



Veterinary Centre EwesNews

Spring is the Season of Optimism

Luke Smyth BVSc
VETERINARY CENTRE Oamaru



While most people I've talked to recently enjoyed the dry early to mid-winter and excellent feed utilisation. The tough wet weather conditions of the last month have meant breaking feeding became a muddy challenge and feed utilisation was poor, slips on access tracks, washed out culverts, fencing repairs, coupled with continually rising farm operating expenses and a skilled labour shortage has certainly changed the mood.

But spring is always a good chance to stop and reflect for a few minutes.

Be honest with yourself, are you feeling optimistic or pessimistic going into this season? How is this driving your planning and decision making?

Yes, I know there are so many unknowns in farming. You never know how good your lambing was until tailing time and I also know that kilograms of lamb weaned per hectare is the biggest driver of profitability in our sheep systems so lambing needs to go well.

If you're feeling a bit over it and things are festering away, there is nothing better for the soul than taking a minute to watch a good old fashioned lamb race. Few can deny the sheer joy of seeing lambs messing around in the paddock, especially if the sun is shining and the grass is starting to freshen up and grow.

Lambs are a true sign that spring is here, brighter, and longer days are ahead. Hopefully it brings you a sense of optimism for the remainder of the year.

Lamb Tailing and Castration

Dave Robertson BVSc BSc – VETERINARY CENTRE Oamaru



As most of you are aware it has become a law that farmers need to leave a stumpy bit behind when tailing now. This has been a "best practice guideline" for 4 years, the consultation was done in 2016. Many of the meat works report on it, and most Western European countries have decided it has to be this way...so (as usual) we end up following to keep the peace. The evidence of any meaningful or useful reason for this change is sketchy at best, but we will get used to it. Most tailing contractors have been compliant for a number of seasons now.

Minimum standard for tail length came into effect May 2021. \$500 fines will be issued if 2021 born animals are non-compliant.

The tail MUST be no shorter than the distal end of the caudal fold. ¹

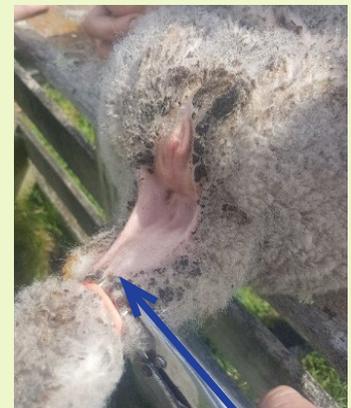
Another way of stating it is:

No shorter than the third palpable joint

Or... **The tail shall be docked with sufficient length to cover the vulva of a ewe, and the equivalent length in rams.** ²

¹ Beef and Lamb Fact Sheet July 2020. minimum standards and best practice guidelines please refer to Animal Welfare (Painful Husbandry Procedures) Code of Welfare available from MPI Tel: 0800 008 333 or www.mpi.govt.nz/protection-and-response/animal-welfare/codes-of-welfare/

² RWS Tail Docking Standard Operating Procedure. Publication Date: August 13, 2020



Caudal Fold

IN THIS ISSUE

- Spring is the Season of Optimism
- Lamb Tailing and Castration
- Product of the Month Multine 5-in-1
- SMCO Poisoning
- BVD Vaccination Programme
- Foot & Mouth Disease
- Parasite Management Plan
- Introducing Ewan Penny
- Using Pain Management at tailing
- Product of the Month Numnuts
- Lloyd Smith Dog Training Event
- The Yoghurt Recipe
- Common Neonatal Lamb Health Problems

Multine 5 in 1 Clostridial Vaccine – Lambs

NZ Trial work demonstrating superior immune response¹ - Lambs born to Multine vaccinated ewes obtained more than double the mean level of antibodies to Pulpy Kidney and 30% more antibodies to Tetanus than lambs in the reference vaccinated group¹.

¹ - Clostridial vaccination of lambs with maternally-derived antibodies J Moffat & H Bain (MSD Animal Health) and S Bruere (Vet Services Wairarapa)



Multine Plain 500ml –

31c Excl GST per 2ml dose
ACVM A000934



Multine B12 500ml –

51c Excl GST per 2ml dose
ACVM A001311



Multine B12 Selenised

54c Excl GST per 2ml dose
ACVM A001311

Product of the Month

Sensitiser dose needs to be followed by a Booster 4-6 weeks later.

Protection against 5 clostridial diseases –
**Tetanus • Pulpy Kidney • Black Disease
Black Leg • Malignant Oedema**

Important – Multine with Selenium has an adult sheep dose of 2.5mg/ml of Selenium and is not licensed for lambs (under 30kg).

SMCO Poisoning

Vanessa Love BVSc – VETERINARY CENTRE Ranfurly

SMCO toxicity, also known as redwater or kale anaemia, is a very uncommon occurrence seen in animals grazing brassicas. SMCO (S-methyl cysteine sulphoxide) is in all brassicas in varying concentrations, especially kale. It is converted to the oxidative compound dimethyl sulphide which reacts with red blood cells and decreases haemoglobin, causing anaemia and red tinged urine. Animals must be on the toxic feed for at least one week for clinical signs to begin. Clinical signs are weakness, diarrhea, yellow mucus membranes, poor performance, red urine and death.

SMCO concentrations increase in older plants and the flowering plant in spring. Levels are also higher on crops with high nitrogen and sulphate soil or fertilizer exposure. Ensiling affected crops does not stop the high SMCO concentration.

SMCO cannot be tested in the plant or the animal in NZ any more. Diagnosis requires proving the presence of severe anaemia and ruling out copper poisoning and bracken fern toxicity which cause similar clinical signs and anaemia. It is also important to rule out nitrate poisoning by testing suspect crops.

Once a toxic crop has been identified, ideally it would not be fed. However if toxic crops need to be utilized, animals can adapt to increased SMCO feeds to some extent with a sound transition regime over a 10 day

period and feeding the toxic feed at no more than 50-60% of the diet. Very toxic crops would need to be fed at lower rates than this. If the crop needs to be fed, change breaks daily and ensure animals don't go onto the crop empty. It takes the animal 4-8 weeks to replenish red blood cell levels so affected animals shouldn't be stressed or run any distance during this time period. Treatment with selenium may reduce the oxidative effects of SMCO. Cows are suspected to be more susceptible to SMCO than sheep, however there are anecdotal reports of feeding known toxic crops to cows following sheep deaths without issue if they were carefully managed.

Although it is seldom reported, this winter period we have seen SMCO poisoning in sheep in the Maniototo on two farms feeding different brassica crops resulting in substantial losses and there are reports of other cases further afield. Bloat, acidosis, nitrate poisoning, scald and choke are more common and better known than SMCO toxicity, however it is important to keep it in mind when feeding brassicas to any ruminants.



BVD Vaccination Programme

Ella Swann BVSc
VETERINARY CENTRE Oamaru



Bovine Viral Diarrhoea (BVD) is widespread in New Zealand. Most beef herds have been exposed to the virus with 65% of herds having active virus infection at any one time. The main effects of BVD infection in a beef herd are:

- Reproductive losses
- Decreased growth rates in young stock and ill thrift in cows
- Immune suppression making animals more susceptible to other diseases (mastitis, scouring, pneumonia)

Vaccinations are one way to control BVD within beef herds. In order for vaccination to be most effective, it must be completed prior to mating and provide fetal protection. Therefore, reducing the risk of early embryonic loss and preventing the creation of a persistently infected (PI) animal.

All cattle intended for breeding should be vaccinated:

- Heifers, or previously unvaccinated animals will require 2 vaccines. A sensitiser followed by a booster 4 weeks to 6mths apart.
- Annual booster vaccinations for cows, and the booster vaccine for heifers should be complete 4 weeks prior to mating.
- Bovilis BVD vaccine provides 6mths fetal protection following the initial vaccination series (sensitiser and booster) and 12mths fetal protection following the 3rd dose.

Bovilis BVD ACVM A008237

Foot & Mouth Disease

Con Ten Cate BVSc – VETERINARY CENTRE Oamaru

Foot and Mouth Disease (FMD) is a very contagious virus that affects cloven hoofed animals. Since May, Indonesia has been experiencing a fast-spreading outbreak of FMD. Although the risk of introduction to NZ is low, the possible consequences are severe. FMD causes serious production losses and an outbreak can result in a major block to international trade. NZ biosecurity has been ramped up for travellers from Indonesia to prevent the introduction of the virus via contaminated items. Along with these measures, farmers and vets play an important role in preventing an outbreak. FMD spreads very quickly, therefore by being aware of what signs to look out for, and ensuring our on farm biosecurity is strict, we'll give ourselves the best chance of staying FMD free.

What you can do to help prevent an outbreak

- If travelling, follow all biosecurity advice carefully
- Ensure a one week stand down period for overseas travellers coming on farm
- Purchase stock from reputable suppliers
- Ensure NAIT records are up to date for cattle and deer, record movements within 48 hours. Use the eASD functionality for other stock classes
- Clean and apply disinfectant to boots, vehicles and other farm equipment
- If meat is fed to pigs, ensure it has been cooked at 100°C for 1 hour
- Report any suspect FMD symptoms immediately

Clinical signs to look out for

- High temperature
- Blisters or sores in the mouth, muzzle, feet and teats
- Drooling, tooth grinding and chomping
- Lameness or tendency to lie down (especially in pigs)
- Lethargy and depression
- Drop in production
- Death of young stock

FMD can cause variable clinical signs. In cattle and pigs the signs can be severe, whereas in goats, deer, alpacas and lambs signs are often more subtle. Non-cloven hoofed animals cannot contract the disease, nor can humans. FMD is unrelated to Hand, Foot and Mouth disease that affects children.

If you suspect FMD contact us immediately and stay put. Alternatively ring the MPI Pest and Disease hotline directly – **0800 80 99 66**



Parasite Management Plan

Gwyn Mark BVSc – VETERINARY CENTRE Oamaru

With pre-lamb treatments currently underway and lambing about to start, it is time to think about what your parasite management plan will be for the coming season. Triple drench resistance is turning up more and more frequently and therefore the question is no longer “what drench should I use?” but “what systems can I implement to reduce my worm burden effectively, maximise my performance while using drench sustainably?” obviously a much wordier and complex question.

There are 2 main areas to focus on to reduce the impact of worms on stock performance:

1. **Reducing larval challenge:** the level of larval challenge on pasture has a direct effect on young stock live weight gain. Possible grazing strategies to reduce larval challenge include, using integrated grazing e.g. weaning lambs onto cattle finishing blocks or using cattle to clean up after wormy lamb pasture. Grazing lambs after silage/hay cut. Summer crops can provide a break in the worm cycle as well as being a great high-quality feed
2. **Nutrition:** well-fed animals are much less likely to develop a significant worm burden. Feeding your ewes well and monitoring this using body condition scoring will reduce reliance on pre-tup and pre-lamb drenches. A key difference between ewe mobs which showed a response to a long-acting drench pre-lamb and those that showed no response, was pasture cover at and around lambing.

3 key points for sustainable drench use:

1. **Using the most effective drench:** identifying your drench resistance status either through a Faecal egg count reduction test or drench checks so that you use a drench that actually works.
2. **Refugia:** how is a naïve and susceptible worm population going to be present on pasture? e.g. a percentage of undrenched lambs or following with undrenched ewes.
3. **Monitor:** using FECs to check whether animals need a drench and to check the drench is working.

Managing worms is no longer just making sure lambs get drenched every 28 days, there needs to be a farm systems approach. A parasite management plan is ensuring that the ability to farm into the future won't be limited by ineffective drenches and an inability to manage internal parasites.



Introducing



Ewan Penny BVMS – VETERINARY CENTRE Waimate

Hello! I qualified from the University of Glasgow in 2017 and have worked predominantly in large animal practice in Scotland ever since. After a 2 year delay due to Covid, my wife and I have finally arrived with our 1 year old son, John. I enjoy tramping, swimming and plan to see as much of NZ as possible. Working in the musical Waimate clinic, I'm sure I'll pick up my violin again after a 10 year interlude!

I was brought up around beef and sheep operations in the UK, and have a particular interest in beef cow fertility, bull semen sampling and genetics. I hope to further my understanding of ewe nutrition whilst in NZ and learn as much as I can about New Zealand systems. I look forward to meeting you all!



Liver Biopsy with Jasper Meek (Right)



Braving the weather

Using Pain Management at tailing



Dave Robertson BVSc BSc – VETERINARY CENTRE Oamaru

The management of pain during tailing and castration is a new concept. It is not law. This article outlines some of the options. It is currently for farmers to weigh-up the costs and welfare benefits. No one is making you do it. It is an interesting field to discuss with your farming colleagues and Veterinary Centre vet.

Benefits:

- Male lambs will not lie down and get mis-mothered the same.
- Your lambs will experience less pain afterwards.

It is probably better if you have an informed view on the pain management options for tail and castration pain in your lambs before some outfit mandates that you have to.

Most of the pain associated with castration and tailing occurs within the first 5 to 40 minutes following the procedure. Lambs can lie-down for a period and display signs of discomfort.

There are options available for managing this pain associated with tailing and castration. It is not mandated at this point, but has been identified as a “best practice guideline” in some instances. There are wool contracts that may require it in future. The Australian’s are a lot further down this path than we currently are.

To adopt best practice recommendations to manage the painful aspects of tailing and castrating lambs the following options are available.

Fast acting, shorter duration anaesthetics. Local anaesthetics block pain and sensation of the area they contact. The approved local anaesthetic products available for use at lamb marking that do not require a Veterinary Operating Instruction (VOI) are Tri-Solfen® topical and NumOcaine® injection.

Tri-Solfen® contains two types of local anaesthetics, (lignocaine and bupivacaine), Adrenaline, and Antiseptic.

Tri-Solfen® is applied as a gel spray directly onto the open wound and provides immediate (within one minute) pain relief that lasts up to 24 hours. The meat withhold is currently default at 90 days. This may shorten with current work under way. Only appropriate after hot-iron or surgical removal.

NumOcaine® (delivered via the Numnuts® device) is an injected local anaesthetic developed specifically for ring castration and tail docking with rings. It provides immediate pain relief, reaching maximum intensity 15-35 minutes after application. Local injection into the neck of the scrotum rather than the testicle is more effective. It reduces pain displayed by up to 68%.

Lignocaine injection is a restricted veterinary medicine. It is used for minor surgical procedures in conscious animals. For use in tail dock and castration a Veterinary Operating Instruction (V.O.I) would have to

be approved, which would involve an audit of competency to handle and administer it correctly. A register of use and log book would have to be complied.

Products with meloxicam (Metacam and Buccalgesic) alleviate pain and inflammation and reduce fever and fluid production caused by tissue damage. These are slower-acting than local anaesthetics, can be injected or applied orally, and provides longer-lasting pain relief for over 24 hrs.

Injectable local anaesthetic is the fastest acting and most comprehensive to cover the bulk of the pain associated with castration & tailing (first 45min).

Summary

The numnuts applicator is well designed and standardises the procedure and has additional safety features. The numnuts tool costs ~\$402.50 Incl GST.

If using a hot iron I would use Tri-Solfen on the tail stump. Anti-inflammatories take too long to kick-in to be of benefit on their own.

NumOcaine ACVM A011834

Tri-Solfen Gel Spray ACVM A011409

Metacam 20mg/mL ACVM A007982

Ilium Buccalgesic OTM ACVM A011353

Summary of tail docking and castration pain management options

Procedure	Option	Comments	\$/lamb (approx)	Meat WHP
Castration	Numnuts	Approved tool that combines elastator ring and consistent local delivery	86c	Nil
	Local injection	Separate local injection on vaccination needle. Require veterinary assessment for initial dispensation.		Nil
Tailing with Iron	Local injection	As above		Nil
	Tri-Solfen topical spray	Contains 2 types of local anaesthetic, adrenaline and disinfectant. Spray 1.5 -3mL on stump post tail removal.	~50c - \$1	90 days
Tailing rings	Numnuts	As above	86c	Nil
	Local injection			Nil
	Buccalgesic	Oral anti-inflammatory. Starts working after 20 min. Lasts 24hrs+.	37c/10kg	10 days

numnuts®

Targeted pain relief for marking

Applicator

\$402.50
Incl GST

NumOcaine 100ml Refill
66 x 1.5ml Doses NumOcaine ACVM A011834

Product of the Month



World's first rubber ring applicator with a pain relief delivery mechanism

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Waihemo Collie Club

LLOYD SMITH DOG TRAINING DAY



Abby Robertson, one of our senior small animal vets, was briefly allowed out of the clinic to speak at Lloyd and Linda Smith's pup training day earlier this month. Abby took the opportunity to talk about a subject close to her heart, optimising working dog nutrition to enhance growth and performance, and minimise injury. The key points from her discussion were:

- There is no silver bullet of foods. Where there is variation between age and workload, different foods may be required to meet individual needs.

- Using a large breed puppy food for young, large breed dogs is important to manage appropriate calcium levels for slow steady growth. This helps to reduce the incidence of stifle and hips problems in Huntaways.
- The use of high protein and high fat diets for dogs in peak work. Like an elite sports person, food intake needs to be adjusted to meet the workload. High energy foods are key to keep food volume low. Fresh meat is a useful adjunct but given the high-water weight and mineral deficiencies, should not

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constitute more than 30% total food in a day.

The Veterinary Centre is grateful to Lloyd and Linda for including us in what looked to be a very successful day. It was great to see so many local farmers, trainers and shepherds working in partnership with these unique and amazing dogs.



The majestic Maniototo



The Yoghurt Recipe

Aroha Te Hiko BVSc – VETERINARY CENTRE Waimate

THE YOGHURT RECIPE

- Put three litres of warm water (400 c) in a nine litre bucket.
- Add 1 kg of milk powder. Mix with an electric stick blender (250 watts or more).
- Add 200 ml of acidophilus yoghurt. Mix. Cover with a lid or sheets of newspaper.
- Keep mixture warm for the next few hours. The easiest method is placing the bucket on a brewer's mat (cost \$50 for a 25-watt solid heating mat). If the air temperature is too cold the milk will take

a long time to ferment. Another option is to put the bucket in an insulated box, e.g. a polystyrene box with a lid. A hottie is a cheap source of heat in the box.

- The yoghurt should set within 8-12 hours and may have a soft crust on top with some liquid at the bottom; or it may resemble thick commercial yoghurt.
- Top up with cold water to the 8 litre mark on the bucket and mix to feed directly to lambs.
- Depending on the number of lambs add

See "Common Neonatal Lamb Health Problems" article on Page 6.



the yoghurt mix to the daily ration at a rate of 1:7 (i.e. one part yoghurt to seven parts milk). This yoghurt mix will keep in the fridge for up to seven days if sterile containers are used. Remove 200 ml of the liquid yoghurt as the starter for the next batch.

Feeding a Small Number of Lambs

If feeding only a handful of lambs, add 1 tablespoon of acidophilus yoghurt per 500ml of milk or reconstituted powder just before feeding, and mix well.

Common Neonatal Lamb Health Problems



Aroha Te Hiko BVSc – VETERINARY CENTRE Waimate

Lamb and ewe losses are greatest around or just after lambing. New born lamb survival can be a fine balance in the best of conditions. With the cold and wet conditions

lately lambs really have a fight ahead of them for survival. There are many different diseases that can cause lamb fatalities.

Issue	Hypothermia – This is the most common cause of lamb fatalities after lambing.	Watery Mouth – E.coli infection. If a lamb hasn't had enough colostrum the bacteria multiply rapidly in the lambs gut, as they die they release a toxin.	Navel/joint ill	Lamb bloat – artificially reared lambs. Typically seen at 2-4 weeks of age.
Signs	<p>Normal lamb temperatures should sit between 39-40C any temperatures below this + hypothermia. <37C is classed as severe hypothermia.</p> <ul style="list-style-type: none"> Lambs will be tucked up and lethargic, not following their mothers around. If the hypothermia is severe they will be flat and may not be able to hold their head up. 	<ul style="list-style-type: none"> Initially dull, depressed reluctant to feed. Collapse Excessive salivation Gas movement in gut can be heard (rattle belly) Sometimes can have a scour Lambs usually die within a few hours. 	<ul style="list-style-type: none"> Swollen wet navel often discharging pus One more swollen joints. Lameness 	<ul style="list-style-type: none"> Swollen distended round abdomen. Repetitive standing up then lying down a lot Kicking at the belly Frequent defaecation/urination Grunting Extending head and neck Not wanting to feed
Cause	<p>Lambs get cold very quickly unless they are well fed.</p>	<p>Caused by an e.coli infection usually in the first few hours of life. It is influenced by two things:</p> <ul style="list-style-type: none"> the amount of bacteria ingested amount of colostrum consumed. 	<p>Caused by many different bacteria. But;</p> <ul style="list-style-type: none"> Inadequate hygiene in the first few days of life. And; inadequate colostrum intake. 	<p>Happens to lambs fed infrequently (eg twice daily), hungry lambs feed rapidly and over gorge on milk. The influx of lactose into the stomach cause lactose consuming bacteria to increase in activity and release gas which continues to expand until the stomach puts significant pressure on other organs or ruptures which is fatal.</p>
Treatment	<p>Early action is essential.</p> <ul style="list-style-type: none"> If hypothermia is mild (37-39C) then dry the lamb feed warm colostrum, then warm the lamb. If hypothermia is severe (<37C) and the lamb is able to swallow feed colostrum with stomach tube, dry and then warm. If hypothermia is severe (<37C) and the lamb is unable to swallow inject intraperitoneal glucose, dry then warm. <p><i>*It is vital lambs have a source of energy before attempts are made to warm them up.</i></p>	<ul style="list-style-type: none"> Early identification and intervention. Supportive care to keep the lamb hydrated ie (stomach tubing a warmed electrolyte solution). Oral antibiotics eg: Scourban, or 1ml penicillin. (This can initially cause an increased release of toxins as bacteria die.) Enemas to stimulate gut movement/remove bacteria (20ml of warm soapy water into the rectum) <p><small>Scourban Plus ACVM A009626</small></p>	<ul style="list-style-type: none"> Injectable antibiotics are required - often high doses of penicillin @1ml/10kg. Alcohol based iodine or antibacterial spray on navels. Severe cases may need a vet to drain and flush the infected area. 	<ul style="list-style-type: none"> Prevention works better then treatment, but treatment should be immediate. Treatment goal is to relieve gas build up. Either by reducing production of gas or releasing gas. Giving 5ml of oral penicillin or 40-60ml acidophilus yogurt can help change the bacterial load. Yogurt will need to be given 3x /day. Baking soda mixed with water given orally may help neutralise the acid. In extreme cases a needle may need to be inserted into the stomach to release the gas.
Prevention	<p>Ensure lambs are well fed, top up any lambs with tube feeding or bottle feeding if needed.</p> <ul style="list-style-type: none"> Provide extra shelter during harsh weather especially wet/windy. Carry out extra checks when the weather is bad to pick up problems as early as possible. Bring smaller lambs indoors if possible 	<p>Prevent lambs from ingesting large quantities of bacteria and ensure lambs have sufficient colostrum.</p> <ul style="list-style-type: none"> Lambs should get 50m/kg colostrum in the first TWO hours and a total of 10% of its bodyweight in the first 24hours. Good conditioned ewes to ensure production of large volumes of good quality colostrum. Winter shearing or crutching to reduce fleece contamination. 	<ul style="list-style-type: none"> Good hygiene in the lambing areas is essential. Ensure navel is covered with a strong iodine (10%) solution as soon as possible after birth and check at 24 hours and re-dip if needed. Ensure adequate intake of colostrum. 	<ul style="list-style-type: none"> Prevention is always better then treatment. Don't overfed lambs. Don't feed calf milk replacer due to higher lactose content. Feeding lambs smaller feeds more frequently to mimic more how a lamb would be reared on the mother. Smaller stiffer feeding teats with a small hole to help slow the intake of milk when drinking. Feed milk at body temperature 38-40C Feeding a whey based milk replacer. Adding yoghurt to the milk (soured milk).

*See Yoghurt Recipe on Page 5