



# NABSnet

# Newsletter

#58 | 10 December 2025

Hi all in the NABSnet network

Most important message this newsletter: **sign up for the next NABSnet Masterclass - in Perth on 6-7 March 2026.**

The Masterclass is an unique part of NABSnet that recognises the benefits of northern vets getting together (doing the networking bit) and upskilling.

This Masterclass will be a terrific opportunity to discuss cases, explore investigation techniques for disease events caused by nutritional factors and plant poisoning, do a practical exercise in the DPIRD Molecular Lab (TBC), hear tips from pathologists, get an update on global EAD status and risk factors for incursions in northern Australia... and a heap more.

So, don't miss out. There are still subsidised places left. Download the EOI and get it back to Tom Clune asap – see below.

Other things in this newsletter:

- An SDI of sudden death near water - likely urea poisoning
- A challenge - 'diagnosis in the long dead'
- The Cattle Skin Survey – now even easier to do

And a couple of farewells. After 8 years involved with NABSnet, Pauline Brightling and myself (Kev) are finishing up at the end of this year. We have both loved the connection with everyone across the broad north frontline and will miss you all, but know the good work continues.

As we were putting this newsletter together Pauline asked me my about my career - and has shared our yarn down below. Over to you in 2026, Bill - the NABSnet Vet Adviser role in good hands.

Cheers, and Season's Greetings, Kev and Bill



Kevin Bell



Bill Tranter

# NABSnet Masterclass 2026

**! Need to act now!**

## NABSnet Masterclass 2026 Perth, WA

**When:** Friday 6th and Saturday 7th of March 2026  
(accommodation check-in available from Thursday 5th March)

**Where:** Novotel Langley Park, 221 Adelaide Terrace, Perth WA

**Who:** Large and mixed animal veterinary practitioners in Northern Australia - the NABSnet network

**What's on:** The 1.5 day NABSnet Masterclass 2026 will be a valuable opportunity to connect with other northern cattle vets to share insights and enhance your disease investigation skills.

**The program will include:**

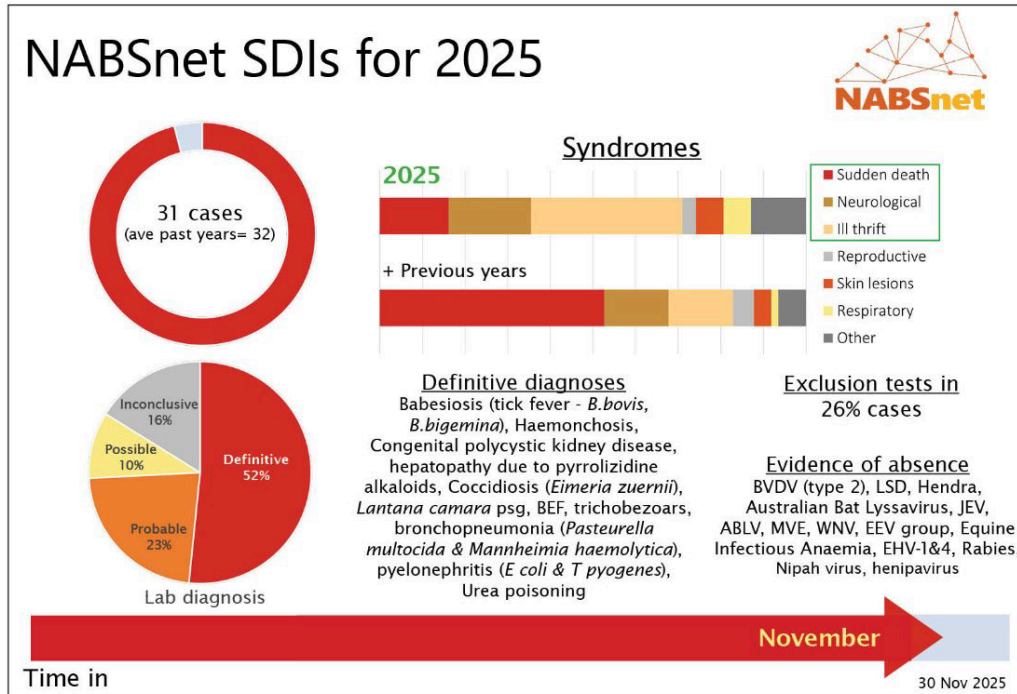
- SDI case presentations and discussions
- a practical exercise at the DPIRD Molecular Lab (TBC)
- deep dives into nutritional diseases and plant poisonings
  - tips from pathologists (getting brains out etc)
- an update on EADs around the world and our near neighbours

Participation at the Masterclass, accommodation, food and air travel will be subsidised by NABSnet for one vet per branch practice.

**Next step:** To register your interest, download the form and send to Tom Clune asap (details on the form).

[download EOI form here](#)

## NABSnet SDI dashboard - so far this year

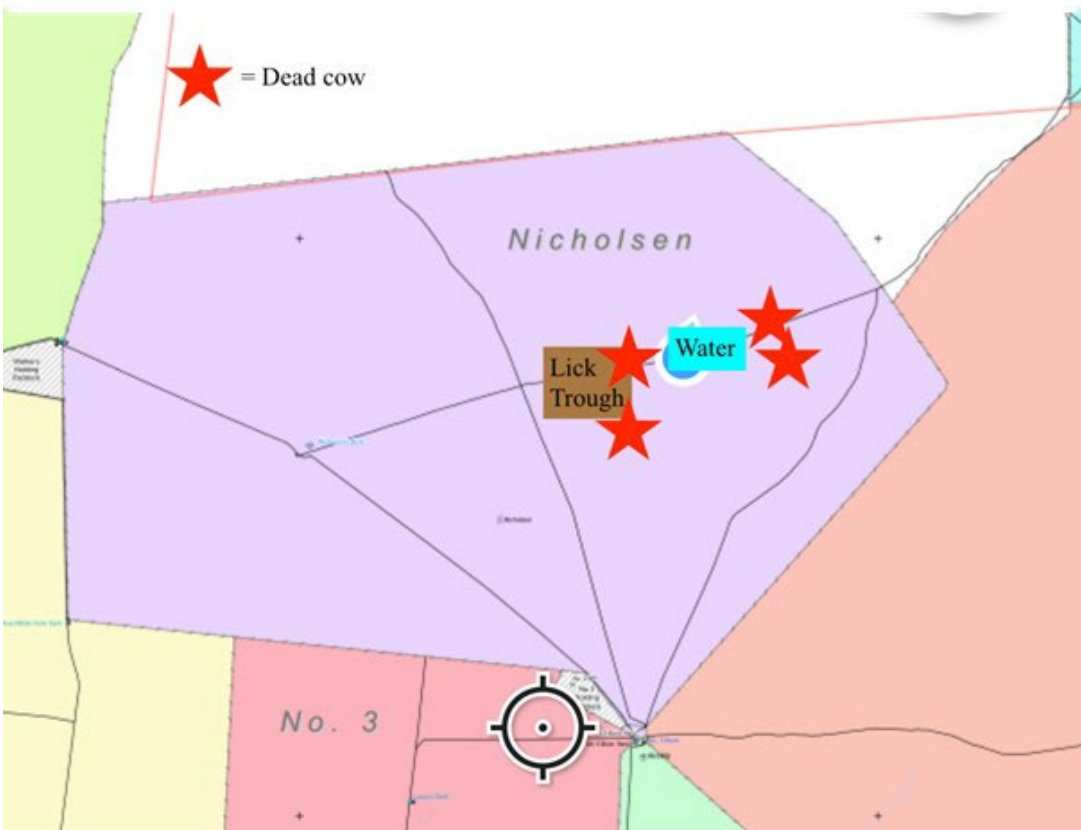


## Sudden death in cattle close to water

In September 2025 in western Queensland, four of a mob of 200 18-month-old composite *Bos indicus* were found dead within 50 metres of the water and lick trough. The others in the paddock appeared healthy.

All carcasses were already decomposing when examined by the attending vet, but some findings were possible:

- All cattle were bang tailed (indicating they had been vaccinated for botulism)
- There was no sign of struggle
- The two heifers were not pregnant and dry
- The rumen contents of the two heifers contained large amounts of lick
- Vitreous humour was sampled on the two heifer carcasses (where eyes were still present)



*Location of dead animals found by the bore runner*



*Lick and carcasses*

Field differentials:

1. **Urea/ammonia toxicity (most probable)**
2. Botulism
3. Clostridial diseases

Ammonia levels in the ocular fluids were significantly elevated. Although increased ammonia occurs with carcass decomposition, these levels did support (but not confirm) a diagnosis of urea poisoning.

A combination of unrestricted access to urea and availability of water near the lick trough led to acute ammonia toxicity (urea poisoning).

Urea is converted by rumen microbes to ammonia and if ammonia is not sufficiently digested by microbes or removed by the liver, increased blood concentrations can cause sudden death, which is suspected in this case. Water can increase the absorption of the rumen and can also increase the consumption of urea as it improves the palatability. When the urea lick becomes wet it can dissolve and recrystallise causing 'hot spots' – which may have occurred in this case because there had been a small amount of rain over the previous 3 days, and examination of the area showed a leak from the tank providing water to the trough.

#### **Recommendations:**

Immediately

- Move the lick trough further away
- Check the rest of the cattle every second day (there were no more deaths)

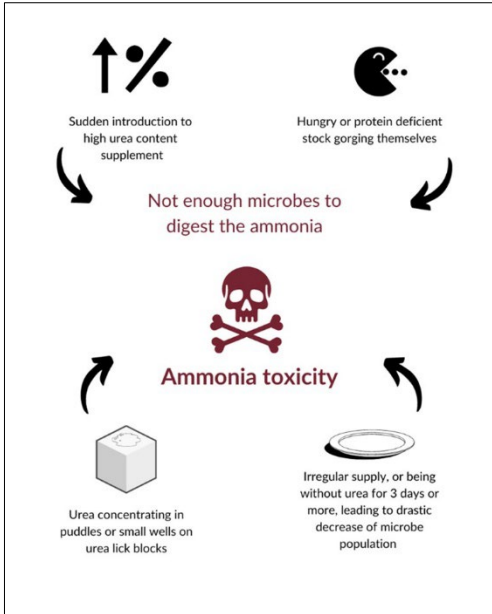
Ongoing

1. Introduce urea gradually.
2. Provide adequate roughage.
3. Keep lick troughs at least 500m from water.
4. Protect lick troughs from rain and moisture.
5. Ensure urea lick levels are maintained to avoid gorging when refilled.

#### **A previous SDI: [probable urea poisoning with soft lick blocks](#)**

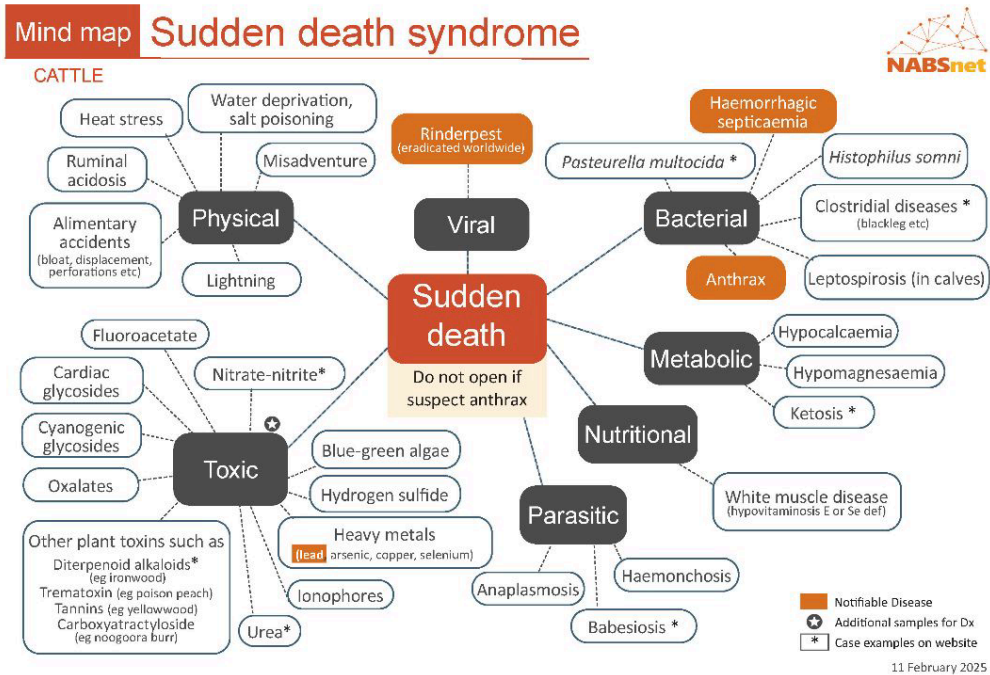
An SDI in Oct 2024 in FNQ investigated 18 of 950 BrahmanX cattle found dead or dying shortly after exposure to a new batch of lick blocks

On examination lick blocks from the new batch appeared unusually soft on top. Consumption rates were estimated for one paddock known to contain 200 head of cattle. Approximately 300 kg of lick blocks were consumed over 48 hours, giving an estimated intake of urea per head of 225 g/day (safe limit: 60 g/day).



Graphic from FutureBeef [7 strategies to minimise urea poisoning](#)

## Sudden death in cattle - things to consider



Post mortem		
	Fresh Individual, labelled, chilled	Fixed Pooled, formalin
Ocular fluids	<input checked="" type="checkbox"/> frozen	
Brain	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Liver	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Lung	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Kidney	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Spleen	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Heart	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Rumen contents	<input checked="" type="checkbox"/>	
Abomasum / forestomachs		<input checked="" type="checkbox"/>
SI / LI / IC valve		<input checked="" type="checkbox"/>
Skeletal muscle	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Any lesions	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Ante mortem (from cohorts)		
Bloods *3		
Blood smear		

## Sudden death Sampling

### Sampling considerations

- Several significant EADs.
- Need thorough history.
- Differentiate between 'sudden death' and 'found dead'.
- Lab focus is on infectious, parasitic, metabolic and toxic causes.
- Ocular fluids for suspect urea/ammonia, nitrate or phalaris toxicosis and for metabolic disease.
- Some sampling of live clinically affected cohorts may be useful.
- **Do not open carcass if suspect anthrax.** Wear PPE and take thick air-dried smears of bloody exudate and soil.

### Additional samples

- ✦ Tick fever exclusion: take organ smears - brain and kidney.
- ✦ Suspect plant poisoning: (1) submit plant sample (or photos), where access by the stock is clear, (2) submit suspect plant fragments from rumen.
- ✦ Suspect feed (eg ionophores): send feed sample, batch label and date, note batch details when problem started.
- ✦ Blue-green algae: rinse container in water source, sample from multiple depths on the downwind side of dam, add 5 mL of formalin to 100 mL water to preserve cells.
- ✦ Other suspected toxins - request tests for these - you may need to check with the lab about what to collect and how.

11 February 2025

## What can you diagnose in long dead carcasses?



At the last Masterclass in Townsville Tristan Jubb challenged us to consider 'Diagnosis in the long dead' – by careful assessment of the animal's characteristics and location, and consideration of just what can be diagnosed.

The participants at the workshop came up with 21 diseases and conditions that could be reasonably diagnosed in a 'long dead' carcase. How many can you list? (their list below)

**As Tristan reminded us  
"More is missed by not looking than not knowing"**

## **Cattle Skin Survey - continues, with some changes**

**The process is now easier for busy vets in the field and for collation of the results.**

NOW you send the photos and submission forms by email (not text message), dispatch the samples, and then send the invoice. You no longer need to send in the results – they will be collated from the lab.

BUT for the samples to be eligible for the subsidy, we must receive images and the additional Cattle Skin Survey submission form by email to [NABS@aff.gov.au](mailto:NABS@aff.gov.au)

## How to participate

1. Take photos of the lesions
2. Get punch biopsies (fresh + fixed)
3. Collect serum and EDTA bloods (if possible, not critical).
4. Fill in the Lab submission form **AND** the Cattle Skin Survey submission form. Both forms are necessary so we can analyse the data.
5. Email photos and both submission forms to the state lab (email addresses below) **AND** to [NABS@aff.gov.au](mailto:NABS@aff.gov.au)
6. Pack and freight samples and submission forms to your relevant state lab, to arrive the next day.
7. Send an invoice for \$600+GST to [NABS@aff.gov.au](mailto:NABS@aff.gov.au)

Email photos and submission forms to:

NT: [BVL.DITT@nt.gov.au](mailto:BVL.DITT@nt.gov.au) or

QLD: [bslclo@daf.qld.gov.au](mailto:bslclo@daf.qld.gov.au) or

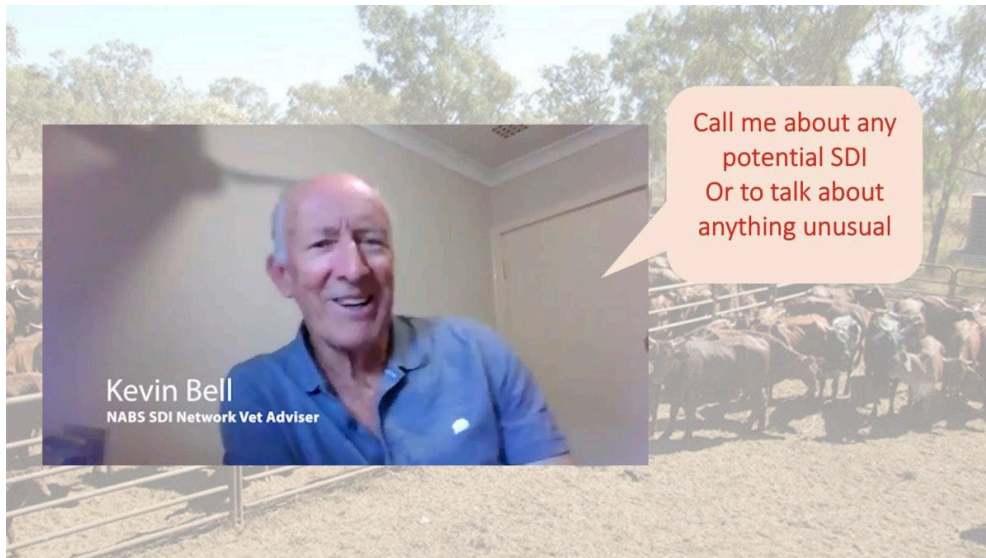
WA: [DDL@dpird.wa.gov.au](mailto:DDL@dpird.wa.gov.au)

AND [NABS@aff.gov.au](mailto:NABS@aff.gov.au)



[download instructions and submission form here](#)

## Kevin Bell – Korea, Kojonup and Kimberley connections



***Kevin Bell has been the Vet Adviser for NABSnet since its inception – so we all know him through the newsletter and his affable "it's Kev here" on the phone. He finishes his tour of duty this month and we grabbed the opportunity to ask about his career journey and highlights, and to thank him for being available 24/7 so that any of us could always connect on a tricky SDI.***

***All your input greatly appreciated Kev. 😊***

***It's a long time ago, Kevin, but in the 1960s, what took you into vet as a career?***

Well actually I was hell-bent on doing chemical engineering but in my last year at school I realized, much as I loved chemistry, I'd end up being a manager stuck in a factory in an urban environment, and I didn't want that sort of lifestyle. And so I thought, okay, what would I like? I'm amazed at that age, I thought that far ahead... to work in the country and be my own boss. I did Vet Science which was a wonderful choice that led down that track of not just chemistry, but living chemistry of plants, of animals - I just loved that.

I went to the Melbourne Vet School and met my wife Jo, in the same class, so it all began from there.

***And early on, after graduation?***

I did a year in the horse surgery department at Melbourne and then started a PhD with Jack Arundel looking at cysticercosis in sheep. For 18 months I was rearing worm-free sheep, injecting them with dog faeces and cutting them up into 1/8th inch slices, looking for *C. ovis*. Research was not all that sophisticated in those days, but it was solid and we published two papers in *Nature*. Then suddenly my heart wasn't in it. I had to go to the Dean, Ken Jubb and say I'm going to pull out, and he said "I see, Mr Bell, what are you going to do?" I said, "I'm..."

I'm going to play the banjo in a jazz band”.

So I got a start in sheep parasitology, and I did play the banjo for a while, but it didn't work out too well in terms of earning an income so I went into practice – doing a locum in Geelong and working with Jo in her practice at Bacchus Marsh.

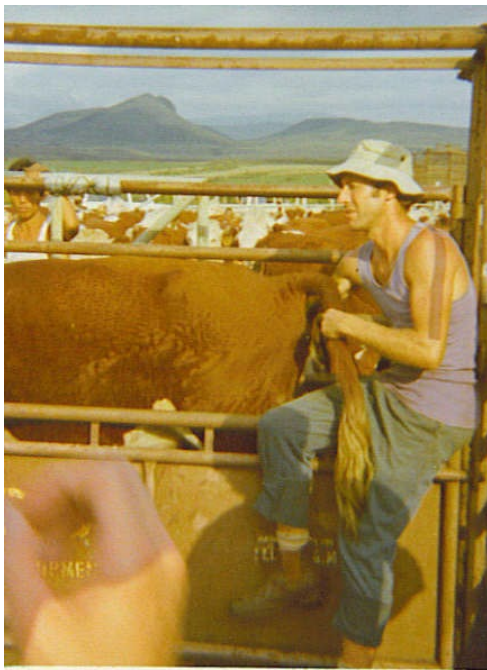
And then we both felt a desire to do some voluntary work somewhere overseas.

***OK that's another change in direction – where to?***

We did some preparation for volunteers with the Catholic Church and in 1972 they were going to send us to a cattle station mission near Broome, but that didn't eventuate. About 6 months later an opportunity to go to Korea came out of the blue – we heard about it on Wednesday, and by Saturday we had decided to go. February 1973 we packed up the kids and went to Jeju an impoverished volcanic island south of the Korean peninsula.

An Irish priest on the island had been looking to establish local industries for the people and brought in some sheep to start a hand weaving cottage enterprise – traditional Irish spinning and weaving in South Korea! And then a pig farm, and then cattle. They needed veterinary input – lots of pig diseases and a massive outbreak of Theileriosis in the cattle. I did lots of pig PMs and bucket blood transfusions in the cows, and learnt to speak Korean. It was an amazing 5 years and we have kept connections there ever since. Eventually the enterprise morphed to dairy and racehorses – now very successful.

We had 5 kids by the time we left and came back to Australia in 1977, and we went to Murdoch Uni where I did a project on how the veterinary profession could value-add to livestock production.



*Preg testing, Jeju South Korea, 1973*

***So that was the start of your time in WA?***

Yes that study began a project to build a production-based consultancy service for the sheep industry. We went to Kojonup and started with 20 farmers, advisory work but first getting to know the production base of soils and pastures – and compared results with a group of ‘control’ farms. When the project finished I stayed on offering a private sheep practice, added another vet and an agricultural science graduate, and we spent 23 fantastic years there. Eventually I wrote the initial project up as my PhD – so I did circle back to it! The 80s was boom time for sheep and other practices established too.

I started as Professor in a new Animal Science degree at Murdoch in 2004 and loved introducing soil and pasture science with their importance for ruminant nutrition. Great to see some of those graduates are kicking goals in the north now.

In 2010 I ‘retired’ to Broome where our son was living, so 35 years after nearly coming to Broome we actually arrived. After a couple of years I was keen for some more activity and took a job as a remote housing officer for the Education Commission – going to all the remote communities managing 162 houses for teachers. That got me all around the Kimberley and I loved it.

A few years later a role came up with Northern Beef Futures assisting pastoralists with business grants to work ‘on the business, not in the business’ – an introduction to the northern beef industry, my first stint in government administration, which was a bit of a different world. Over this time I filled in as government veterinary officer at Broome. That got me into plenty of cattle yards, bleeding cattle and tick inspection being a few jobs.

And then in 2018 NABSnet started and I loved the connect with the private practitioners – especially the young graduates - across the north. I’ve been doing that and research, operation review and advisory work involving mainly Wagyu cattle on irrigated tropical pastures and a feedlot at Pardoo. They have been my two main jobs for the last eight years. Now we are living in Perth with less on the ground time at the station.

The highlight for me has always been interacting with people out at the coalface – just out there enthusiastically doing what they are doing. It’s infectious.

***Kev, do you still play the banjo?***

Well, not so much. I keep thinking, at this stage of life, I'd love to get back into it. I've still got a few banjos, don't worry. If I could find a jazz band here, I would.

***Best wishes Kev – reckon that band is just around the corner.***



*The Southern Strutters, Kojonup, 1998*

## **Q. What can you diagnose in 'long dead' carcasses?**

**A. The list from the workshop at the last Masterclass (did you have any others?)**

Abomasal impaction	Sand, dirt, indigestible fibre balls occupying abomasum
Algae poisoning	Dried algal scum around muzzle
Anthrax	Extensive leaking of blood, positive smears
Diesel poisoning	Oily smell and texture of rumen contents
Dystocia	Remnants of calf in pelvic canal
Fluorosis	Dental enamel defects, excessively worn molar teeth, exostoses of limb skeleton
Gastrointestinal obstruction by a phytobezoar	Lethal if right size, shape and location (many phytobezoars are benign)
Gunshot	Bullet holes in hide or skeleton
Ingestion of toxic plants/fungi	Plant or fungal remnants among the gut contents
Laminitis (founder)	Pedal bones have pushed through anterior soles
Lead poisoning	Heavy grey shiny metal in reticulum and ventral rumen
Lumpy jaw	Deformation of mandibular bone
Misadventure	Indicated by postural and locational predicament
Ocular squamous cell carcinoma	Cancerous damage to orbital bone in the Hereford breed
Old age	Absence or wearing of incisor teeth, empty gut, growth rings if horns present
Osteomalacia	Thin soft bones

Osteoporosis	Thin brittle bones
Pharyngeal obstruction	Foreign body (usually bones) in pharynx
Rumen impaction	Rope, bags, sand, indigestible fibre in rumen
Starvation	Empty and/or indigestible-fibre filled gut, badly worn teeth in a young grazing animal
Trauma	Broken bones

## Key NABSnet SDI contacts

**Key contacts**

**Kevin Bell**  
NABS Vet Adviser  
0427 433 244

**EMERGENCY ANIMAL DISEASE WATCH HOTLINE**  
**1800 675 888**

**Bill Tranter**  
NABS Vet Adviser  
0417 605 379

**Marion Seymour**  
0427 420 176

**Charlotte Watson**  
0484 616 210

**Nina Kung**  
0409 634 281

**Cass Wittwer**  
0417 094 633

**Tom De Ridder**  
0401 877 670

Department of Primary Industries and Regional Development  
NORTHERN TERRITORY GOVERNMENT  
Queensland Government  
Australian Government Department of Agriculture, Fisheries and Forestry

### Kevin Bell, NABSnet Vet Adviser

Contact at: [nabsvetadviser@gmail.com](mailto:nabsvetadviser@gmail.com) / 0427 433 244

### Bill Tranter NABSnet Vet Adviser, QLD

Contact at: [bill@tablelandvet.com.au](mailto:bill@tablelandvet.com.au) / 0417 605 379

- QLD **Nina Kung** [nina.kung@daf.qld.gov.au](mailto:nina.kung@daf.qld.gov.au)
- NT **Charlotte Watson** [Charlotte.Watson2@nt.gov.au](mailto:Charlotte.Watson2@nt.gov.au)
- WA **Marion Seymour** [marion.seymour@dpird.wa.gov.au](mailto:marion.seymour@dpird.wa.gov.au)



Have a safe  
and happy  
Festive Season



Missed earlier NABSnet newsletters? [read them here](#)

To subscribe: [join here](#)

Sent on Kevin and Bill's behalf from the team at [Harris Park Group](#)

Let us know any topics you'd like to see covered in future issues.