



Veterinary Centre EwesNews

Drench Resistance

Dave Robertson BVSc BSc – VETERINARY CENTRE Oamaru

The focus for this month's ewesnews is animal health action month. It is a very active period for all sheep farmers, either on the point of lambing, or scanning and shearing for the high country. For me I have attended vet conference and presented a couple of papers, one on turning a farm's drench status around and the other on the custom footrot vaccine technology. Since then I have spent most of my conversational powers discussing the tsunami of drench resistance marching across farms at present.

On the worm control front it does appear that the internal parasites are fighting back in what has been 40 years of chemical warfare. Not that any of you have probably had time to read Darwin's "Origins of Species", but if you had you may have been able to predict the emergence of drench resistant parasites, you just may not have imagined the scenario on your corner of the Galapagos Islands.

Is more drench the answer to a failing chemical worm control problem? No.

Is there an app we could build that...? No.

What is the answer to internal parasite resistance then? Well, I think it is rather under-whelming, like the ending of Monty Python's meaning of life movie where they finally reveal the meaning: *"Well, it's nothing very special. Uh, try and be nice to people. Avoid eating fat. Read a good book every now and then."*

So the mundane solution to relying on drenches for capital stock pre-lamb is along the lines of: optimise ewe condition, feed twinners plenty of quality after shearing and before lambing, set stock with adequate provision of high protein feed to lactate on. If you are not quite set-up to do that this year, do some targeted drenching, only capsule 2 toothies and light twinners. If you have to, refugia tag un-drenched ones so you can



Patearoa Station -no drench romneys in great nick out off the wool

surprise yourself (with a bit of BCS and dag-score monitoring) when they have survived to produce lambs at weaning. The remaining lambs will need an effective drench at weaning of course, which we hope there will be one in 2 years' time - Oh and talk to a progressive stud breeder about supplying more worm tolerant genetics. The end...Although I think a bit of fat in the diet is not so bad for you these days.

Metabolic Disease around Lambing

Gwyn Mark BVSc – VETERINARY CENTRE Oamaru

There are two main causes of a down ewe pre-lamb, pregnancy toxemia and hypocalcemia which can have similar clinical signs and can present in similar circumstances.

Pregnancy toxemia (sleepy sickness, twin lamb disease) caused by a negative energy balance i.e., the ewe is unable to supply enough energy for her foetuses as well as meet her own demands. Affected ewes often become drowsy, stop eating, may separate themselves from the flock and if left to progress sit down and die within 2-7 days. A characteristic feature is 'wool pull,' where the wool plucks easily. General treatment includes providing energy either in the form of oral ketol or injectable glucalpos but often treatment can be unrewarding, and prognosis is much better if she is still eating.

Risk factors include multiple bearing ewes and severe weather events. Reduce the chance of pregnancy toxemia by making sure adequate feed is on offer, especially for multiple bearing ewes in the last 6 weeks of pregnancy as they have the highest energy requirement. If pasture

is tight, supplementary feed may be required, especially in bad weather. Minimise any time ewes are required to be off feed.

Hypocalcemia (milk fever) is a deficiency of calcium; clinical signs are usually more rapid onset than pregnancy toxemia and once ewes are down, they usually die within 24 hours. When treated with injectable calcium, they have a rapid recovery. A response to calcium is diagnostic of the condition. Sheep in the last weeks of pregnancy and first few weeks of lambing are most at risk, especially older ewes, ewes held off feed or extreme weather reducing ewe's feed intake.

Both pregnancy toxemia and hypocalcemia are preventable and the key to prevention include adequate nutrition and minimal stress (e.g., yarding) in late pregnancy and early lactation.



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ACTION MONTH

Correct administration of vaccines, drenches & dips

Vanessa Love BVSc – VETERINARY CENTRE Ranfurly

When treating livestock with any product it is important it is applied correctly to prevent ineffective underdosing and costly (or dangerous) overdosing.

Treatment failure of any particular product can be due to any of the following (or a combination of them all) administering the incorrect dose rate due to use of faulty equipment, poor dosing technique, incorrect storage or use of product resulting in reduced efficacy and resistance.



Maniototo Sheep Handling
(photo credit Jan McKenzie)

Drenching

Check drench guns for defects before use. If possible weigh the largest animals in the mob and drench to their weight. Calibrate drench guns before use by pulling the rubber plunger out of a syringe and dispensing the dose into the syringe casing for a quick and accurate reading. Check throughout use that the drench is being drawn up without air. Wormwise recommend checking the drench gun every day it is being used or every 200 animals, whichever comes first. Ensure sheep aren't spitting the drench out and make sure their necks are straight when drenching.



Damaged Drench Gun ... worn hole in side of nozzle.



Calibrate by dispensing a dose into a syringe and measure

Vaccinating

A common question we get about vaccinating guns is which part of the plunger gives the correct dose. Always line up the front face of the plunger with the number of ml you require. This picture shows a 2ml dose. Vaccination guns can be calibrated the same way as drench guns, using a small 3 or 5ml syringe to measure one dose, or a larger syringe and dispensing and measuring 5 or 10 doses.

We have a list of recommended needle sizes for each vaccine so ask at your local Vet Centre clinic if you aren't sure which to use.



Always line up the face of the plunger

Dipping

Every season we have the odd case of lice or fly despite treatment. Farmers usually suspect a problem with the chemical, however the vast majority of these failures is due to a failure in the application process. Maggots or lice can be collected and exposed to the chemical at the correct concentration and wool can sometimes be tested for residues to determine what has happened.

If using saturation products follow manufacturers instructions for mixing and check sheep are wet to the skin level on several areas of the body including the belly, if not it will not work. If using a pour on product check the gun is dosing correctly before starting and follow manufacturers recommendations closely.

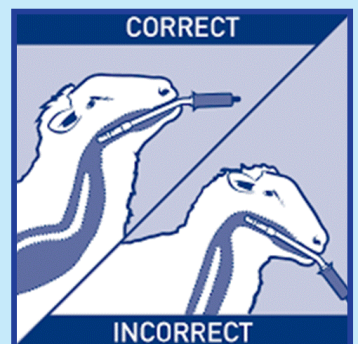


Electrodip Jetting Race

Correct Application of Capsules and Oral Drench



Tilt head back by cradling under chin and pull back.



Tilt head back opens pathway for correct application.



Jenny doing a Drench Check (FEC) in Ranfurly

Post scanning and pre-lamb shearing is one of the busy periods for sheep farmers....there is lots of disease treatments and prevention done.

Pre lamb Clostridial Boosters

Dave Robertson BVSc BSc – VETERINARY CENTRE Oamaru



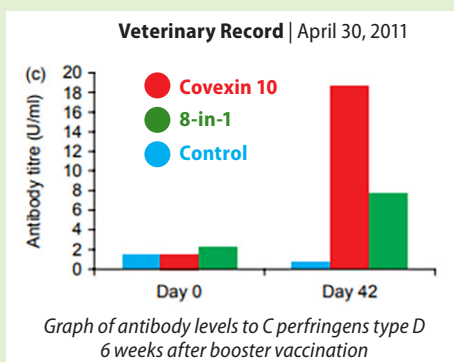
Which vaccine? We stock clostridial vaccine that has been rigorously tested, reliable and has good science and technical support behind it. Results:

Multine 5-in-1 works. It has Prefringens D that is the main cause of pulpy kidney (plus tetanus and 3 others). It has been shown to have a higher antibody peak than other 5 in 1 vaccines. We take the view that more antibodies are better, covering variables of lambing date from vaccination and amount of colostrum ingested by lambs. It also comes with B12 and is Selenised.

Covexin 10-in-1 is favoured when the clostridial risk is greater and for stud stock. The risk is higher for ewes and lambs when grazing legume dominant or high sugar feeds. For example lucerne and fodder beet. Covexin 10 has been shown to have excellent antibody levels and superior to other 8 in 1 vaccines.

Optimal time for clostridial booster is 2-4 weeks pre-lamb, that is when the udder is obviously developing.

Nilvax is a clostridial vaccine with levamisole drench which can be given earlier than 4 weeks.



Sheep Vaccination Application



Lice Control

Dave Robertson BVSc BSc – VETERINARY CENTRE Oamaru



Off shears and pre-lamb, before the next generation of lice residences arrives, is the best opportunity to deal with lice.

Jetting off-shears with short acting knock-down chemical such as Extinosad or Seraphos can be a cost effective option.

The most popular new product off shears this year has been Zapp Encore. It is a different flavour of IGR chemical, triflumaron, this is different to most fly treatments (hence the sheep and lice have not seen it much before). The triflumaron gives persistent activity for 2-3 months. In addition there is a novel knock down imidocloprid which gives instant kill, hence differentiates Zapp Encore from other straight IGR based chemicals. It does have limitations with cover-comb shorn merinos however. Double dose Expo pour-on may be the best knock-down for lice in fine wool.

The trick is to treat all sheep and do it properly.



Product of the Month

Refugia Ear Tags

SOLD as EACH Tag
(Gang of 4 Shown)



EACH
60c

Sheep Pour-On Fly & Lice Control Application



**Belly Crutching
Hoggets at Overland
Simon and Louise McRae**

B12 Survey Summary – Test or Guess?

Aroha Te Hiko BVSc – VETERINARY CENTRE Waimate



Earlier this year a selection of our farmers were involved in a nation-wide study to understand attitudes towards B12 use on sheep farms across the country. Results from this study highlighted the fact that very few farmers knew the status of their farm, or how B12 levels varied throughout the season in their growing stock. Many were unaware that testing for B12 was even an option, and supplementation on many properties was just via oral drenches containing cobalt – which unfortunately only lasts a few days.

Cobalt/Vitamin B12 is an important mineral for grazing sheep. Dietary cobalt is incorporated into Vitamin B12 by microbes in the rumen, which is then absorbed by the animal and used to aid in nutritional metabolism of energy. Because of this, cobalt/B12 deficiency in growing lambs can be similar to malnutrition and lead to reduced growth rates, general ill thrift, emaciation, poor appetite and anemia.

A lot of farms in our region have an unknown cobalt/B12 status. When we broke down the Veterinary Centre B12 testing results from the past few years we found that:

- Only 10% of sheep farms that we service have tested for B12 levels in the last 3 years
- In 2020 (our year with the most testing carried out at 18 farms)
 - ♦ The majority (>70%) of the farms testing had levels that indicated they were supplementing with B12 already. This testing was to monitor the effectiveness of their programme

- ♦ The remaining 30% of farms all had some animals with deficient levels.

We therefore know that many farms have an effective supplementation programme in place for their stock. However, we also know that there are clearly deficient animals across the practice. This deficiency shouldn't be highly surprising when you look at the cobalt soil maps that have been published historically. In the map below the dark green areas with the label 1 were considered areas where B12 deficiencies would be rare. This land is mainly now Dairy country in our practice. Most of our sheep farms now lie in the white (labelled 3), and orange (labelled 5) areas, which are considered "commonly deficient (3)", and "occasionally deficient (5)".

With improvement in pastures, more sheep farms have faster growing, lush, spring-like growth in both Spring and Autumn. Lush, fast growing green spring grass has lower available dietary levels of B12 so it is likely that the chance of B12 deficiency has increased, rather than decreased over time.

This survey is probably a timely reminder to do a stocktake on your farm's B12 supplementation and testing strategies. On the supplementation side there are multiple options available, from short acting injections such as Prolaject B12 or Multine 5-in-1 with B12 (relying on cobalt supplementation from oral drenches will not be sufficient) to longer acting sustained release products (i.e SmartShot, Smarttrace boluses and Bionic.) Our ability to provide advice that is fit for your farm can be markedly improved with some testing. To this end we have set up a TraceCHECK programme for sheep, with

B12 monitoring focused on young, growing lambs. These lambs have the highest demand for cobalt, and can therefore act as the canary in the coalmine for the system.

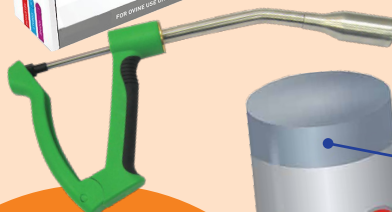
For B12 Monitoring we recommend either of the following TraceCHECK packages:

- Autumn – liver sample x 5 works lambs (Optigrow – contact us to arrange this)
- Weaning – liver sample x 5 OR blood test x 10 lambs (if there are any concerns lambs could be deficient prior to weaning and are not supplemented at tailing)

Get in touch if you'd like to discuss B12 further on your farm. It would be great to get a better understanding of that status of farms across our practice and to monitor what supplementation programmes are successfully keeping B12 levels elevated, and thereby maximising growth rates.



Product of the Month



**PER BOLUS
\$2.47**
Excluding GST

**24/7
SMARTTRACE
ADULT SHEEP**

- Selenium, Iodine and Cobalt
- Active Life of at least 3-4 months following administration
- One bolus per sheep
- Available in Pack/50

Two part bolus erodes releasing Iodine, Cobalt and Selenium

Wrapper dissolves in reticulum and bolus parts separate.

Waihemo Collie Club LLOYD SMITH DOG TRAINING DAY

Friday 5 August 2022

10.30am Arrive for a Hot Drink
267 Palmerston/Dunback Road,
Palmerston

\$25 per Person

Registrations and any other enquires to **Kate Poulsen 027 819 0917** or **k8poulsen@hotmail.com**

One-on-one training sessions will run for the afternoon with experienced local dog trainers. If you are interested in this, prior registrations are preferred.



When Woody tongue ISN'T Woody Tongue!

Aroha Te Hiko BVSc – VETERINARY CENTRE Waimate

Roughly 80% of cases we get called out to see as a potential woody tongue end up NOT being woody tongue at all! Animals often seen drooling, rapid loss of condition, inability to eat or drink, with swollen jaws or tongues, are given a course of Vibrostrep which clears up the infection great if the animal actually has the disease. But when that doesn't work... what else can it be?

- Many cases seen are in fact Johne's disease! This disease causes the so-called 'bottle-jaw', which can sometimes cause them to drool as well.
- BVD – mucosal disease
- Adult teeth erupting, causing inflamed gums and drooling
- Cellulitis and diphtheria (laryngitis)
- Lumpy jaw
- Broken jaw
- Drench gun injuries
- A stray copper bullet accidentally lodged in soft tissue of the throat
- Swollen glands/lymph node abscesses/ blocked glands
- Foreign bodies stuck in the mouth/ throat: a piece of rubber, an alkathene pipe, a broken bucket.
- Oedema due to liver disease

So what is Woody Tongue?

Woody tongue is caused by a bacteria (*Actinobacillus lignieresii*) which is a normal commensal organism in the mouth of cattle. When an animal gets an abrasion or open wound within the mouth then the organism takes the opportunity to multiply within the tissue leading to firm nodules and abscesses within the lesion. In many cases the tongue is infected and feels like a "plank of wood". We tend to see more cases in winter, with hay/baleage feeding causing more cheek abrasions.

Treatment of choice for woody tongue is a course of Vibrostrep which is a relatively expensive antibiotic particularly if the animal doesn't actually have the disease. This is why we always insist farmers always open the mouth of the animal and feel the entire tongue for hard nodular lesions.

If you are ever unsure of an animal showing signs of woody tongue, one of our vets are always happy to come out for a visit to examine the animal before dispensing the costly treatment. Lesions you would be looking for when opening the mouth are shown below. These pictures are from a recent case seen in the South Canterbury region in a R2 bull.



Veterinary Centre EwesNews EXTRA



Abrasion to the tongue which likely caused the lesion.

Yellow lumps of actino granules within swollen tongue.



Swollen tongue protruding from animals mouth.

Prevalence of Leptospira in New Zealand deer farms

Ella Swann BVSc BSc – VETERINARY CENTRE Oamaru

Although we commonly associate leptospirosis with dairy farming, it can just as easily infect dry stock including deer. Multiple studies have found that a large proportion of deer farms in New Zealand have one or more serovars of leptospira species in their herd. One study found the prevalence to be 81%. Another study found 97% prevalence of sheep and beef herds. Infection with leptospira species results in negative health and production outcomes for deer herds, and is a risk to the people that work with them. A 2021 review by Massey University found that deer farmers had a similar risk of contracting leptospirosis as dairy farmers.

The most common serovars identified in deer farms were Hardjobovis and Pomona. In a 2013 study 76% of deer farms had 1 in 20 animals seropositive for either of these serovars. Other serovars identified in deer included Ballum, Copenhageni and Tarrasovi. Leptavoid-2 is the most commonly used vaccine in the district, and includes the Hardjobovis and Pomona serovars.



76%
Farms Positive
for Leptospira

TWO
Doses
required
4-6 weeks
apart ...

**Primary
Dose
2ml
Weaning**

**Booster
Dose
2ml
Scanning**

Veterinary Centre Spring Management Seminar '22

Thu 4 Aug 2022

Waihemo Lodge,
Palmerston ... 4-6pm

You're invited to
catch up with
Dave Robertson in
Palmerston where
he will cover
spring topics.

Let us know if you can
make the seminar ...
RSVP to
events@vet111.co.nz



Do Ewes need extra Vitamin-D and Vitamin-E pre-lamb?

Dave Robertson BVSc BSc – VETERINARY CENTRE Oamaru

New Zealand research has shown benefits of extra Vitamin E with respect to lamb survival. The Vitamin E antioxidant is tied up with selenium, fluid dynamics within the foetus and lamb vigour. Vitamin E is highest in green, growing leafy feed, lower in grains, stored feed, and poor quality grass. So you can probably decide whether your ewes might benefit from the additional vitamin supplement prior to lambing...or if its worth leaving out?

Vet-LSD has been formulated (with vitamin A,C,D & E + Se + Chromium) and tested in New Zealand environments and widely used for the over 15 years, hence why we endorse the use of it. It is an

insurance against a very easily fixed deficiency that can cost you production. It can be mixed with most drenches. The main recommendation is to use on the day.

Vitamin D certainly seems to be of benefit for calcium uptake, smooth muscle function and - for humans – mental well being. Last month we featured a more concentrated vitamin product hideject that has the highest concentration of vitamin D at 500,000 units/mL. Hence we have a number of farmers using 0.5mL for ewes post scanning as a quick and comprehensive means of addressing vitamin A, D and E.



Product of the Month

Royal Canin Energy 4800

- Elevated fatty acids (30%) for sustained endurance
- High protein levels (32%) for muscle condition
- The premium food for keeping condition and sustaining working dog energy through winter

20kg

Beat the Sept Price Rise!

**BUY 3 BAGS
\$142.00
including GST**

**PALLET DEAL
\$129.90
including GST**



Sheep Farming in the Maniototo (photo Jo Sutherland)

Boss's Barley Grass

Emmy Armon BVSc – VETERINARY CENTRE Oamaru

Boss is a 5yr old Huntaway who presented to us on 07/04/22 with a large swelling on the left side of his rib cage. This swelling had been acutely noticed by the owner, and Boss was quite unwell on presentation to the clinic with symptoms of dehydration and an increased temperature.

Radiographs, ultrasound, and sampling of the area confirmed a deep muscle abscess was present and surgery was undertaken to thoroughly explore the abscess. We were highly suspicious of a Grass seed in this case however none was found during this surgery. A bacterial culture was run on a sample and no concerning bacteria were isolated.

Boss appeared to make a full recovery and returned to work for a short while, before presenting again on 23/05/22. Surgery was performed for a second time, again

the abscess regressed to normal, but unfortunately Boss was then brought back on 06/07/22 for a third visit.

A third surgery was performed in which amazingly a Barley Grass was found immediately upon opening the abscess. This was a great find, and everyone was very pleased with the result. We were all very hopeful this would be the final visit for Boss. Another bacterial culture was sent to the lab, but unfortunately this time it isolated a nasty bacteria called Actinomyces chartareum. This particular bacterium is a major concern in barley grasses. It's difficult to kill and can cause recurrent local and systemic disease, which can become life threatening. This case is currently ongoing, and we very much hope Boss will make a full recovery.

This case highlights some of the common

complexities with Barley Grass disease. Patients often need multiple visits to the vet clinic and even sometimes referral to a specialist. Keep a close eye on your dogs and check them regularly for grass seeds. Although it's not always possible, removing a grass seed before it enters the skin is by far the best treatment for your working companions.

