



## Beef & Sheep Newsletter Winter 2023

### CVC CLINIC NEWS

Welcome to the second Beef and Sheep Newsletter for 2023! Lots of autumn lambs and calves are starting to hit the ground around the district, so we encourage all producers to ensure they are ready to mark their youngsters and plan the next joining period. We have some exciting changes ahead at CVC. Nessy has officially gone on maternity leave and we look forward to meeting her little one very soon. We don't think we will be able to keep her away from the clinic for long so we are sure you will be seeing her again very shortly!. We also have Gemma returning to the CVC team full time this month. Many of you would have already met her when she locumed for us earlier in the year. We are very excited to have her friendly face and expertise back in the clinic! Our clinic will also be changing our trading hours, offering routine late night consults for small animals and drug collection Monday, Tuesday and Thursday starting the 19th of June.

### Camperdown Veterinary Centre

1 Leura St, Camperdown VIC 3260

Ph: (03) 5593 1077

#### Opening hours:

Monday—Friday 8:30am—5:30pm

Saturday 9:00– 12:00 PM

Our 24 hour emergency/afterhours service is always available.

Email: [team@camperdownvet.com.au](mailto:team@camperdownvet.com.au)

### Bull testing

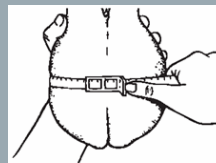
Now that autumn calving is finishing up, producers should be planning for their next joining. Ensuring your bulls are fit and fertile is absolutely crucial for a successful joining. We encourage all producers, regardless of your stock numbers to get your bulls tested prior to joining. We recommend bull testing be performed 10-12 weeks prior to your mating start date in case any abnormalities are detected that require retesting or if replacement bulls need to be sourced.



The Veterinary Bull Breeding Examination (VBBSE) is a standardised procedure designed to determine a bull's risk for reduced fertility. By determining their fertility risk we can make recommendations about a bull's ability to get cows pregnant.

The VBBSE consists of the following steps:

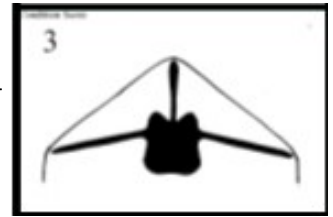
- **Physical examination**—This includes examining the bull's locomotion from a distance and in the crush. Body condition, eyes, teeth, legs, feet, testes, prepuce and internal reproductive organs are all assessed for any abnormalities that may affect their fertility. Scrotal circumference is measured using a Reliabull device. Scrotal circumference is used as an indication of a bull's daily sperm output and potential daughter fertility.
- **Penis examination**— An electroejaculator or rectal massage is used to get the bull to exteriorise the penis for assessment of anatomical abnormalities or disease.
- **Crush-side semen evaluation** - A sample of semen is collected using the electroejaculator and examined using our iSperm device or a microscope. The new iSperm device is an device which attaches to an iPad and allows immediate analysis of semen concentration and motility.
- **Vibrio vaccination & BVDV testing**—Bulls should be given a vaccination to prevent Vibriosis, a bacterial disease causing infertility and abortions in cattle. An ear notch can also be collected from each bull to determine if they are a carrier for BVDV (Pestivirus).
- **Semen morphology**—Semen may be submitted to a specialist laboratory for morphological examination. Morphology can identify microscopic abnormalities which may prevent sperm from fertilising an egg and resulting in a pregnancy.
- **Serving ability assessment**— This is performed in a yard with heat synchronised cows to observe the bulls successfully mating. Serving ability tests are used to identify bulls that have difficulties mounting, poor libido or penile defects that prevent successful matings. This step may not always be performed depending on the situation.



## Are your ewes ready for lambing?

### Body condition scoring

Body condition scoring is a highly effective tool for assessing ewes nutritional status. Condition scoring is a very valuable skill and should be done at every opportunity to palpate ewes. Condition scoring is done by palpating the amount of tissue and back covering the spine and short ribs the sheep. The image right shows the location for body condition scoring. Ewes are scored on a scale from 1 to 5, with 3 being optimum condition. You should be aiming to have your ewes lambing down in BCS 3. Appropriate provisions should be made to ensure ewes under BCS 3 are on a rising plane of nutrition towards lambing. Lifetime Wool has some excellent resources on body condition scoring [here](#).



### Pre-lambing parasite control

All ewe mobs should have faecal egg counts (FEC) performed prior to lambing to determine if drenching is required before moving to their lambing paddocks. Many producers use long acting moxidectin products for the pre-lambing drench, while these products can provide some sustained protection from parasites they can pose a high risk for resistance development. To minimise this a primer drench should be used at the same time as the long acting drench. A priming drench is an effective short-acting drench given with the aim of clearing the animal of worms that are resistant to the long-acting product. The primer drench includes a product that is in a different group to the long-acting drench.



### Vaccination boosters

During the 2-8 weeks prior to lambing ewes are undergoing a process known as colostrigenesis, which is the production of colostrum in preparation for lambing. This colostrum is rich in antibodies which are absorbed by lamb in a process known as "passive transfer". These antibodies are absolutely critical to lamb immunity and survival in the first weeks of life. Ewes should be given their annual vaccination boosters prior to lambing to promote the development of colostrum antibodies against clostridial diseases. Not only do these booster vaccinations protect the ewe during a stressful period they also provide protection to their lambs until they are old enough to receive their first vaccination themselves. If you have problems with arthritis in lambs, vaccination against erysipelas is highly recommended. Ewes should be vaccinated prior to lambing and lambs doses at marking and weaning. There is now a 7in1 product available for sheep which provides protection against 5 types of clostridial disease, cheesy gland and erysipelas.

### Selecting a lambing paddock

The first priority for selecting lambing paddocks should be feed and shelter availability. As a guide, lambing paddock should have > 1200 kg/DM/ha to be suitable. The least parasite contaminated paddocks should be prioritised for the highest risk lambing ewes, such as maidens or older ewes.

### Order your lambing kits

CVC has lambing kits available that include anti-septic, rectal gloves, 4in1 injection, dextrose injections, propylene glycol, needles, syringes, tail paint, and any medications required for treatment of ewes during lambing. We can tailor the contents of your lambing kits to your farm's specific needs. We encourage you to have lambing kits in all vehicles used to check ewes during the lambing period.

If you would like to order your lambing kit, please give us a call to arrange!

### Pre-lambing checklist

- Body condition score ewes
- Separate singles and multiple ewe groups to target feed twin bearing ewes
- Administer vaccination boosters
- Administer pre-lambing drench
- Select lambing paddock with adequate feed availability (>1200kg DM/ha)
- Ensure you have lambing kits available to all staff checking stock during lambing
- Ensure you have supplementary feed available






## Lamb marking

With increasing consideration of animal welfare, providing pain relief to your lambs at marking is highly encouraged and in some cases a requirement. There are a number of different options for pain relief depending on your system, these are outlined below.

Local anesthetics are short acting drugs administered locally to a specific area to block the pain receptors. These are highly effective drugs at stopping pain during a procedure such as castration, tail docking or mulesing however they have no ongoing effects after 1-2 hours. Non-steroidal anti-inflammatories (NSAIDs) reduce inflammation, pain and fever. They block the production of inflammatory substances in the body and hence provide a long lasting pain relief than local anaesthetics. NSAIDs are usually given systemically (to the whole animal) by mouth or injection and take between 15-30 minutes to work. They usually have effects for up to 24 hours.

We recommend using a local anaesthetic and a NSAID together at lamb marking for a synergistic effect. The local anaesthetic provides short term pain relief while the NSAID has an on going longer term effect.

It is become more and more common for wool and lamb buyers to request pain relief be used at lamb marking, so they can be sure their product has been sourced from a welfare conscious enterprise.

<b>Tri-Solfen</b>	<b>Meloxicam</b>	<b>NumOcaine</b>
<p>Tri-Solfen is a topical anti-septic -anaesthetic product used on open wounds. Tri-Solfen contains lignocaine, bupivacaine, adrenaline and cetrimide. Tri-Solfen has been shown to provide pain relief for up to 24 hours after application. It is a schedule 5 drug which means it is available over the counter at your local ag retailer.</p> 	<p>Meloxicam is an NSAID drug registered for use in sheep. It decreases pain, swelling and fevers associated with lamb marking. Meloxicam is available in 2 products for use at lamb marking including:</p> <ul style="list-style-type: none"> <li>→ <b>Buccalgesic/butec</b>— a gel containing meloxicam that is administered into the buccal pouch (cheek) of lambs. Buccalgesic is available from vet clinics, and butec is available from ag stores.</li> <li>→ <b>Injectable meloxicam</b> - an injection administered under the skin just like a vaccination. Injectable meloxicam is a schedule 4 drug and must be sourced from your vet.</li> </ul> 	<p>NumOcaine contains the local anesthetic agent lignocaine. Lignocaine is a fast acting agent that “numbs” the area where it is injected for a 1-2 hours. NumOcaine is schedule 5 drug which means it is available over the counter at the vet or ag product distributors. NumOcaine is applied through the Numnuts applicator when rings are used for tail docking and castration.</p> 

The table below is adapted from that produced by MLA and outlines what pain relief should be used depending on your lamb marking practices. The full table can be found [here](#).

Lamb marking procedure	Meloxicam	NumOcaine	Tri-Solfen	Meloxicam plus Tri-solfen	Meloxicam plus NumOcaine	Numocaine plus Trisolfen	Meloxicam, Numocaine
Mulseing	■		■	<b>Best option</b>			
Hot iron docking/ring	■	■		<b>Best option</b>			
Ring docking /ring	■	■		<b>Best option</b>			
Surgical castration	■		■	<b>Best option</b>			
Hot iron docking/ring castration + mulesing	■	■	■	■	■	■	<b>Gold standard option</b>
Ring docking/ring castration + mulesing	■	■	■	■	■	■	<b>Gold standard option</b>

We recommend all lambs are treated with an NSAID (either injectable meloxicam or oral Buccalgesic) at the time of marking. Additionally, if surgical procedures are used (mulesing or surgical castration rather than ringing) Trisolfen should be applied to the wound. If the Numnuts applicator and NumOcaine are used it is still advisable to use an NSAID as well. These multimodal methods of pain relief provide the best results for your lambs from both production and welfare aspects.

Product	Dose	Price per dose
Buccalgesic	1ml /10kg	\$ 0.92
Injectable meloxicam	0.5 ml /10kg	\$ 0.42
Numnuts	1.5ml per tail dock 1.5ml per castration	\$ 1.40

## Are your cows ready for calving?

### Pre-calving vaccination boosters

Cows and heifers should receive their annual booster for 7in1 prior to calving to provide maximum protection for both cows and their unborn calves.

### Pre-calving checklist

- Body condition score cows
- Draft into early and late calving mobs based off preg testing results
- Administer booster vaccinations
- Administer drenches if required on FEC results
- Select paddocks with plenty of feed available
- Check supplementary feed stock
- Stock up on 4in1 pouches and ketol
- Locate your calving chains and make sure the crush is in safe working order
- Save the clinics number incase you need assistance!



**1** Vaccination of cow/heifer



**2** Protective antibodies develop in serum of animal



**3** Antibodies concentrate in colostrum



**4** Protective antibodies absorbed through calf's gut during first 12-24 hrs

## Calf marking

Calf marking should be performed as soon as possible after cows have finished calving. Two sessions of calf marking may be required if your calving period is > 8 weeks.

### Vaccinations

Calves can have their first vaccination against clostridial diseases from 4 weeks of age. 5in1 products protect against the 5 strains of clostridial disease, while 7in1 also covers for 2 strains of leptospirosis. We recommend that any calves that are to be used for breeding receive 7in1 vaccinations. For full immunity calves should have their second vaccination booster 4-6 weeks after the first dose.

### Castrations

There are two techniques used for castration of male calves in beef enterprises, surgical castration involving the removal of testicles through the scrotal skin and ring castration through the use of emasculator rings. Calves that are surgically castrated should have topical local anesthetic such as Tri-Solfen applied to the wound and a longer acting NSAID administered systemically. There are two options for the use of NSAIDs at calf marking, either Buccalgescic/Butec, a gel administered orally or an injection of meloxicam given under the skin. NSAIDs can also be given at the time of ring application for sustained pain relief. If calves are castrated at > 6 months old, it must be performed by a veterinarian. Therefore we recommend performing castrations on animals <12 weeks old for greatest success. We treat a lot of cattle for castration failures throughout the year so if you have any doubt about castration, please get in touch - we are happy to help teach you the correct technique. It is essential that calves have their vaccination at or prior to castration as the castration wounds are high risk for developing tetanus.

### Disbudding

Horned cattle can be a safety risk for people working with them, as well as a risk for carcass damage due to fighting. Where possible, polled genetics should be used to avoid the need to dehorn animals. If calves are born with horns we highly recommend disbudding before their horns fully develop to ensure they don't grow back. Disbudding is much better for calves in the long run compared to dehorning. Disbudding is performed by our vets from 2-12 weeks old under heavy sedation with nerve blocks and pain relief. The sedation can also provide restraint for castration, ear tagging and vaccinations if required.

If you would like to discuss having your calves disbudded, please give us a call on 5593 1077 to discuss your options.



## Grass tetany in beef cattle

Grass tetany aka grass staggers, or hypomagnesaemia is a highly fatal metabolic condition of cattle associated with low levels of magnesium in the blood. This mineral deficiency occurs when the dietary intake of magnesium does not meet the animal's metabolic requirements. Cattle cannot access magnesium stored in their bones and muscles, therefore they rely on daily intake of magnesium to meet their needs. The lack of magnesium in the blood and brain leads to rapid development of tetany, convulsions and very often acute death.

Grass tetany can affect all classes of cattle, although mature cows are most likely affected. In beef cattle, the most common times we see cases of grass tetany is prior to calving and at peak lactation (usually 6-8 weeks after calving). Milk contains a high quantity of magnesium and calcium. A cow in peak lactation requires a constant source of magnesium intake to maintain blood magnesium levels. These cows are also at high risk of developing milk fever (hypocalcaemia or low blood calcium) due to the vital role magnesium plays in calcium metabolism.

Signs of grass tetany in cattle may include:

- Sudden death—often there are marks on the ground surrounding dead animals from paddling (cow image shown in lateral recumbency with paddling marks).
- Seizures, muscle tremors and twitching
- Staggering
- Aggression, agitation, and vocalisation
- Teeth grinding and frothing at the mouth



Animals in lateral recumbency with signs of grass tetany should be treated with a slow intravenous injection of magnesium and calcium (Minbal 4in1). If you are not comfortable with intravenous injection or are unsure if the cow has grass tetany contact us immediately. Prompt treatment is essential to cow survival.



Some of the risk factors for development of grass tetany in cattle include:

- **Cold wet weather** when cows reduce their feed intake
- **Transport, yarding, and mustering**, or any husbandry procedures that may limit a cow's feed intake or produces stress for the animal
- **Grazing wet lush pasture**—wet pasture rapidly transits through the gastrointestinal system and does not allow for adequate magnesium absorption.
- **Grazing lush green rapidly growing pasture fertilised with nitrogen and potassium**—these pastures usually have a relatively low dry matter and magnesium content. Diets high in potassium are high risk for grass tetany due to high potassium levels blocking the absorption of magnesium across the rumen wall.
- **Low roughage intake**—having access to good quality hay is essential

The mainstay of grass tetany prevention is ensuring magnesium intake meets demands. This can be achieved in a number of ways:

- Adding **magnesium oxide powder into feed** is a great way to increase magnesium intake. The commercial product "Causmag" can be dusted on hay, pasture or mixed into feeds.
  - Dusting pasture early in the morning when the grass is damp is recommended. Dusting at a rate of 75-100g/cow/day is advised.
  - If adding to hay, magnesium oxide should be mixed at a rate of 50g/cow/day.
- **Magnesium oxide intra-ruminal bullets** are also an option however they only provide a small amount of magnesium daily so should be used in conjunction with other options.
- **Adding magnesium chloride or magnesium sulphate to the water** source can increase magnesium intake, however these powders are often quite unpalatable and intake is unreliable. These products need to be mixed with molasses to encourage intake and cows trained to drink the treated water.
- Commercial magnesium blocks are available however they are relatively expensive and it is quite difficult to ensure all cows receive the correct dose, hence their use is not recommended.



If you have any questions regarding grass tetany control in your cows, please do not hesitate to call the clinic. We can help develop a prevention plan suitable to your system and cows.

## Preparing paddocks for weaning

With the increasing amount of drench resistance on sheep properties we are shifting our focus to alternative methods for controlling worm burdens in stock. Proper grazing management is a critical part of any parasite control program.

The three key elements of grazing management to reduce worm burdens in sheep are:

- Avoid allowing paddocks to become heavily infected with parasite larvae
- Reduce the level of worm egg contamination on paddocks
- Allow time for resting of paddock when conditions are favourable to kill larvae and eggs



Weaner sheep are extremely susceptible to worms, therefore preparing clean low-risk weaner paddocks is crucial to a successful weaning. Like all procedures associated with weaning sheep, preparing low-risk weaner paddocks requires prior planning. Weaner paddocks should primarily have the **highest quality pasture** and secondly have the **lowest-worm burden**. If weaners can get a good start on high quality feed it will go a long way in developing their immunity before they have to contend with a high worm burden.

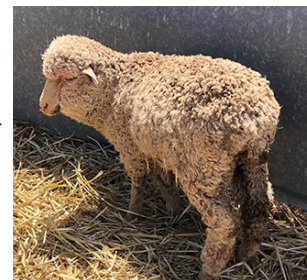
Two key methods for a low risk weaner paddock are:

- ◆ The paddocks selected to be used for weaning after the autumn break should only be grazed by sheep that have received an effective summer drench or adult cattle. Up to 40% of pasture parasite contamination occurs during late spring and early summer. An **effective summer drench in November/December** can significantly reduce this contamination. Pastures should only be **grazed for 30 days** after an effective short acting drench to avoid re-contamination.
- ◆ **Always give weaners an effective drench** prior to moving onto the low risk pastures.

Remember, proper prior preparation prevents, poor performance!

## Weaner illthrift

“Weaner ill-thrift” is the condition used to describe the un-expected poor health of weaner sheep. Weaner ill thrift is characterised by poor growth rates, weight loss, weakness and susceptibility to significant disease. Ill thrift usually affects sheep between 3-15 months of age. Nearly all problems associated with ill thrift are directly related to undernutrition. Adult sheep have are able to cope with periods of poor nutrition by mobilizing body fat reserves, but young weaners very rapidly exhaust these energy stores resulting in serious decline in condition and health.



One of the most common presentations of weaner ill thrift is the identification of a “tail” in the mob. The tail refers to group of lambs with low liveweight at weaning. Approximately 20% of a weaner group will be underweight and require specific attention. Low body weight at weaning is one of the biggest risk factors for death. Lambs likely to have low body weight at weaning are “late-born lambs”, “twin-born lambs” and lambs that have suffered misadventure such as illness or mismothering. Provision of high quality nutrition is essential to ensuring that lambs gain weight and defend illness.



Key advice for managing weaners:

- ♥ **Monitor regularly with FEC** as by the time lambs are dying or showing signs of worms, production losses will be significant.
- ♥ If weaners are going to be fed grain we highly recommend **introducing them to grain feeding prior to weaning**. This can be achieved through “creep” feeding while lambs are still on the ewes. The lambs learn to eat grain off the ground or from a feeder by following their mums.
- ♥ Grain should always be **slowly introduced** to avoid grain poisoning.
- ♥ **Ensure vaccination booster are up to date**. Lambs should receive their second clostridial vaccination booster at or prior to weaning. Most clostridial vaccines require 2 doses 4 weeks apart to be effective. Lambs grazing lush pasture or being fed grain are at high risk of sudden death from pulpy kidney so vaccination is advised.

There are a large number of health conditions that may cause or exacerbate ill thrift in weaner lambs, including:

- High worm burdens
- Yersiniosis—a bacterial disease causing scours
- Coccidiosis—a protozoan disease causing scours
- Footrot
- Trace mineral deficiencies—most commonly selenium and cobalt deficiencies.
- Pneumonia

The majority of these conditions require diagnosis and treatment by a vet. If you are concerned about the condition of your weaner lambs, we would highly recommend getting in contact to rule out any of the above conditions that may be contributing to poor growth.