

APRIL 2019

VET NEWS

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DRENCHING DAIRY COWS



Some photos by Richard Hilson

VETservices
www.vshb.co.nz

PIN OAK POISONING IN CATTLE

STUART BRUERE

Many species of oak are grown in New Zealand and cases of acorn poisoning have been reported frequently. Oak, rather than acorn, poisoning is uncommon in NZ. A feature of Pin Oaks is that they have very few acorns. Following is a case report of toxicity in beef cattle grazing pin oak.



Pin Oaks that were grazed by beef steers.

A farm was visited to examine five sick steers. They were all hollow in the gut and three of the five had dark almost black faeces. The mob of 25 Hereford steers had been grazing in a

paddock lined with pin oaks. In the previous spring the farmer had trimmed the trees as they were situated below power lines. Subsequent to this numerous fresh regrowth had sprouted on the cut surfaces. There was clear evidence of cattle chewing the regrowth.

A diagnosis of oak poisoning was made. The five sick steers were given supportive care – plenty of good pasture, clean water and shelter. Three weeks later the property was revisited so the five steers could be checked. Four of the five had made a reasonable recovery but the fifth one had lost significant weight. Blood samples showed that there had been some kidney damage done, however; as four seemed clinically normal, they were left to make a recovery. A post mortem examination was carried out on the fifth steer. The microscopic examination of the tissues showed that there was extensive damage to the kidney tissue (the toxin is tannic acid and causes damage to the renal tubules and cells lining the gut). There were also several erosions and ulcers in the oesophagus and oesophageal groove. These lesions explain the dark faeces, as this is digested blood.

In these cases it is difficult to predict the outcome as kidney damage to individuals can be quite variable. In some cases you will observe dribbling deaths and in others there will be fewer deaths. It wasn't completely obvious as to why the steers had eaten the oak as there was reasonable pasture available. Clearly it is a good idea to make sure that when cattle are grazed near any form of oak tree, the trees are hot-wired off to prevent foliage from being eaten.

HAVE YOU BOOKED YOUR EWES IN FOR SCANNING?

We have been at the forefront of ultrasound pregnancy scanning in the Bay and we pride ourselves in the delivery of a timely and accurate service. We have always aimed to be "middle of the road" from a pricing perspective and we have seen many other operators come and go over the three decades that we have been scanning ewes en-masse.

We provide:

- top operators, both veterinary and technicians, with an annual training and succession plan
- flexible service to provide your preferred team, around dates that suit you. Weekends too!
- veterinary back up and immediate investigation of flock fertility and fecundity issues
- NZ's largest and most complete sheep scanning data base with your data back to you with strong and valid age, breed, district and provincial benchmarked comparisons

- good gear: we invest in the latest ultrasound equipment for quality results, we carry "spares" so we never get held up by breakdowns and we maintain and modify our crates to make them better all the time
- an experienced labour unit is included in the price to assist in good sheep flow. This is not an "extra" and neither are the raddles or markers.
- free faecal egg counts from two mobs of ewes, reported back to you promptly by vets. Do you need to drench or draft this winter?
- we will come back to rescan late ewes or to scan little mobs. Scanners from far, far away don't want to come back for these jobs- we do, happily.

Jump on our website www.vshb.co.nz to book your scanning in for the 2019 season kicking off soon.



A set of twin lambs- can you spot two heads?

THE VALUE OF AUTOPSY EXAMINATIONS

STUART BRUERE

There are seasons of the year when we tend to do more autopsy examinations in livestock. We certainly do more in the Autumn and Spring. This tends to be associated with periods of high risk disease outbreaks and about the time animals are about to give birth.

There are various reasons we do autopsy examinations. In many cases we are looking for the cause of death of a single animal or several animals. This gives us the "clues" we need in order to make a diagnosis and put in place remedial action to prevent further deaths and loss. In a few cases we need to carry out an autopsy examination in order to satisfy the requirements of an insurance claim for a valuable bull or ram.

There are a few things that help us make much better use of animals for autopsy. These are highlighted below;

1. If you find dead animals and the idea of an autopsy enters your thinking, please let us know promptly so we can deal with this ASAP. Green, smelly and rotten carcasses are of very limited value.
2. If you find the dead animals in a difficult location, such as the bottom of a gnarly gully, if at all possible it can be helpful to try and get it out first so the autopsy can be done in a flat area of a paddock. Carrying out an autopsy with one foot in a creek and the other one up a creek bank is pretty tricky.
3. If you find dead animals and suspect a poisonous plant as the cause of death, move the remaining live animals to a safe location. An example of this would be to move sheep off a riverbank where Goats Rue plants are growing.
4. If you are thinking about making an insurance claim for a dead animal, please contact the insurers early in the event. There are numerous occasions where we carry out autopsy examinations only to have a farmer come back to us a few weeks later as they would like to make an insurance claim. Cynical as it sounds, Insurance companies look for reasons not to pay out – don't give them any! I often say "no" is just the start of negotiations!!



A fat two tooth ewe found dead in February. A quick look could make you conclude the death was due to Salmonellosis. In fact the autopsy of this ewe revealed she had died of Black Disease, one of the Clostridial bacteria (*Clostridium novyi*) that is activated by migrating immature Liver Fluke. A sound 5 in 1 vaccination programme in the sheep flock ended these deaths.

5. Please involve us early. Often we are only notified after a farmer has incurred significant losses. A single autopsy often "solves" the problem, but in many cases we need to carry out several to make the correct diagnosis.
6. If you are looking at an abortion outbreak in sheep, please have available the recent vaccination history of products such as Toxovax and Campyvax4.
7. Try and have staff available to us who have seen the deaths occur. They often have vital pieces of information that help us put together the puzzle. It can be quite frustrating to carry out an autopsy in isolation and have to wait for a critical person to be available to question.
8. In some cases, live flock or herd mates can also yield useful information. In a disease investigation such as calf abortions due to Theileria, a calf autopsy may yield little useful information but a blood test of the aborting cows to check for Theileria will very quickly confirm the cause.

TRANSPORTING DEHORNED CATTLE – DO YOU KNOW THE RULES?

KATHRYN SIGVERTSEN

It is widely known that cattle with long and/or sharp horns are not suitable to be transported, but at what point does a horn become long? We have found recently that consistent written guidelines do not really exist. There are several different suggestions, coming from stock agents, MPI personnel, and what may be known as good management practice. These vary but probably the most commonly quoted would be "no sharp ends and within the ear". For most cases this seems to be appropriate, although the exception is curled horns that are growing back into the head – these need to be removed before transport also and under new rules you can be fined \$500 for having or transporting animals with ingrown horns. The risk of long or sharp horns is carcass damage and bruising of other animals, and a safety risk for handlers. It is important to also note that it takes some time after dehorning for large horns to heal appropriately, and it is recommended that they be dehorned at least three weeks before transport to reduce the risk of bleeding and damage to the raw end of the horn.

There have been some changes to the Code of Welfare – Painful



Husbandry Procedures (1 October 2018). For many years there has been a requirement to use local anaesthetic when dehorning cattle over 9 months of age, and from October 2019 it will be required to use local anaesthetic for all ages of cattle including for disbudding young calves.

If you do find yourself in a situation where you have cattle that need

dehorning before transport, there are a few golden rules to follow:

- Make sure it is done appropriately for the age of the animal e.g with local anaesthetic
- Keep any paperwork that may be provided by the vet at completion of the job, that should detail any withholding periods, for example if sedation is used
- Wait 3 weeks before transporting to allow healing of the horn end (longer if required by a withholding period)
- If you have young calves with horns, have them disbudded to prevent this problem in the future!

If you aren't sure about your particular situation please get in contact with us sooner rather than later.

DRENCHING ADULT DAIRY COWS

CLARE RYAN

Adult dairy cattle have a very good immune response to parasites which limits the development of eggs causing pasture contamination. Sometimes that immunity can even kill off parasites.

But... two NZ trials have proved that treating adult dairy cows at calving with Eprinex can produce an extra 0.03kg milk solids per cow per day for up to 150 days, amounting to 4.5kg milk solids per cow for the season, due to the cow diverting energy from fighting parasites into making more milk. Yes, I said "at calving"!

Most dairy cows are drenched at drying off but that doesn't give as good a response as that at calving, despite autumn being the season when pasture larval contamination is likely to be highest. There may also be a benefit from drenching your early calvers and low body condition cows in January or around scanning time.

We know that having a high worm burden in the stomach can cause inappetence in cattle, therefore they eat less and consequently limit milk production. This is a good reason to treat skinny cows but be aware if other disease processes are occurring you won't necessarily see



any benefit.

Eprinomectin is the only drench proven to give this response in milk production due to its formulation. Eprinex with a nil milk withholding is a pour on of choice – don't be tricked by other products making this claim.

In the same trials heifers treated with Eprinex conceived 12.9 days early than their untreated herd mates which amounts to over \$80 extra production (at 1kg MS/day at \$6.50 payout) in the next season. Keep in mind that this is about worms rather than the drench itself – growing good heifers means you need a good parasite programme too.

So in summary: drenching adult dairy cows with Eprinex Pour on at calving time will give a 6:1 return on investment at payout of \$6.50 and drenching heifers will result in earlier conception.

On the flip side of this great return on investment is that a significant consideration when drenching adult stock of any species is how you will affect drench resistance on your farm – a longer term view over a short term gain. Give us a ring if you would like to discuss this further.

RESTRICTED USE OF ANTIBIOTICS IN ANIMAL HUSBANDRY AND DRY OFF

GEERT GELLING

In human medicine the increase of occurrence of multi resistant bacteria in human infections is causing an intensifying discussion around antibiotic use, not only in humans but in farmed animals as well. Antibiotic use in farm animals has been criticised and identified as a source of multi- resistance in bugs isolated from human cases.

In the past, a lot of drugs were used through feed and drinking water application, in the intensive poultry and pig industry worldwide, to prevent infections and to increase growth rates. These drugs were often dosed at half to quarter effective dose levels. Using antibiotics in this way may cause the development of resistance in a bug population. In the meantime, all these applications have been banned in Europe and antibiotic use in animal husbandry is seriously restricted.

Another likely cause for the increase in multi resistance in human bugs is international traffic. Large areas of the world have no restrictions on antibiotic use in humans; all antibiotics can be bought over the counter without a prescription from a doctor. Multi resistant bugs can be cultured out of rivers in South East Asia and India. Due to cheap air fares and increased wealth, large numbers of people are travelling to these areas, holidaying, back packing or on business trips. Quite a few people will pick up an infection by a possibly multi resistant bug and a few of those people will end up in hospital after returning to their home countries. This could well be a cause for the increased number of multi resistant bugs cultured from hospital cases in the western world.

Antibiotic use in farm animals in New Zealand is low; New Zealand is the third lowest user of antibiotics in farm animals, measured as treatments per animal. At this level of antibiotic use in farm animals New Zealand is definitely not the cause of the issues, but, being an exporting country, New Zealand still has to show importing countries that antibiotic use on farm meets best practice standards. Best practice is that antibiotics will only be used after a valid diagnosis (clinical examination and/or bacteriological culture).

A large chunk of antibiotic use in New Zealand is Dry Cow Therapy. When we think about best practice in prescribing Dry Cow Therapy we run into trouble. Individual culture of all quarters is simply not an option due to the numbers of cows to be dried off in a short period of time. As blanket Dry Cow Therapy (that is, all cows get antibiotic treatment) will not be an option anymore in the next few years we need systems to decide which cows need antibiotic treatment at dry off and which cows could have no treatment or Teatseal only. Recording of clinical cases and availability of bulk and individual cell counts is very helpful when making that decision. Recording clinical mastitis cases in Minda, signing up to Infovet and allowing Infovet access to Udder Health data in your Minda and Fencepost records are the steps that need to be taken to allow a meaningful discussion about Selective Dry Cow Therapy for the next season. The days of Blanket Dry Cow Therapy seem to be numbered: Selective Dry Cow Therapy will be the norm in a few years' time.

OUR VET TEAM

Napier & Hastings:

Clare Ryan, Dave Kruger, Dave Warburton, Georgina Campbell, Greg Tattersfield, Helen Crawford, Ian Leadbetter, Joao Dib, Neil Stuttle, Rachel Griffiths, Rachel Muir, Richard McKenzie, Roger McKinley, Sharné Boys, Stuart Badger, Veronika Pipe and Vicki Gilchrist.

Waipukurau:

Annelise Enslin, Anyika Scotland, Anne Gelling, Camille Flack, Caroline Robertson, Geert Gelling, Harry Whiteside, Kathryn Sigvertsen, Lucy Dowsett, Mike Fitzgerald, Nicolette Adamson and Richard Hilson.

Dannevirke:

Corinna Minko, Johnny Atkins, Kate Matthews, Naomi Barrett, Simon Marshall, Sophie-Leigh Anderson and Tim Hogan.

Masterton:

Anne Ridler, Jacques Van Zyl, Louisa Broughton, Naya Brangenburg, Nicola Haglund, Sandy Redden, Sanncke Neal, Sara Sutherland, Sarah Wolland and Stuart Bruere.

CLOSTRIDIAL DISEASE IN SHEEP

GEORGINA CAMPBELL

Clostridial vaccination prevents against key clostridial diseases that can cause sudden death in your sheep. The diseases these vaccines protect against include:

- Tetanus
- Pulpy Kidney (enterotoxaemia)
- Malignant oedema
- Black disease
- Black leg

The clostridia bacteria are found everywhere in the environment on farms and animals are susceptible following injury (docking, a wound or bruising from yarding). With the exception of tetanus these conditions present with severe disease and quick death. Even if an animal is found alive there is little available to treat it. The only way to control and prevent disease is to vaccinate animals. Most losses are reported when vaccination hasn't occurred.

Vaccination protocol

To start a vaccination programme all animals require two injections at least four weeks apart. They will then need an annual booster to retain immunity. It is best to vaccinate ewes



Tetanus in a lamb

annually 4-6 weeks pre-lamb to give the best immunity to the lambs. The lambs will be passively protected for up to 16 weeks. The replacement ewe lambs (and lambs remaining on the farm for a while) should then be vaccinated at weaning and then again four weeks later. If the ewes haven't been vaccinated before lambing the lambs will need lamb vaccine at docking to provide short term protection against tetanus and pulpy kidney. For long term protection they will still need two shots four weeks apart. In an outbreak of pulpy kidney (enterotoxaemia) vaccination is immediately required to prevent further losses. The vaccine is given as an injection

under the skin in the neck.

We have a range of vaccines available to cover all eventualities. Clostridial disease is complicated by age of the animal, how long you need to protect them and even what they are eating and how they are managed. Want to get the best system with the best coverage? Please call in for a chat about clostridial vaccination options.

TRY SOMETHING LICE AND SIMPLE FOR SHEEP THIS WINTER

RICHARD HILSON

The topic of wool prices and the difficulty in actually making money from wool, especially when second shearing, is a common discussion point of late. A great renewable product that remains stuck in the doldrums. Hard to imagine that when Roger Douglas and his mates properly torpedoed NZ farming in the eighties, the only way to make money was with wool and there were farmers not putting the ram out!

It is hard to ignore lice in sheep, unfortunately. Second shear often removes nearly the whole lot pre-winter and careful observation means you could easily sneak through winter without any big lice build up. Unfortunately, no one keeps a close eye on lice populations so the outcome is that we see significant issues at the end of every winter, often worst in hoggets which are woolly and not shorn since December to February. Split shearing in ewe flocks doesn't help either. So lice are here to stay and, in most cases, farmers want to avoid the mess that ensues when lice numbers get away.

On top of this, simple pour ons like Cypercare, used extensively in the last couple of decades and off-shears, seem to be running into some issues with tolerance or resistance. If these products are working well, a change of active ingredient is a good idea too. Either way, "Expo" is a good option. Expo uses spinosad to kill lice and needs to go on off-shears too (ie: no change from what you were doing with Cypercare). It is a bright blue colour, so really easy to see where you have been, and the applicator gun is very nice to use, requiring very little hand pressure (a consideration when the flock numbers in the thousands).

We have revamped our advice around ectoparasite control and a key part of that is ensuring products are used in a better technical manner. This includes being aware of what was used in summer for fly, to ensure that the louse population gets to see a different active when you are targeting lice specifically in winter. An example here is that Expo is best used after, say, Cyrazin KO or Cyrazin, neither of which have spinosad in them. Conversely, Cyrex uses spinosad to kill active maggots in struck sheep as well

as being a preventative, so we'd suggest that you use a product other than Expo this year for lice control.

Expo is getting a slight re-labelling this year, with a bigger dose for "crisis" dosing, not unlike what we have used Cypercare for too. And be aware of an old label recommendation on it that suggest sheep be penned closely after application to assist in product movement across the sheep. This simply doesn't work (the editor tried it on a mob of ewes!) as the stuff you will put on is on the back and sheep don't do much back contact. Just let them run!

Expo is not the cheapest option for lice this autumn and winter but it is unique and is part of a sensible product rotation. We'll help you suss that rotation out.





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