



March 2013

Transition Bull Management with Bopriva

Bopriva is a unique vaccination for temporary reduction of testosterone in bulls. Through its effect on testosterone, Bopriva reduces aggressive and sexual behaviours in bulls, providing farmers with a highly effective management tool.

Bopriva causes temporary suppression of testosterone following a two shot vaccination regime, which improves the behavioural management of bulls.

Lag phase: It takes 9 days after the second vaccination until maximum testosterone suppression is achieved. So it is recommended to wait at least 10 days after the second vaccination before mobbing unfamiliar groups of bulls.

Agreeabull phase: This is the period of maximum testosterone suppression and behavioural control.

Transition phase: Agreeabulls are gradually reverting to bulls over a period of a few weeks as the treatment effect wears off.

Improvements in the following behaviours:

- Fighting
- Sexual mounting
- Damage to infrastructure such as fences
- Pawing, digging and pasture damage
- Bellowing
- Dominance and territorial behaviour

Potential benefits for bull farmers:

- Reduced labour
- More grazing management options
- Better pasture-less damage, pugging and faster regrowth
- Fewer injuries or deaths from fighting and riding
- Less damage to fences and infrastructure



Worm Control in Beef Cattle

Cattle are most likely to be affected with gut worms; ostertagia, trichostrongylus and cooperia, and lung worms. These can cause significant production losses and in extreme cases, death. (12 out of 50 in one recent example)

In general cattle develop good immunity to worms by 20-24 months. Some groups however are more susceptible, first calving heifers and bulls are examples.

Worm burdens can rise sharply in paddocks constantly grazed by young cattle. Consider weaning calves onto new grass or paddocks grazed by sheep. Drench resistance is common in cooperia, especially against the Ivomec family of drenches, but these worms are usually susceptible to levamisole (clear drenches).

As always frequency of drenching, choice of drench and method of application are complex issues with nutrition, health, other management procedures all to be considered.

Michael Baer BVSc



Pink Eye in Cattle

Many of us will have experience of Pink Eye infection and are aware that it can occur in a few individuals but also spread rapidly to affect whole mobs.

The primary cause is a bacteria - Moraxella bovis - that causes inflammation of the conjunctivae and cornea. Other bacteria have been found in cases and the presence of mixed infection may increase the severity of symptoms. A wet face starting from the medial canthus of the eye is usually one of the first signs. The conjunctivae appear inflamed, the cornea becomes cloudy and 'pink' with increased blood vessels around the periphery. Corneal ulcers may develop and in severe cases the eye may rupture causing irreversible damage to the eye.

A number of factors predispose cattle to the development of pink eye and can exacerbate the spread of disease. These include:-

- Age - young animals more susceptible
- Dry, dusty conditions
- Presence of airborne irritants such as pollen
- Exposure to strong UV light
- Stalky vegetation with seed head
- Use of supplementary feeds
- Nuisance flies
- Stress/poor condition/ concurrent disease
- High stocking density
- Frequent close contact between animals or frequent stock handling
- White faced calves with no eyelid pigmentation

Field experience has shown it is important to segregate affected animals as soon as symptoms appear to limit the spread to mob mates. Affected animals should be treated 2-3 times a week depending on severity of symptoms. More frequent yarding could be detrimental to the effectiveness of the treatment. Use of vaccine in the face of an outbreak has had mixed results and the decision and outcome can be complicated when multiple bacteria are involved. Used prophylactically in at risk animals, vaccination has been shown to be effective in preventing pink eye caused by Moraxella bovis.

J MacGibbon BVMS MRCVS



BVD can happen on a Beef Farm

-and the testing and vaccination program took place

The following is a chronological tale of BVD virus introduced to a naïve Beef farm, what happened, and what is being done to combat the virus.

Pregnancy test records

Cows		Heifers	
Year	% Empty	Year	% Empty
2006	4	2006	3
2007	9	2007	4
2008	16	2008	14
2009	15	2009	74
2010	17	2010	22
2011	11	2011	0
2012	10	2012	6

In 2009 there was a dramatic empty rate in the heifers i.e. 74% empty. By blood testing it was established that all the heifers had a high antibody level to BVD virus indicating a recent exposure of a naïve herd to the virus. The viral affect was not so dramatic on the cow empty rate although it did increase in 2008, 2009 and 2010. The not so high increase in empty rate was probably due to some natural immunity in older stock due to the passage of time.

Eradication of P.I. animals and vaccination procedures

In 2010,2011,2012 all calves were tested for the presence of BVD antigen (test for persistently infected calves) at weaning time. All heifer calf replacements, and bull calves for sale that tested positive were slaughtered.

Calves tested	Number positive
2010	18
2011	6
2012	0

Also at this time all remaining female calves were vaccinated twice, a month apart in May and June as a primary vaccination for BVD. The negative

BVD continued...

tested bull calves were sold. In 2010 all bulls on the property were tested for P.I.s and all were negative. The bulls were also given their primary vaccination course at this time. Now only BVD negative tested bulls, vaccinated against BVD are purchased.

On going programme

All calves will be tested for P.I.s at weaning and all positive tested calves will be slaughtered.

N.B. After 3 years of testing and vaccination in 2012 all calves were negative for P.I.

Also the empty rate of heifers had fallen through 22% in 2010, 0% in 2011 to 6% in 2012.

All heifer calves will be vaccinated twice, a month apart before mating and all bulls will be vaccinated annually.

What caused the outbreak?

In this case probably the introduction of a shedder cow in the 2008-2009 period, as the farmer was trying to boost cow numbers in the herd at this time.

Paul Langford BVSc



Feeding Fibre During Winter

Eating fibre stimulates salivation, which can help to protect cows against bloat and acidosis. It also stimulates the cow to chew her cud ensuring particles are physically broken up for digestion. On the other hand fibre sources tend to have low energy and protein levels and feeding too much can be detrimental to production. At high levels of fibre feeding (>25%) the amount of food eaten by the cow reduces.

Cows require between 17 and 25 % of their diet as effective fibre. The actual level will vary with the type of diet, in general the more meal or grain offered or winter crop the higher the requirement for fibre. For cows on high grain diets feeding up to 3 kg of hay will help ensure optimum rumen function. Offering animals a source of fibre will help demonstrate their requirement, if they need it, they will eat it.

So how much fibre should be fed and of what type? The length and rigidity of particles is important. Particles chopped too short do not have the physical effect needed in the rumen. Hay and straw provide the required rigidity to poke the rumen wall and stimulate cud chewing. Feeding highly processed meal or large quantities of crop increases the need for fibre in the diet.

M Baer BVSc



Woody Tongue

Woody tongue is the common name for a bacterial infection by *Actinobacillus lignieresii*. This is a common condition in cattle and is often characterised by a firm/rigid tongue or cheek (hence the name woody tongue), salivation, poor body condition (due to the inability to graze properly) and swelling under the jaw.



The bacteria is a normal inhabitant of the mouth and does not cause disease in healthy tissue. However, if the soft tissue gets damaged then the bacteria gains access and can cause problems. The risk factors for the disease therefore include anything that can cause abrasion in the mouth such as fibrous feed, thistles, and soils that contain abrasive materials. The tongue is often affected, as cattle use the tongue toprehend food, but lesions can also occur in the lips, cheek and oesophagus.

Cases are considered sporadic, but animals managed in a group are often exposed to the same predisposing factors. Therefore multiple cases may be seen over a short time period.

Treatment normally consists of sodium iodide intravenously, with or without antibiotic treatment. Repeat treatment may be required 7-14days later, especially if the lesions are extensive. The earlier the lesions are found and treated the better the prognosis.

Rebecca Morley BVSc BSc



Calf Drenching

For a limited time we are giving away a free drench gun with all Converge and Alliance drenches.



Converge is a low dose oral double combination containing abamectin and levamisole, also vitamin B12 and selenium. 1ml/10kg

Alliance is a low dose oral triple combination containing abamectin, levamisole and oxfendazole, also B12 vitamin and selenium.

Calf Losses in Beef Herds

In recent work monitoring beef herds a significant calf loss between scanning and calf marking has been identified. Where these losses are greater than 10% further investigation is warranted to identify when they are occurring. Broadly speaking they can be broken down into pre-calving, calving and post calving. So far data collected shows a high number of losses occurring pre-calving especially in first and second calvers. Cattle scanned wet at 3-4 months gestation are expected to have minimal further losses. A wet dry rate of 0.5% per month would be tolerable but we have found a loss up to 8% in heifers. The only way to identify these cattle is to repeat scan four to six weeks prior to calving. This allows "empties" to be identified and further testing can be undertaken to identify possible causes. The "empties" can be removed from the mob and possibly sold, freeing up pasture for pregnant cattle.



Castration and Dehorning of Calves

On 23rd December 2005 Parliament enacted legislation making it illegal to dehorn calves over nine months of age without pain relief. The same legislation (the code of welfare act) prohibits castration by any means without pain relief after six months of age. Castration without pain relief using high tension bands at any age is prohibited. Pain relief entails the administration of local anesthetic, by a veterinarian.

The legislation stipulates that these procedures should be carried out when animals are as young as possible. For spring born calves (August – October) this means castration must be performed before February, (April for October calves). Dehorning should be performed before May.

The pain from these procedures will affect feed intake for a few days even in young calves.

When you are dehorning or castrating calves hygiene is of utmost importance. Infection of castration wounds is not uncommon. A clean bucket of water and disinfectant and sharp tools keeps the wound clean and makes the job easier.

After dehorning and castration, wounds can become flyblown, another reason to do the job earlier. Calves are also susceptible to tetanus and blackleg so vaccinating with 5 in 1 (or covexin 10) at least two weeks before marking is an effective and cheap way of protecting stock..

M Baer BVSc



March Hot Deal

We are running monthly hot deals, be sure to read your mailer so you get the best deal around.

This month 10% Off

Merial Ancare Pour On Drenches

Copper and Liver Biopsies

Copper is needed for growth, production, health, immunity and reproduction. The uptake of copper is affected by high molybdenum, sulphur and iron levels especially in winter and spring.

How do we test copper levels?

The simplest way to test is by blood testing a number of animals in whatever group is to be tested. Usually 8-10 animals are needed to give an overall representation of what is going on in that particular group.

The other method is by testing the liver for some of these elements.

Liver copper concentration is recommended over blood sampling when we are trying to establish a risk of deficiency or to check on reserves. This is particularly important for in-calf cows entering winter. The liver acts as the storage reserve for copper however adequate blood levels can be obtained even where storage reserves are quite low.



Liver biopsy is recommended over post slaughter collection as the cull cows may not be representative of the herd. In addition the same cows can be sampled from year to year providing valuable trend information.

Early winter is the best time to assess liver copper stores as it gives time to supplement before late pregnancy and lactation.

As gestation progresses the foetal demand for copper increases which puts a drain on copper reserves. In addition iron and molybdenum interfere with copper uptake. Animals on crop over winter are ingesting very little copper normally but also tend to have interference from these other elements.

The biopsy procedure itself is a relatively quick and simple procedure, with most of the time involved in the procedure is to ensure the site for the biopsy is surgically prepared. The procedure involves inserting a small trochar from the right hand side of the animal into the liver which removes a small core of liver that can be tested at the lab. Post biopsy health complications have not been reported.

We can tailor testing done on farms to suit individual requirements and in general this would comprise a mix of blood testing and liver biopsy work. The results of this testing will then determine what supplementation if any needs to take place.

Feel free to talk to one of the vets about what your

A bum steer is worthless bull

Ground beef is a cow sitting down

A stockholder is yards for cattle

Moscow doesn't make as much milk as Pa's

cow

Skinny Cattle

Are you getting frustrated with that skinny cow that won't respond to treatment? Throughout the year one or two cows will show up as not doing as well as the others.

Losing weight over a period of time is a sign of chronic or long standing disease. Cows aren't often noticed until they have lost a significant amount of weight due to the slow but steady decline in body condition. Aside from obvious ill health there are also economic losses with less chance of getting in calf.

There are several reasons for disease to present in this way. Six of the more common reasons are discussed below. The severity of each disease depends on the causative agent as well as how quickly the cow is picked up.

PARASITISM – less likely in adult cattle but number one cause in young stock. Again signs of not doing well and also diarrhoea. Fixable if not too much damage to the gut. Drench.

JOHNES – very common disease in cows aged between 3 and 5 years. Caused by a bacteria and presents as wasting +/- watery diarrhoea. Blood test to diagnose. There is no treatment and cows should be culled. It is picked up when they are calves so very difficult to control.

FOREIGN OBJECTS – baleage wrap, string, wire, other litter in paddock. Cows are very curious animals and will eat whatever they can get into. Animals begin to lose weight and stop eating. Will die if no intervention, only option is surgery to remove what is present as well as follow up treatment with antibiotics and pain relief. Very hard to diagnose. Prevention is best by keeping paddocks clean and tidy.

LIVER ABSCESES – result of subclinical acidosis over winter, again unresponsive to antibiotics and elevated liver enzymes on blood test. No definitive treatment.

BVD – either infected transiently or have it from birth. Persistently infected (PI) cattle often are poor doers and are noticeably smaller than the rest of their age group. PIs should be immediately culled and transiently infected show signs of not doing well, off-colour and diarrhoea. Blood tests to diagnose.

CANCER – affects cows as well as all other species. Basically fade away to nothing, doesn't respond to antibiotics and may show other signs, dependent on what type of cancer it is. Most common is intestinal cancer.

Treating a skinny cow is sometimes difficult due to similar signs for different diseases, and blood testing being essential in some cases and of no use in others. At times, if thin cows have gone too far, the cost to get them back to full health is too great. Options need to be considered carefully when dealing with that frustrating skinny cow.

M Reidie BVSc

