



Antibiotic use in food producing animals and companion animals has become a hot topic over the last few years. Increasing levels of resistance to anti-microbial drugs in bacteria causing diseases in humans are being recorded worldwide. Multi resistant bacteria in hospitals are a reality and a serious problem. There could be several reasons why these multi resistant bugs are emerging: wide spread use of antibiotics in humans in large areas of the world; increased mobility of people over the world; over the counter sales of all classes of drugs in large areas of the world; use of antibiotics in food producing animals and in animals in close contact with humans (companion animals). Use of antibiotics in food producing animals has been a hot topic for a while; feed medication for increased growth purposes in pigs and poultry was banned in Europe 15 years ago, preventive medication of feed has been banned a couple of years ago. Antibiotic use in these sectors in Europe is really restricted nowadays.

In the meantime antibiotic use in dairy cows has not escaped scrutiny. New Zealand is one of the lowest users of antibiotics in food producing animals, but a large chunk of antibiotics used in food producing animals is being used in dairy cows, due to the absence of a large poultry and pig industry in New Zealand. There is no denying that politics and trade issues have entered the discussion as well. Going forward we can expect changes in antibiotic usage on dairy farms in the next few years.

Antibiotic drugs have been classified in three classes: first-line, second-line and third-line with increasing restriction of use on farm. This means that certain drugs will be available for routine use, but that other drugs can only be used after a diagnosis, combined with culture and sensitivity.

Blanket antibiotic treatment at drying off is likely to be phased out in 2020. The proposal at this stage is that antibiotic dry cow treatment will only be allowed to treat existing infections. The arrival of Teatseal on the market has given us an option here.

The classification of drugs in three classes and the (future) expectation that antimicrobial drugs will only be used after a diagnosis (culture and sensitivity) will have consequences for the way we treat clinical mastitis on farm.

Guidelines regarding mastitis treatment have been discussed during the RVM consultations for the 2017-2018 season.

#### **Spring mastitis**

Spring mastitis in New Zealand is mainly caused by Streptococcus uberis. Streptococcus uberis is sensitive to penicillin. The drugs prescribed for these cases are all penicillin based and available as first line drugs.

### Repeat treatments and mastitis later in the season

These cases could still be caused by Streptococcus uberis, but could be caused by Staphylococcus aureus as well. Most of the Staphylococcus aureus strains in New Zealand are still sensitive to straight penicillin, but some are resistant. Drugs prescribed in these cases are often combinations of antibiotics; some of those antibiotics are classified as second or even third line.

It is clear that as policies aimed at restricting antibiotic use on dairy farms are being developed, culture of milk samples will become more important, and possibly compulsory, in the (near) future. With the arrival of the Check Up culture system in all VSHB clinics, overnight culture of milk samples is available. Culture is definitely recommended when repeat treatments are necessary, the first treatment has not been successful and resistance issues might be an issue. Best practice, short of culturing all mastitis cases, is to take a milk sample of the affected quarter before treatment. Freeze immediately and store in the freezer. If treatment of the quarter is successful the sample can be discarded at a later stage. If a repeat treatment is necessary the original sample can be used for culture and sensitivity, which will give a more reliable result than a sample taken after the first treatment. Sterile sample pottles are available at your VSHB clinic.

# **CALVES: DISBUDDING, COCCIDIA**

**KATHRYN SIGVERTSEN** 

Adult cattle with horns can be dangerous, and although removing them as an adult is possible it is much better for all involved if they never grew in the first place. Some breeds or lines within a breed are not born with horns, but those that are need some attention.

The best way to deal with horns is as a very young calf. The ideal age for disbudding is approximately 4-8 weeks old. Several batches may need to be done to fit them all in if you have a large number or a spread age group. The method we use involves local anaesthetic injected near the horn bud – recent changes to animal welfare regulations will see the use of local anaesthetic being a requirement from October 2019. Hot irons are used to seal around the horn bud and prevent it from growing. This procedure, if done properly, is a permanent solution to a lifelong issue

Around the second month of life (the ideal age for disbudding) is also the time that we tend to see high rates of coccidiosis, a disease in calves causing bloody faeces often accompanied by straining and flicking of the tail. These calves are usually eating quite a lot of pasture, and may even be eating meal that contains a coccidiostat. *Eimeria bovis*, the species of coccidia that causes disease in calves, is a protozoan parasite that can survive in the environment from one calf rearing season to the next, and is often seen where calves have been raised in the same paddocks year on year. Over time, calves will develop their own immunity

to this parasite however they may have reduced growth rates while they are infected. If the calves are showing clinical signs we can treat them with an anti-coccidial called Baycox. If there are no clinical signs, there can still be sub-clinical infections that may affect growth rates. It is possible to test for coccidiosis and we have some free testing available this spring to determine if there is a subclinical infection. Faecal samples can be taken at the time of dehorning and we will take 5 samples along with some basic information regarding the health of the calves, whether or not they are eating meal, and how much they are eating. Some research shows that treatment of subclinical infections can improve growth rates and these tests will show if coccidia are present and at what level.

A common question we have is "my calves are eating meal with coccidiostat in it, how could they get coccidiosis?" The job of a coccidostat is to suppress the growth and reproduction of the protozoa, however it can still survive. It is also dose-dependent, meaning that some calves may not be eating enough meal (for instance they may be eating more pasture) to have the complete effect. It will help to reduce the number of oocysts shed in the faeces and dampen down the clinical effects while still allowing the calf to develop their immunity. Individual calves that are not getting their complete portion of meal, or those that have encountered a high environmental burden may still succumb to the parasite.

We frequently get enquiries for the purchase of surgical materials for use with pig dogs that get injured. So why don't we take the option of an easy sale?

Knowing when and how to go about closing a wound up isn't as straightforward as it may seem when the results of such actions are examined. A similar situation arises with suturing equine wounds when some days after what had looked like a great job ends up with a total wound breakdown, putting the healing process back to square one (and this happens after a Vet has done the job!).

Tempting as it may seem to close a wound after being gored by a pig, it often isn't the right approach. The pig's tusks do an enormous amount of damage that often extend deep into the tissues. Under the conditions encountered the wounds become contaminated with dirt and hair leading to rapid invasion of bacteria that is carried into the damaged tissue also.

This means that suturing the wound in the field often results in more dead tissue and infection, without the desired effect of healing, than would be the case if handled less aggressively.

So what to do when faced with this type of injury?

The best thing to have in the first aid kit is a large crepe bandage with some clean pads. By immediately bandaging the area we can:

 Stop blood loss - The body stops blood loss from small vessels very efficiently with the bandage facilitating this.
 Using it with more tension as a tourniquet will stop blood loss from major vessels until help can be sought.

- Keep the open wound from getting contaminated Some contamination of the wound with hair is inevitable however I find most debris in wounds is from vegetation and dirt sucked in on the way home. The cleaner the tissue is the better it will heal.
- Keep the tissues approximately apposed This helps with healing in that tissue can seal together faster without as much inflammation needed for producing new tissue.

With minor clean rips up to about 5cm in length bandaging for a couple of days may be all that is needed since, when removed, healing can continue with drainage aiding the body getting rid of any contamination and infection. Our patients generally help rather than hinder by licking the wound at this stage.

Large, deep, infected wounds that aren't just affecting the skin are best taken to your Vet to sort out and the bandaging will aid enormously in making that job easier. A successful treatment often involves opening the wound up even more before closure to clean tissue/remove dead tissue and place internal sutures prior to closing the skin.

**TIPS:** Don't use harsh disinfectants on an open wound. Thoughts have changed about this and we now realise that bacteria killing chemicals also harm the very tissue that we want to heal. So various sprays and iodine and the like are not a good idea for maximising healing.

It's a really good thing to clean a wound if contaminated as soon as possible. One litre of the cleanest water available may be mixed with 2 teaspoons of plain salt to make up an isotonic solution that is best for this job. Best put into a plastic

drink container and liberally squirted onto the wound before bandaging.

A bandage that can be used as a tourniquet is an essential part of kit for anyone in the bush....one saved a possum hunting friend of mine years ago having suffered a deep gash....so it's not just our canine mates that bandages can do wonders for.



This is not a real pig dog.

# **INTRODUCING JOAO DIB & MIKE ROSS**

**CLARE RYAN** 

In Hastings we welcome Joao Dib, our new production animal veterinarian and Mike Ross, our new Retail Field Rep.

Joao Dib joins our clinic after 13 years in production animal practice in Manawatu after graduating from Massey. Joao originates from Brazil but now lives in Hastings with his wife and they have three adult children. He enjoys spending time on his lifestyle block, paddling with his waka ama team in Clive and, if time allows, going hunting. Joao has joined us as a mainly dairy veterinarian but has experience with all other species.

Mike Ross joins the retail team after a 20 year sales career with major animal health product companies with experience around successful brands, food production, animal health and the red meat sector. Mike originally comes for Wairarapa but now lives in Havelock North with his wife and two teenage daughters. He enjoys camping, waterskiing and plays some (low grade) squash. Mike will be based out of the Hastings office, mainly out on the road, helping our clients with any animal health requirements.





Mike Ross

# TRANSPORT CERTIFICATES FOR ANIMALS BEING SENT TO SLAUGHTER

**STUART BRUERE** 

A fairly common task we are asked to perform is certifying cattle for transport to slaughter. The strict definition here is that we are being asked to give our opinion as to whether an animal is fit for transport or not. We are **not** being asked to certify if it is suitable for human consumption – that's the job of the meat inspection staff at the works. Fair to say that in most cases the animals are certified, the animal is humanely transported to the closest "works" and the appropriate funds find their way to your bank account – no drama!

From time to time we are unable to certify the animal. Options in these cases are to treat the animal/slaughter the animal for home use/kill for dog tucker/kill and bury or wait to see if the animal improves sufficiently to be sent at a later date.

There are very clear guidelines we operate under as defined in the Animal Welfare Act and Animal Welfare Codes. These are as follows.

- 1. Certificates are only valid for 7 days following examination of the animal make sure you book with your agent before you call us.
- Certified animals have to be sent to the nearest freezing works – make sure your agent knows this. This requirement supersedes any supply agreements you may have with particular meat companies.
- 3. Lame animals must be able to "bear weight" on the lame leg. If an animal is "hopping along" on 3 legs, we may suggest appropriate treatment but we won't certify it for the works.
- 4. Animals with cancer eye can be sent if the lesion is no bigger than a \$1 coin. Lesions larger than this will preclude an animal from being certified for transport. In some cases, cancer eye lesions may not look too bad, however, if the lesion has spread to the bone around the eye or the local lymph nodes of the head, the whole carcase will be condemned at the freezing works.

- 5. In some cases animals may appear to walk normally, but when made to move at a faster pace, they may knuckle over on their fetlocks. This would generally indicate a serious spinal lesion and preclude an animal from transport. We could not confidently certify the animal would not fall over in the transport truck.
- 6. Sometimes we are asked to certify animals that have had broken legs that have healed. A common stock class that fits this category is young Friesian bulls. If we can establish you have sought veterinary assistance to repair the fracture and that it has healed well, we can certify these animals. If the animal has been "turned out" in the hope it will heal okay, without any veterinary assistance, it is unlikely we will certify it for transport. MPI will look at this as a retrospective offence under the animal welfare act and consider prosecution.
- 7. Thin animals cannot be certified as a guideline, cattle need to be at least BCS 2.5/10 to be sent to the works.
- 8. Animals with any form of active infectious process cannot be sent. Examples would be cows with mastitis, cows with retained foetal membranes, animals with actively discharging abscesses/wounds etc. Common sense should prevail here.
- Animals with horns growing back into the skin cannot be certified until the condition has been fixed and healed.

This is by no means an exhaustive list of the conditions we see; however, these are the common things. We hope this provides you with a good overview of how this process of certification works. We know most of you are well aware of the process and work within these guidelines; however, there are always those who like to push the boundaries and don't look to have animals certified. In the event that there has been an offence under the Animal Welfare Act, the starting price for a defended hearing in the courts is \$20,000.

# ANOTHER GREAT TURN OUT: THE ANNUAL SHEEP FARMER SEMINAR

**RICHARD HILSON** 

In late July Vet Services hosted another well-attended series of sheep farmer seminars, with about 160 farmers from our part of the East Coast at four venues. These seminars have become regular events on the farming calendar and we strive to provide current and relevant topics, with key speakers and good hospitality. This year we added an extra sideshow...

Key messages were based on the somewhat scary topic of lice resistance to ectoparasiticides and anthelmintic resistance in worms. Colin McKay, "Mr Ecto" in NZ now and working with Elanco, gave an enlightening history of lice control (who remembers statutory dipping requirements?) and some good guidelines for the most effective methods of controlling lice currently. Lice simply do not go away and we need to pay more attention to timing to give ourselves the best chance of minimising their numbers and their impact each year.

Sara Sutherland spent time engaging her audience with the gnarly subject of sheep lameness, following on from her wideranging ram soundness study and an international speaking engagement in UK. Sara challenged farmers to work out the cost of lameness and to therefore easily justify intervention at an early point. We know that she hit the nail on the head, judging by the amount of feedback we received in the next couple of weekslame sheep are a hot topic this (wet) year and, to be fair, doing nothing is simply not an option.

Two in-depth investigations of very recent discoveries of triple

drench resistance in CHB and Tararua probably created some consternation. While the two farms had varied histories in terms of monitoring and anthelmintic use, both arrived at the same near-impossible point by different routes. One farm appears to have maybe purchased a problem with a neighbouring farm while the other has involved large numbers of lambs in defined areas with regular drenching, no refugia and no integration of other stock. Many farmers would recognise aspects of their own systems within the two described and these cases hopefully serve as a "call to arms" for those with good anthelmintic performance or those who have not done a FECRT or any monitoring.

As a variation on past seminars, Vet Services took an opportunity to recognise the value we place in the close professional and technical associations we have with our major suppliers. These suppliers also came to the party, providing nearly \$8000 of spring animal health remedies, which were collected by five lucky attendees at each of the venues. It was apparent that no one came to win some drench or dip but this did add an air of anticipation and festivity at the end of the serious stuff!

Many thanks to all who attended the seminars and to all who helped make them happen. If you were unable to attend and wish to have a copy of the material sent out, please contact your nearest Vet Services clinic and we'll get one in the mail to you. And we already have some topics lined up for 2018....

## **SEASONAL UPDATE**

## **HASTINGS/NAPIER**

The weather has been wet but this has not been too disruptive to lambing as at the middle of August. Lame cows have been a problem on some dairy farms with large numbers being treated by our vets. Some of the cases are bruising or simple "white line disease' but there are a few where the problem has progressed to more serious problems. We once again can confirm that the key to successful treatment is careful observation and early intervention.

Another by-product of the wet weather has been a relatively high incidence of mastitis in dairy cows and scours in reared calves.

We are attending various problems on lifestyle blocks including lambings, bearings and a relative large number of lame sheep and

#### **MARK MATTHEWS**

goats with scald and footrot. We are fortunate to be involved early in most of these cases so our success rates for treatments have been very good.

We have had a few cases of magnesium grass staggers over the past month. The highest demand for magnesium is at peak lactation and will be exacerbated by high feed demands during wet cold days. Hopefully September will not produce too many problems in this area.

Local orchardists and grape growers are gearing up for the start of flowering and bud development. Frost control will be foremost on their minds over the next few weeks.

## WAIPUKURAU

Spring is when you feel like whistling, even when you're covered in shit!

Waipukurau, sunny, 16 degrees. A coffee, a beef and coleslaw roll, the gentle warmth of sun on the face. The bustling metropolis of the Waipukurau train station. The meeting place of the caffeine deprived. It seems the wetsuits and waterwings have been given a rest the past week; its warming up and somewhat drying out – spring is on

#### MIKE FITZGERALD

its way. Great to see lots of twin and triplet lambs bouncing about, grass growing and the smiles returning. Watch out for type two ostertagiosis in 2-year-old cattle, and 'red worms' in horses – both of which bury into the gut lining to overcome winter, and reappear in spring – we have had some cases of this in early august – seemingly a little earlier than normal. Take care out there!

## **DANNEVIRKE**

Spring definitely feels like it is on the way with this fantastic sunny spell we are currently experiencing, it makes everything seem OK after what has been the wettest Winter for a long time. We have been seeing issues with lame stock and since calving has started some fairly bad cases of mastitis are cropping up. Calf scours are back and other calf related illnesses are popping up also.

If you are having problems with high somatic cell counts in your herd or a higher than usual number of clinical cases of mastitis then please give us a ring. We have tools to help get through what can

## SIMON MARSHALL

be quite a stressful experience. We have been checking colostrum quality for new born calves and have been finding a range of quality out there, some excellent, some poor. Blood testing for Magnesium, Selenium and Copper has started in milking cows and we are also testing for energy balance as well.

We hope that this fine weather continues so that lamb survival is excellent and grass growth is above normal. Look forward to seeing you all soon, Happy Spring.

## WAIRARAPA

September is normally the month lamb docking gets underway and you start to get an idea of how well your ewe scanning percentage has converted into a your lambing percentage for the year. Based on the results from our ewe BCS survey in the Wairarapa, we are expecting better lamb survival and lamb weaning weights than we saw in 2016. Ewe BCS scores at scanning time were very good, with most flocks having around 90% of their ewes in BCS3 or better. I know we keep "banging on" about this but the key factors that influence lamb weaning weight, are ewe BCS at lamb drop, and the feed covers that ewes lamb on. A ewe in BCS2 at lambing will

### STUART BRUERE

produce a small lamb – period! Pasture covers below 1400kgDM/hectare will reduce the potential for a ewe to establish a good lactation if the ME of the feed is significantly below 10. Ewe lactation is very difficult to manipulate upwards once she has lambed. Ewe milk has an ME equivalent of 13, so clearly there are lots of "easy metres" to be gained in lamb growth if a ewe milks well.

In July, MPI published 46 changes to the Animal Welfare Act, to be applied as of 1 October, 2018. We will draw the significant ones to your attention before that point – suffice to say they are "common sense" and should not create problems as long as you are prepared.

## **OUR VET TEAM**

Napier & Clare Ryan, Dave Kruger, Dave Warburton, Helen Crawford, Helen Taylor, Ian Leadbetter,
Hastings: Joao Dib, Mark Matthews, Neil Stuttle, Rachel Griffiths, Richard McKenzie, Roger McKinley,

Sharné Boys, Stuart Badger, Veronika Pipe and Vicki Gilchrist.

Waipukurau: Annelise Enslin, Anyika Scotland, Camille Flack, Caroline Robertson, Geert Gelling, Harry

Whiteside, Kathryn Sigvertsen, Lucy Dowsett, Mike Fitzgerald and Richard Hilson.

Dannevirke: Corinna Minko, Ingrid Meijer, Johnny Atkins, Kate Matthews, Naomi Barrett, Simon Marshall

and Tim Hogan.

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Masterton: Elke Blommers, Jacques Van Zyl, Louisa Broughton, Nicola Haglund, Sandy Redden, Sara

Sutherland, Sarah Wolland and Stuart Bruere.



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