed change over period from her current position in Oamaru. Cellphone contact

CENTR

for the Waimate Territory Manager will remain unchanged.



"Never a dull moment with these two. Vanessa and Jenny from the Ranfurly team make most vet jobs entertaining in some way."



Looks like we might have a budding new vet in the making! Lucy Turner checks out the heart beat of her family puppies at the Ranfurly Veterinary Centre.



"A cool little procedure" Jason Douglas of Linnburn Station and Ranfurly Vet tech Jenny Newth checking out the view inside the sheep via laproscope during recent Al programme.

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