Beef and Sheep Newsletter Summer 2021

CAMPERDOWN VETERINARY CENTRE

CVC CLINIC NEWS

Welcome to the Summer newsletter for Beef and Sheep producers. We hope everyone had a wonderful festive season. As we are approaching our warmest temperatures we will be discussing heat stress and salt toxicity in cattle. 2020 has seen some interesting disease occurrences, particularly in our young sheep. Nutrition and mineral balances will be discussed with things you can do to help ensure a great 2021.

Our Skipton and Derrinallum clinics are open in line with current COVID-19 restrictions . We are available on-farm on Wednesdays for routine work up North and every day for emergencies! Please contact the clinic on 5593 1077 to book an appointment or if you would like to talk to one of our friendly team!

HEAT STRESS IN CATTLE

As the temperature and humidity increases, it is important to consider how heat stress can affect your cows and their productivity. Cows take on heat from the environment and generate metabolic heat from eating and digesting feed. Problems start to occur if temperature and humidity increase and cows don't have opportunities to balance their metabolic and environmental heat gains. Decreased milk production is the clearest cost, but some effects are less obvious and result in significant productivity losses including: **Reduction in fertility (decreased conception rates, embryonic deaths and reduced birth weight of calves) and susceptibility to infection (due to decreased immune function). By far the biggest effect in beef cattle is the significant reduction in feed intake resulting in reduced weight gains.**

Black cattle absorb twice as much heat from the sun as white cattle! Large cattle (e.g. mature cows) are at a disadvantage in losing excess body heat compared to calves due to their larger surface area, therefore are a higher risk of becoming overheated.

Cows will change their behaviour to try and cool down. Behaviours to look for that indicate your cows are too hot include:

- Agitation and distress, becoming more severe with increasing heat loads
- Looking for areas with greater air movement or standing to increase exposure to air
- Seeking water and shade
- Panting and sweating
- Stopping or reducing feed intake

Some responses of cattle to heat stress can actually act to increase heat production within their bodies. Increased respiratory rate and panting can cause a cow to experience more distress, eventually with life threatening consequences. With very severe heat stress, cows will have frothy discharge from the mouth or nose, become ataxic (wobbly), refuse to move, collapse with convulsions, coma and eventually death.

Ensure water supply in paddocks is more than satisfactory. **Water intakes can double in hot weather (as much as 250L per cow!).** Treatment of affected animals involves hosing down and stomach tubing with cool water. Rectal temperature must be monitored closely and active cooling stopped once a normal temperature is reached.

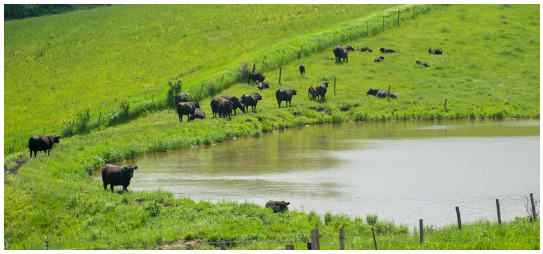
Preventative measures include; Having good quality drinking water and shade available in all paddocks, placing troughs in or close to shade to encourage drinking, if using sprinklers or wetting cows lightly, care must be taken to provide air flow (otherwise the increase in humidity can exacerbate the heat stress). During periods of hot weather the salt content of the diet can be increased to counteract losses through sweating and increased urination. If cattle must be moved or yarded, early morning or late evening is preferable when temperatures may be cooler.

SALT INTOXICATION

This is a syndrome seen when animals have experienced water deprivation or restriction and then are given access to unlimited water. This can result in the development of intravascular haemolysis (breakdown of red cells within the blood vessels) and severe neurological signs as a result of changes to the brain (cerebral oedema, polioencephalomalacia (PEM) and cerebral dehydration). These signs can be exacerbated if cattle have access to salt or salty water (>10g/L of salt) during the period of water restriction.

Clinical signs are usually seen within 3-10 hours of access to water. Animals that have had lower salt intakes or shorter restriction periods may show depression and anorexia at 8-24 hours. The most commonly observed signs include:

- Opisthotonus (backward arching of the head, neck, and spine)
- Nystagmus (Involuntary eye movement, often a quick side to side flicking)
- Tremor and weakness
- Polyuria and haemoglobinuria (increased urination and dark red/ amber urine)



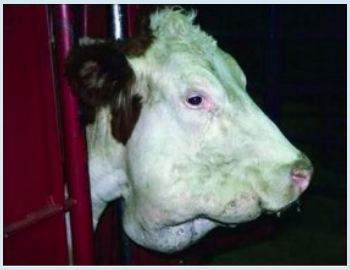
Untreated cattle will progress to collapse, coma, convulsions and death. The rate at which cattle will develop clinical signs is dependent on the level of water restriction, combined with salt intake during this period and the rate of water intake after restriction. Cattle that have taken on significant amounts of salt during restriction will show gastrointestinal signs such as colic, rumen stasis and diarrhoea.

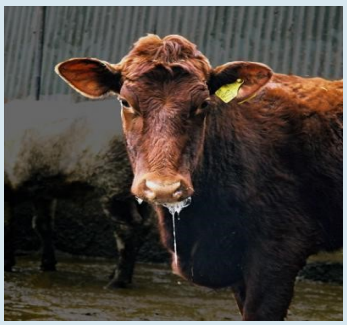
Treatment is most effective if instituted prior to the development of cerebral oedema; it should be aimed at restricting water intake to maintenance so that cerebral rehydration can occur without the development of oedema. Vit B1 (thiamine) can also be beneficial. For severely effected animals, veterinary treatment with intravenous fluids and drugs to reduce cerebral oedema can be life saving.

Prevention is achieved by effective management of water supply—ensuring that it is constant and that access to salt is restricted.

If you have animals that may have had a period of water restriction, please call the clinic and discuss with a veterinarian prior to allowing access to water.

WOODY TONGUE





We have seen a number of woody tongue cases recently in both beef and dairy cattle. Wooden tongue (aka woody tongue) occurs in cattle of all breeds, age and sex. Woody tongue is caused by infection with the **bacterium *Actinobacillus lignieresii.*** Small abscesses form in the soft tissue when this bacteria (which is part of the normal flora of the mouth) enters through breaks in the lining of the oral cavity. **Low-quality dry, stalky feed, grass seeds, coarse hay and scrub can cause mouth abrasions** which allow entry of infection.

Animals with woody tongue **develop hard, swollen and painful tongues. Often the back part of the tongue is the most effected area so a thorough examination is required.**

Animals produce **excessive amounts of saliva** and have difficulty eating and drinking resulting in rapid loss of condition. Swelling under the jaw is a common clinical sign and is often accompanied by a gentle chewing action (as though something is caught in the mouth). As the disease progresses, scar tissue develops in the tongue which becomes hard, shrunken and immobile, hence the name 'wooden tongue'. Abscesses often form in the lymph nodes of cattle with woody tongue which may rupture through the skin and frequently reoccur. Other tissues such as lips, nose and the oral cavity are less commonly affected.

The earlier treatment is started, the more likely it is to be successful. The most effective treatment for Woody tongue is iodine therapy with a product called “Sodide”. The initial dose of “Sodide” is **best given intravenously by a vet, often in conjunction with antibiotic therapy.** Resolution of clinical signs is often rapid with appetite usually restored within 48 hours**.** Affected animals should be isolated from the mob, especially when pus is discharging. Feed and water troughs used by affected animals should be disinfected where possible. Alteration of grazing management to try to reduce exposure of cattle to coarse or prickly feed will also help to reduce the prevalence of these conditions.

If you are concerned that any of your cattle may have woody tongue please do not hesitate to give us a call!

LAMB ILL-THRIFT

This season has seen a frustrating syndrome emerge in our lambs. Several disease investigations have been undertaken for flocks of lambs (both not yet weaned and weaned) experiencing clinical signs ranging from poor growth to lameness and easily broken bones. Other properties that have reported issues such as this have responded to mineral supplementation in both injectable and lick forms.

Samples collected from both animals and pasture are sent for laboratory examination. These have returned a range of issues such as deficiencies in; Copper, Selenium, Cobalt, Calcium and Phospherous. Often a mixture of these are identified within a mob.

COPPER:

Copper (Cu) is required for growth, particularly bone and wool.

Deficiency can be primary, when plant levels are too low for animal metabolic requirements, or secondary, where other factors are interfering with the Cu uptake and utilisation (sulphur and molybdenum being the most common).

Cu is more readily available in dry feed. The lush, ongoing green growth we have experienced in 2020 may look great but is often the cause of primary deficiency. Pasture species can also play a role with clovers traditionally having higher Cu levels than grasses.

Clinical signs can include:

- Steely wool
- Sway back in young lambs (uncoordinated gait)
- Increased incidence in leg and rib fractures

Excess Copper and Selenium in particular can be toxic. Care should be taken when supplementing livestock.

SELENIUM:

Selenium (Se) is essential for growth and prevention of white muscle disease. White muscle disease is a degenerative muscle disease affecting both skeletal and heart muscle resulting in weakness and death. Selenium also plays a role in immune and reproductive function.

Seasonal variation results in lower levels of Selenium in Spring and Summer. Many Victorian pastures are Selenium deficient with acidic soils, high rainfall, high superphosphate application and clover dominance all working in conjunction to give this result.

Lambs are most commonly affected particularly when we have had good autumn rain and abundant clover in spring.

Clinical signs can include:

- Ill thrift in young stock
- Poor growth and reduced wool production
- Reduced conception rates, particularly in younger animals, retained foetal membranes
- Stiff gait
- Sudden death

COBALT:

Cobalt (Co) is essential for the production of vitamin B12 in the rumen. Deficiencies can be seen in conjunction with heavy liming and applications of superphosphate.

As with both Copper and Selenium, Cobalt pasture levels are lowest during the Spring flush. Soils provide a concentrated source of Cobalt for ruminants. The seasonal variation may be due to less soil being ingested as animals are grazing longer feed.

Clinical signs can include:

- Poor BCS, poor appetite
- Weeping eyes, scaly ears
- Anaemia
- Death in severe, prolonged cases

MINERAL SUPPLEMENTATION

Depending on the minerals to be supplemented injections, drenches, capsules or loose licks can be used to treat/prevent deficiencies.

Fertiliser additives and pasture sprays can be used but are not as effective at treating the animal directly.

Diagnosis of deficiency can be performed with blood tests however liver samples are much more accurate and reliable. Samples can be collected from live animals using a special trocar or from sacrificial slaughter/recently deceased animals.

Pasture samples can also be tested to determine mineral composition.

Due to the potential for death if excessive supplementation occurs, it is advisable to contact the clinic to discuss supplement rates and always ensure you are not dosing with multiple products (e.g. a Selenium containing drench **plus** a Selenium containing injectable).

KEEP AN EYE OUT FOR PINKEYE!

We are now in the midst of our warmer weather when fly numbers are high.
Minimise your pinkeye risks by:

- Reducing the incidence of flies and subsequent spreading of bacteria with the application of pour-on treatments such as Easy Dose or Arrest .
- Early detection, segregation and treatment of infected stock.
- Use the Piliguard ® pinkeye vaccine
- Avoid excessive yarding in dusty yards during the pinkeye season

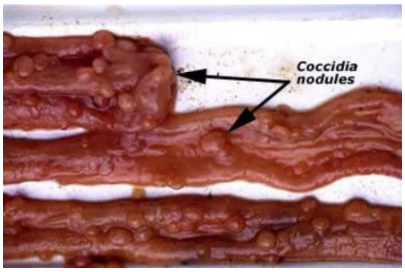
To discuss treatment options please don't hesitate to contact the clinic 5593 1077

COCCIDIOSIS

Coccidia *(Eimeria)* are microscopic parasites known as protozoa, with several species existing. These parasites develop in the intestinal tract of sheep, goats and cattle, producing oocysts that pass into faeces. These oocysts take several days to develop, after which time they infect stock grazing pasture. The recent warm, wet weather has seen an increase in cases within the western district.

These parasites are usually acquired within the first few months of life. Small numbers are carried by most young animals, usually causing no disease. In times of stress (e.g. overcrowding, damp and unhygienic conditions, weaning and travel) disease may occur. Coccidiosis in young animals is usually associated with cold weather and poor pasture nutrition resulting in a reduced milk supply from the dam, forcing the young animal to graze close to the ground.

Sheep rapidly develop strong, lifetime immunity to coccidia and as such coccidiosis is rare in adult animals. Goats however do not develop this immunity and infection is commonly seen in animals of all ages.



Clinical signs of an infected animal include:

- Brown and sometimes blood stained foul smelling diarrhoea
- Depression, hollow flanks and a hunched appearance
- Straining even once faeces have passed
- Death occurs in severe cases

Although the organisms are microscopic, some species may cause white nodules in the gut of affected animals.

Diagnosis: Coccidiosis is usually suspected when severe scouring is seen in lambs and kids at a younger age than is usual for worm problems or in adult animals when stocking rates are high and nutritional stress is present. Affected stock will fail to respond to routine drenching (unless a significant worm burden is also present).

Coccidia can be seen in a routine faecal egg count (FEC) however this is not definitive for disease. Unlike our regular worm burdens, the coccidial faecal count does not directly correlate to disease. Large numbers of oocysts may be found in unaffected animals, and alternatively disease may occur in animals with a low oocyst count.

Affected animals will usually recover without help, however some may suffer significant weight loss and in severe, acute cases death can occur rapidly.

Treatment is usually undertaken for an entire group of animals rather than at the individual level. Registered treatments (sulphadimidine, baycox) must be dispensed by a registered veterinarian. **Prevention** can be provided by pre-treatment or in-feed products—this is only justified when there is an on-going history of disease. Attention to hygiene, stress and nutrition is a more sustainable approach.

If you have any questions or would like to talk to a vet about Coccidia or any other topics covered in this newsletter, please don't hesitate to give us a ring on 5593 1077 —we are here to help!

Camperdown Veterinary Centre

1 Leura Street , Camperdown

www.camperdownvet.com **Ph: (03) 5593 1077** **Email: team@camperdownvet.com.au**

Hours: 8:30am – 5:00pm (Monday – Friday) 9:00am – 12:00pm (Saturday)