# Veterinary Centre **Ewes**News

### 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.

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

**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.

When ewes are starting to develop an udder is a good rule-of-thumb to determine when the best time to give a clostridial booster vaccine.

**Nilvax** is useful if 5 in 1 vaccinating more than 5 weeks out from lambing start date. It generates a higher antibody peak due to immune-stimulant effect of levamisole.







Graph of antibody levels to C perfringens type D 6 weeks after booster vaccination



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### TRACE Elements

Aroha Te Hiko from Waimate taking a liver biopsy and blood sample for Trace Element Monitoring Programme.



EwesNews (August 2023)

# Animal Health ACTION MONTH

### **Worm Control for Capital Stock**

#### Dave Robertson BVSc BSc - VETERINARY CENTRE Oamaru

It is not as straight forward as it used to be. With triple drench resistance appearing on many farms the mind-set around capital stock drenching is changing and has to. Farms that have followed sustainable drench principles and invested in monitoring for many years still have traditional drench options that work, but I realise we are generally pragmatists who want to invest in the best thing for ewes right now that are going to protect my lamb crop - and that is often at odds with longer term drench efficacy goals.

In addressing the pre-lamb worm control questions, It is interesting to think of the parasite challenge to ewes in 3 levels:

- The Active Worm Population in the gut contributes to egg output.
- **The Suppressed Worm Population**. The immune system of the adult ewe controls this and cannot be measured with FEC. The inhibited burden can become active in times of stress/underfeed-ing/increased protein demand (e.g shearing and lambing).
- The New Larval Infection from grazing spring pastures.

When addressing these levels in the late winter/pre-lamb period we need to consider

- Do all ewes need treatment.
- What is an effective treatment.
- Will long acting drench be appropriate.
- The environmental parasite challenge.
  - Either Side of Shearing: winter parasite larval challenge should be lower, especially with crops or autumn sown green feed.
  - **The Lambing Blocks:** If blocks have been spelled from sheep for more than 3 months and/or cattle have grazed previously, then blocks should have lower larval challenges.

Capital stock mini-drench checks have been useful to answer questions around what drench is effective on your property.

**FECs Pre-Tailing** can assist with assessing re-infection rates in ewes and to decide if a targeted ewe drench is worthwhile at tailing.

A mind set of **leaving some capital stock un-drenched (refugia)** at each drench treatment, particularly pre-lamb period is important for 2 reasons.

- Less drenching of ewes is going to be the new standard in order to maintain drench efficacy.
- It is the ewe worm population that establishes in the lambs post weaning. This gets amplified up in the Autumn.

Refugia can also be achieved by:

- Leaving BCS 3 mixed-age singles undrenched.
- Randomly leaving some in each mob un-drenched.

If long acting drench would be useful in some mobs (twinning 2 tooths, lights or twins, areas heavily contaminated with autumn worm burden) then consider Cydectin LA. The choice of a primer drench\* such as Zolvix or Scanda will depend on results from previous efficacy tests.

\*Primer Drench can be Scanda Selenised (BZ/Lev combo), Zolvix Plus or Nilvax Selenised depending on drench efficacy testing.



Some pre-lamb examples:

#### Programme A

Cross-bred ewes. Wintered well. Lambing

paddocks spelled with good covers to set stock twins at 10/ha. Triple drench effective. Has not given flexidine pre-tup and cobalt/ B12 testing of dry ewes show adequate levels.

Description	Drench	Vaccine/Min	Monitoring
MA Singles	No drench	Multine 5-in-1 + Se	Monitor
MATwins	Drench 20-40% Matrix, and Vet LSD	Multine 5-in-1 + Se	Composite FEC pre-tailing
2 Tooths / In-Lamb Hoggets	Cydectin LA, Scanda Se, and Vet LSD	Multine 5-in-1 + Se	Composite FEC 60 days post injection

#### Programme B

Matrix Hi Mineral ACVM A009390, Cydectin LA Injection ACVM A009926, Scanda Selenised ACVM A007368, Multine 5-in-1 Se ACVM A000935

Fine wool. Diagnosed triple drench failure in Autumn lambs and confirmed with ewe drench checks in July. This has been a common finding this year. Has given long acting iodine pre-tup (flexidine) and has had some B12/Co deficiency diagnosed in lambs in the Autumn.

Description	Drench	Vaccine/Min	Monitoring
MA Singles	Zolvix Plus 20 -80%	Multine 5-in-1 + Se	Composite FEC pre-tailing
MATwins	Cydectin LA and Primer Drench* (to lighter ewes)	Multine 5-in-1 + Se	Composite FEC 60 days post injection
2 Tooths / In-Lamb Hoggets	Cydectin LA and Primer Drench*	Multine 5-in-1 + Se	Composite FEC 60 days post injection

olvix Plus ACVM A011107, Cydectin LA Injection ACVM A009926, Nilvax Selenised ACVM A003977, Scanda Selenised ACVM A007368, Multine 5-in-1 Se ACVM A000935 Post scanning and pre-lamb shearing is one of the busy periods for sheep farmers. There is a lot of disease treatment and prevention done. This edition of ewesnews will touch on the big issues to address this month – Worm Control, Clostridial Vaccination, & Lice Control

### **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 is cheaper, but jetting is never 100% effective. It just does not totally wet the skin enough. Can't be that pleasant off -shears in winter conditions.

Off shears pour-on options include Zapp Encore, Magnum, Expo Pour-On and Wipe-out. The IGR in Magnum and Zapp Encore gives persistent activity for 2-3 months. With Zapp Encore there is also a knock down imidacloprid which gives instant kill, this 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. Don't leave an island sanctuary around the head and neck for lice to survive.





Extinosad ACVM A008206, Seraphos ACVM A004265, Zapp Encore ACVM A010400, Magnum ACVM A007704 Expo Pour-On ACVM A010205, Wipe-Out ACVM A004558



Plenty of scope for lice to hide on these sheep post shears...pour on needs to be from between the ears to the tail.

### 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 is it 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 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.



Flock A (Vet LSD) 1000 Ewes tailing 120% 1200 lambs Flock B (Control) 1000 Ewes tailing 112% 1120 lambs

**RIAL RESULTS** 

The **Extra 80 Lambs** in





Shearing time at Pennyweight Ridges (New Zealand Pastures Ltd) Chief applies Zapp Encore



Congratul

Congratulations to Lucy Cameron from the Waimate Veterinary Centre who has recently become a Member of the Australian and New Zealand College of Veterinary Scientists (MANZCVS) in Ruminant Nutrition. These examinations are challenging. Well done Lucy on your achievement – and fitting your study in around a busy family and farming life and work!

EwesNews (August 2023)

# **Calving Heifers**

#### Ewan Penny BVMS - VETERINARY CENTRE Waimate

The riskiest part of calving heifers does not seem to be calving them as 2 year olds, but getting them to calve again at 3. It is not uncommon to find calved heifers with a shriveled, empty uterus and small ovaries at scanning, probably because she's never cycled since calving. First calved heifers need energy both for lactation and their own growth, meaning inadequate energy intake is frequently a problem. Difficult calvings are also a contributing factor. So, how do we get more of them in calf?

#### **Bull Selection**

When a mob of heifers calve badly, the bull and the stud breeder seem to be first in the firing line. Whilst the bull is only part of the bigger picture, there are some aspects of bull choice which can make your life easier;

- There are 4 breeding values for calving ease traits: birth weight BV, gestation length BV, calving ease of daughters CEdtrBV and calving ease direct CEdirBV (direct effect of the bull) - These are becoming more widely understood and relied upon for making good bull choices for heifers.
- Finding a breeder whose bulls work well with your herd eg. Is breeding for ease of calving or at least recording it with reasonable accuracy.
- Artificial Breeding (AB) is a great way to get some of NZ's best easy calving genetics for your heifers. The genetics of a bull worth >\$40,000 can be bought in a straw for ~\$20!



### **Nutrition and Growth**

R1's - Hopefully weighing around 250-270kg

just now, with a target weight for November mating of 330-350kg (British Breeds), will need to keep gaining 0.8kg live-weight per day. Given the low energy and high wastage (50%) of winter grass, some supplement is going to be required –feeding 2-3kg (DM) of good quality baleage will help here. If you have any good quality Lucerne baleage/hay, now is the time to feed it!

**R2's** – Hopefully weighing ~520kg (if 600kg mature weight), aim to gain no more than 0.5kgLW/day in the 6 weeks pre-calving. They'll need 6.5kg DM per day, so supplementing 3-4 kg of good quality baleage will be necessary for heifers on poorer winter grass.

**Lactation** is when nutritional demands really ramp up. A 1st calver is now growing a calf **and still growing herself**, so she needs roughly 10kg DM/day once she calves. Shedding them out on to good grass after calving can help achieve this without over feeding the yet-to-calve heifers.

**Condition** – R2's should be in BCS 5-6 now (fit but not fat) and maintained at this until they calve. This is **crucial** for getting heifers in calf a 2nd time, as there is a well established link between BCS at calving and post-calving heats. Low BCS at calving means a later return to heats, so she's less likely to get back in calf. Under feeding heifers below requirement to get small calves is a bad idea.

The handy wee graph below, courtesy of B+LNZ, summarises targets intakes.

Weaning to end first winter	kgDM/hd/day @ 11 MJME	kgLW gain/day
Weaning to end first winter	3.8	0.5
Spring to end first mating	6.7	1
Pregnancy to last 6 weeks	6.5	0.5
Pregnancy last 6 weeks	6.5	0.5
Calving, lactation, re-mating	10	0.6

### Lambing Requirements Anna Macfarlane BVSc - VETERINARY CENTRE Oamaru



Most lamb deaths that occur shortly after birth are due to starvation and/or hypothermia after being mis-mothered or if lambs are born into adverse weather conditions. These losses can be preventable, and lambs can be saved if the problems are treated quickly. Some important equipment options to help you treat these lambs are covered below;

#### **Wool Covers**

Woolen lamb covers are a great way to dry and protect hypothermic newborn lambs during harsh weather conditions.

### Stomach tubes (e.g. Trusti tubers)

Colostrum is essential for a newborn lamb, as it contains antibodies to boost their immune system and help them fight infection. It is essential that the lamb receives 10-15% of their body weight over 24hours, which is best to split into 6 feeds e.g. (~100ml per fed) as after this the lamb's gut can no longer absorb the antibodies. Cow colostrum or powdered colostrum formulas are both suitable options. If lambs are too weak to suckle you can use stomach tubes to deliver the colostrum e.g. trusti tubers.

A NOR



How to use: Pass the tube into the mouth and down the throat. Ensure you can see the tube

moving down the left side of the neck and can feel it in the throat as there is the risk of passing the tube into the windpipe. You should not be able to hear breaths or feel any air going in and out. Lift the container and allow the colostrum to flow gently into the lamb's stomach. The trusti tuber design means it can be used one handed and has a specialised tube tip that prevents inadvertent airway insertion.

### **IP Dextrose**

For severely weak or unconscious lambs you can give an intraperitoneal (into the abdomen) injection of energy in the form of dextrose. If giving dextrose, ensure it is given before warming hypothermic lambs.

How to use: We have pre-made dextrose kits with all the equipment required including instructions in our clinics. Hold the lambs by the front legs and inject 2cm below and 1cm to the right of the navel.

If you've got any questions regarding lamb rearing, feel free to come in and ask the team at your local Veterinary Centre.





### Artificially Reared Lamb Options using Milk Replacer



Lucy Cameron BVSc BSc MANZCVS (Rumin. Nutr.) VETERINARY CENTRE Waimate

It's vital to get the feeding regime right for your orphan and hand reared lambs, as they are at the most vulnerable stage of their lives, when nutrition has the biggest impact on their health and well-being. There are many different milk replacer options available, and it can be difficult to know what to choose.

The main distinction is between milk replacers made from 100% milk proteins and fats (for example Anlamb), and those made mainly from the whey proteins in milk, and other components (for example Sprayfo).

Milk replacers such as Anlamb and Milligans Multi are designed to form a clot, or curd in the abomasum (4th stomach) of the lamb, just like ewe's milk does, and they are very easily digested and absorbed by the young lamb. In trials **Anlamb** has shown better growth rates than whey-based replacers and a lower incidence of disease.

Whey-based replacers don't form a clot in the stomach and have become very popular in recent years as they significantly reduce the risk of abomasal bloat, which is a very frustrating issue for lamb rearers, as it tends to affect well grown lambs just before they're due to be weaned. There are many different whey-based milk replacers on the market, with different formulations, so it's important to use one that has been manufactured to be easily digestible and absorbable.

**Sprayfo Primo** (pink bags) is whey-based, with some hydrolysed wheat proteins, and vegetable fats. It is uniquely formulated so that tiny particles of fat are encapsulated by protein. This enhances digestibility, and also makes mixing easier, and lines in feeders less likely to block.

Very young lambs may struggle to transition straight from colostrum to a whey-based replacer – **Sprayfo Alpha** (blue bags) is a great transition product to use if you feel this is an issue. It is made up via the same process as Primo, but has only half the amount of whey proteins, so it does form a clot in the stomach. Lambs can be fed on Alpha for the first 2 weeks, then transitioned to Primo (when the risk of bloat increases), or it can be fed all the way through.

Don't forget the importance of adequate **colostrum** for your orphan lambs. Options include:

- First milking colostrum from a dairy farm, frozen in 200ml lots defrost slowly in warm water, not in the microwave
- Powdered colostrum the concentration of IgG varies widely between products, make sure you are able to provide at least 10g of IgG in the first 6-12 hrs
- It may be necessary to tube feed initially, and split into a couple of feeds

Make sure lambs always have fresh, clean drinking water available, and solid feed to develop their rumen. If they don't have ad lib access to good quality pasture, then provide them with alternatives such as starter meals and hay. Feeders should be dry and cleaned out at least weekly.



# Veterinary Centre EWESNEWS EXTRA

Introducing



### Nicole Kennedy TERRITORY MANAGER Oamaru

We welcome to the team Nicole Kennedy as Territory Manager for Oamaru who takes over from Rosalie Calder who has recently stepped into the Waimate Territory Manager position.

Nicole will bring a good amount of existing farm knowledge having significant experience in veterinary practices further south where she became an accomplished diary services technician.

Nicole is excited about taking on the Territory Manager role and is particularly keen to add significant product knowledge to the practical experience gained during on farm technician work. Nicole also brings a serious sporting pedigree to the team having represented Otago in the Farah Palmer Cup from 2016-2022.

We look forward to Nicole using all of these exciting attributes to add to both our Veterinary Centre team and our farmer clients businesses as the 2023/24 season gets underway.

### Genomics in beef herds – a brief overview

#### Ewan Penny BVMS – VETERINARY CENTRE Waimate

Genomic testing analyses bovine DNA to identify the highest genetic merit animals. This can be done in young animals (e.g. at weaning) to aid selection of replacements. It gives very accurate predictions of that heifers traits, and that heifers offspring. Predictions include; mature weight, yearling weight, marbling, scrotal circumference, docility, carcass weight etc., the list goes on! Benefits include:

- Greater accuracy than selecting by 'looks' alone
- More efficient than calving a heifer and waiting to see how the offspring turn out
- Earlier selection of replacements, allowing earlier sale of stores and reduced wintering costs
- Overall, greater genetic gain

The mind blowing situation has now arisen where a high genetic merit heifer can be identified before weaning by genomics, have eggs flushed out of her at ~6mnths old, have embryos fertilised by IVF, have these implanted in recipients, and have calves on the ground when the mother is 15 months old. In short, genomics allow the very best genetics to be replicated before the animal even hits puberty. Scary perhaps, but huge opportunities.

Look up **Genetics Zoetis NZ** for more information.

EwesNews EXTRA (August 2023)

## **Bearing in Mind**

#### Catherine Nelson BVSc – VETERINARY CENTRE Oamaru

Promptly. Gently. Securely. Antibiotics. These are local sheep and beef farmer Julian Price's key principles for dealing with bearings. "Attitude is a big part of treating things" Julian says. At one time, he didn't bother to replace bearings, thinking that a bearing ewe was a dead ewe. Now though, he is much more optimistic and has a 10-step plan for replacing them, starting with the ewe standing, restrained against a fence or rock.

- 1. Elevate the bearing so she can urinate. The bladder can be trapped in a bearing, so this reduces the size and gives you a much better chance of being able to push it back in.
- 2. Wash all the contamination off the bearing carefully, using water and a splash of disinfectant.
- 3. Tie string or baling twine around the ewe just behind the front legs, pulling it firm. Add three more lengths of string, one along each side and one along the spine.
- 4. Lift the bearing again to empty out any more urine. Then put the ewe on the ground on her side, and ease your knees underneath her hindquarters to tip the pelvis downthis allows gravity to assist in replacing the bearing.
- 5. Gently wash the bearing again.
- 6. Apply lube to the bearing- don't underestimate the value of lube!



- 7. Carefully, using the pads of the fingers, manipulate the bearing back into the body.
- 8. Use more lube to push a bearing retainer into the vulva, and tie it to the strings. This can stay in place until lambing- ewes can lamb past it.

Allow the ewe to stand again, then finish up:

- 9. Check that the strings holding the retainer are tied firmly.
- 10. Give an injection of penicillin to prevent bacterial infection.

Any ewe that has a bearing one year is likely to have one the next, so these should be marked and put on the cull list for next season. Although heavier sheep are more prone to bearings, this is no excuse not to feed them well. Skinny sheep can still get them and a whole host of other problems too! If you're caught out with no retainer, Julian says, it's best to leave it and come back later with one- the more times you push the prolapse in and out, the more damage it causes. Bearing harnesses or stitches can be used too but are a little more time-consuming. Lube is key too, with a hand soap bottle and some vaccine gun tube functioning well as a homemade pump. It is cheap, easy and very effective.

So there we have it, the practical way to deal with bearings on farm with minimal cost and minimal hassle. After all, Julian points out, "what else can you do for 20 minutes which makes you \$200?".



### Parasite Control With Low or Reduced Drench Use

#### Ewan Penny BVMS – VETERINARY CENTRE Waimate

Summary of paper given at recent NZVA Sheep & Beef Conference.

17 sheep and beef operations, identified as having low or reduced drench use, were surveyed across North and South islands. Their decision making and operational processes included;

- 16 were mixed beef and sheep, one was beef only. Farming operations ranged from fine wool breeds to dairy grazing, intensive beef to trading etc.
- Reasons for reducing drench use included; drench resistance, concern about drench resistance developing, desire to reduce workload/costs.
- All participants agreed that any short-term negative impacts on reducing drench use were outweighed by the long term benefits.
- All participants still used anthelmintics, but targeted their reductions to specific stock classes.
- Non chemical means of parasite control included;
  - Strong emphasis on feeding stock well
  - Strong to moderate emphasis on co-grazing sheep and cattle and leaving high residuals

- Regular monitoring by visual assessment and good stockmanship. FEC's also play a role here.
- Crops were used on 11 of the farms
- Of the 14 farmers with sheep breeding flocks, only 6 identified parasite resistant genetics as important.

### Veterinary Centre

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