Barkly Beef

DEPARTMENT OF **PRIMARY INDUSTRY AND RESOURCES**

JULY 2019

Inside this issue:

Editorial

Welcome to the latest edition of the Barkly Beef newsletter, which contains a variety of information applicable to all across the Barkly.

The Northern Territory (NT) Department of Primary Industry and Resources (DPIR) staff say a sad farewell to our Livestock Industry Division Director, Neil MacDonald, who is retiring after three decades of service. Neil has always been a staunch advocate for the Barkly, and will be sorely missed.

An exciting new research project, Paddock Power, is starting up on the Barkly. This aims to help producers with decision making regarding infrastructure development and its impact on production and return on investment.

The North Australia Climate Program have provided the latest Climate Outlook for the Barkly and a flyer for their upcoming workshops.

Geoscience Australia continue with their groundwater surveys in the region.

And last, but not least, the Animal Health News and Pastoral Market Updates.

The Tennant Creek DPIR office would like to welcome our latest recruit, Doug Townsley, who has recently commenced in the role of Administration Officer.

Happy reading!

Jane

www.nt.gov.au

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NORTHERN TERRITORY GOVERNMENT

End of an era

Neil MacDonald

The department has said farewell to one of its steadfast faces with Neil MacDonald (pictured) switching off the lights to his office for the final time at the end of June.

Anyone who has had any dealings with DPIR's Livestock Industry Branch over the past three decades will know Neil. In 1990, Neil was employed as a Research Scientist and since 2007 has been the Director of Livestock Industries Branch and the Regional Director of the Katherine/Nhulunbuy region. Neil has applied his scientific intellect and quiet management style to all activities of the DPIR and the broader NT Government regional role. His personable nature and generosity has always provided a welcoming face to the Katherine Research Station.

Neil actively represented the DPIR at the Territory and national level on various committees and boards, speaking up and 'holding his own' both in livestock and rangeland circles. Due to his no-nonsense and common sense approach, he and the department are held in high regard by many throughout northern Australia.

Prior to taking on more senior positions within the department, Neil completed research into a number of topics, including hormone growth promotants, and mineral deficiencies and toxicities (such as phosphorus and fluoride). However, he was particularly active in conducting research in the interplay between livestock productivity and stocking rate. Neil was one of the leading researchers in the Mt Sanford study, which ran for 12 years, and collaborated on its successor, the Pigeon Hole experiment.

For those who have had the pleasure of working with Neil field work was always "entertaining". Armed with a well-maintained NTG land cruiser he would often accept the challenge of many a bush track, creek and gully – shorts cuts were not always short cuts! Often accompanying him on these escapades was his hound, 'Hamish', who appeared to have some personal mission to increase the border collie content of the dog population in the Katherine and Victoria River District regions.

The department has much to thank Neil for. During his tenure, Neil was both the person in the background, facilitating opportunities, encouraging younger staff and then providing the environment to allow staff to focus on their work; and the person in the front providing the direction and challenging misguided thoughts and policies. One of Neil's many legacies will be his mentoring and development of new graduates and staff members. Under Neil's guidance, Livestock Industries Branchhave organically developed a team that are respected at local, national and international levels for their science and their practical interpretation of that science. This has enabled this small team to compete successfully for project funding at northern Australia and national levels.

Neil pregnancy testing at Mt Sanford

Neil and his wife Jane are well-recognised and active community members of Katherine. Their absence will be noticed and they will be sadly missed. Neil has said that they have plans to move to Brisbane to be closer to family and to slow down. We whole-heartedly wish them all the very best for their future.

Introducing “Paddock Power” – a new project unlocking the secrets to sustainable and profitable intensification in northern Australia

A new project that will have broad application across northern Australia has commenced in the Northern Territory.

Previous research (e.g. the Pigeon Hole experiment and the Beetaloo project) has demonstrated that developing more water points is a sound investment for achieving better pasture utilisation and increasing carrying capacity. However, the improvements in breeder herd performance and/or live weight gain that can be achieved from infrastructure development are less clear.

Fencing and water development is gathering pace on large properties across northern Australia. However, it is very expensive and producers have told us they are seeking stronger evidence of potential productivity increases in order to better articulate the business case to financiers.

The current situation

Many breeder paddocks in northern Australia are too big and under-watered to achieve optimum productivity. Impacts on reproduction and profitability include:

- over-and under-utilised feed (depending on distance from water) – see pictures below
- incomplete musters
- limited opportunities to implement herd segregation, controlled mating or tactical pasture management

Cattle having to walk long distances out to feed reduces their live weight gain and body condition. The negative impact of poor body condition on re-conception and calf survival rates further reduces breeder herd productivity.

Some producers speculate that calves born in large, poorly-watered paddocks are at greater risk of separation from their dam, with breeders leaving newborn calves to return several kilometres back to water. This may increase the risk of predation or dehydration and contribute to the high calf loss rates (>20% and up to 35%) often observed for heifers grazing such paddocks.

Over- and under-utilised feed represents a risk and an opportunity for pastoral businesses

Paddock Power has thus been designed to answer three key questions:

Question 1: How much impact does paddock area and distance-to-water have on production?

How will we do this? Use existing datasets and new paddock trials to measure:

- rates of calf wastage
- mortality rates
- steer growth rates
- how many kilograms of beef are produced in a paddock, and how many kilograms of beef could potentially be produced

Question 2: Where should we put new infrastructure to get best bang for buck?

How will we do this? Use GPS tracking to measure:

- how far cattle are walking - with and without calves
- how far from water calves are being born
- how cattle utilise paddocks of different sizes and watered area
- how paddock usage patterns change throughout the year

Question 3: What infrastructure development option will deliver the best return on investment for my situation?

How will we do this? Roll out the "Paddock Power Calculator":

- compare the performance of potential development options identified by the producer
- work out return on investment and payback period on the basis of your cost base, land types and productivity

Want to get involved?

- Join our Paddock Power Facebook Group
- Keep up to date with project findings on our FutureBeef webpage
- Contact Dionne Walsh (dionne.walsh@nt.gov.au) or Kieren McCosker (kieren.mccosker@nt.gov.au)

The Paddock Power project is funded by Meat and Livestock Australia and the Northern Territory Department of Primary Industry and Resources and will run until April 2021.

New resources available for managing soil erosion

Soil erosion has several negative impacts on the productivity and management of pastoral land. Some of these include reducing the amount of pasture that grows, changing the composition of pastures, woody weed increases, undermining fences and other infrastructure, and increased wear and tear on vehicles.

Two publications on managing erosion have recently been released. The concepts and management options described in these are highly relevant for NT cattle producers.

The first, published by the Burnett Mary Regional Group in Queensland, is an excellent manual on how to prevent, manage and rehabilitate gully erosion. It contains clear descriptions and photos and includes on-ground case studies from several properties. The manual is available for download from the Burnett Mary Regional Group website. [1]

The second publication 'Managing Outback Roads'[2] aims to reduce the environmental impacts of erosion, the money spent on road maintenance and wear and tear on vehicles. The manual has been developed by the South Australian Arid Lands Natural Resource Management Board, Cape York Natural Resource Management, Western Local Land Services, Rangelands Natural Resource Management and Territory Natural Resource Management (TNRM). Several of the authors have considerable experience in the NT and will be well-known to many readers. The book covers planning for the prevention of problems, how to build and repair roads and how to rehabilitate or close old roads that are no longer serviceable.

Sheet and gully erosion requiring management intervention. Photo: Caz Pettit DPIR

[1] http://www.bmrg.org.au/files/3915/5425/5765/BMRG_Gully_Erosion_Manual.pdf
[2] https://gallery.mailchimp.com/4e87b864d920614cdaa6cb264/files/9eef6d58-a974-40d9-b9de-dd6d91cc7a6c/Outback_Roads_manual.pdf?utm_source=All+NN+Subscribers&utm_campaign=ce9e0227db-EMAIL_CAMPAIGN_2019_04_10_12_52&utm_medium=email&utm_term=0_3c0f2ed544-ce9e0227db-228014193

Climate Outlook – Barkly Tableland

Contact: Alison Kain, 0409 281 649, alison.kain@usq.edu.au

JUNE, JULY, AUGUST CLIMATE SUMMARY

•The chance of exceeding median rainfall is only about 20-25%.

• Maximum and minimum temperatures are very likely to be above average.

•The El Niño forecast has been downgraded to El Niño Watch, with most models predicting a return to neutral conditions by the middle of the dry season.

•The IOD exceeded positive thresholds at the end of May. To be a positive IOD event, thresholds need to be sustained for at least two months. A positive IOD means reduced likelihood of rainfall through central and southern Australia in winter (the Barkly is really on the edge of this).

CLIMATE WORKSHOPS

In April this year, the NACP climate scientists, BOM scientists and Anne Marie Huey (Climate Mate for the East Kimberley and VRD) held climate workshops in Kununurra and Katherine. Here is some of the feedback from pastoralists who attended:

"It improved my knowledge of interpreting data on the BoM website."
"It helps me a lot to make climate related decisions at the field level."
"More positive outlook on understanding tools that can be used with assistance to understand climate risk."
"Highly recommend to other pastoralists."

Climate Workshops with Bureau of Meteorology and University of Southern Queensland climatologists will be held on the Barkly in August this year. To register your interest, please email Alison.kain@usq.edu.au or phone 0409 281 649.

BARKLY CLIMATE OUTLOOKS

Hopefully you have all been receiving the monthly Barkly Climate Outlooks and Supplements. I have received some positive feedback but the thing about these projects is that we need to be able to show those who are funding them that they are useful.

If you could let me know:	✓	✗
Yep! Keep sending them!	☐	☐
I'd prefer a paper copy.	☐	☐
Not interested...	☐	☐

Northern Australia Climate Program

THIS MONTHS FEATURED CLIMATE DRIVER

The Indian Ocean Dipole

The IOD is a measure of Sea Surface Temperatures in the western and eastern Indian Ocean. Warm water flows through the islands of Indonesia to the region north west of Australia. When the IOD is neutral (Figure 1), warm air rises in the region north west of Australia and circulates over to the western Indian Ocean. Westerly winds blow across the equator, thus maintaining the cycle of convection.

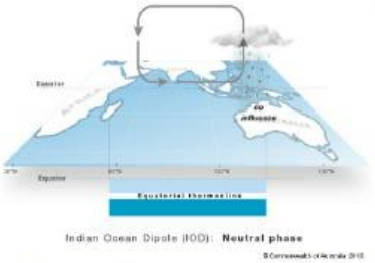


Figure 1. IOD neutral phase (www.bom.gov.au)

When the IOD is positive (Figure 2), the westerly winds decline and the ocean in the western Indian Ocean becomes increasingly warm resulting in a cooler eastern ocean temperatures. Cool oceans mean less convection and less moisture available for rain.

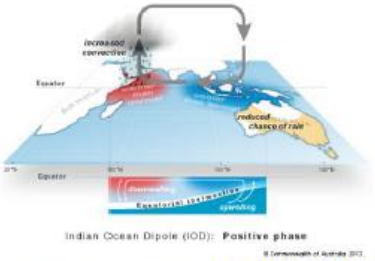


Figure 2. IOD positive phase (www.bom.gov.au)

In a negative IOD (Figure 3), the westerly winds become stronger leading to warmer than average ocean temperatures near Australia and an increase in moisture available to weather systems crossing the country.

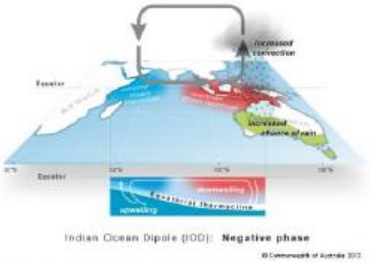


Figure 3. IOD negative phase (www.bom.gov.au)

Big climate drivers like the IOD don't necessarily alter the weather patterns that move across Australia however they can play an important role in the moisture available to the local weather patterns and the subsequent rainfall potential.

What does it mean for rain forecasts?

The IOD exceeded positive thresholds at the end of May 2019. To be a positive IOD event, thresholds need to be sustained for at least two months. A positive IOD means reduced likelihood of rainfall through central and southern Australia from winter to spring. While the Barkly is a bit to the north of that region, you can see in Figure 4 that historically, the winter-spring (June to November) period is often drier in an IOD positive year.

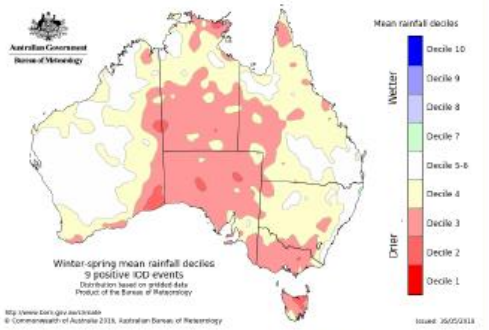


Figure 4. Rainfall deciles for 9 positive IOD events.

What does it mean for the Barkly?

It's important to note that the IOD breaks down around November/December with the onset of the northern wet season. While it doesn't have an impact on the subsequent wet season, it can influence the likelihood of early rainfall around October and November.

Save the Date!

When and Where?
Barkly Homestead: Tuesday 17th September
Tennant Creek: Wednesday 18th September

What is it?
A **FREE** half day workshop, including lunch, featuring:
- The Bureau of Meteorology
- University of Southern Queensland
- Local Climate Mate

Bringing BOM to the Bush

Why come along?
- Learn about the **latest developments** in seasonal climate forecasting and how they apply to our region
- Learn about the **key climate drivers** for northern Australia
- Learn how to **find, use and assess** relevant climate tools such as seasonal forecasts
- Recommended by NT pastoralists

RSVP
Alison Kain 0409 281 649 alison.kain@usq.edu.au

Groundwater shines a light on hidden mineralisation

Geoscience Australia's Exploring for the Future (EFTF) program undertook an extensive groundwater survey across the Tennant Creek and the McArthur Basin region to better understand where potential resources may be buried.

During the 2017 dry season, 118 groundwater samples were collected to locate new mineral areas for further investigation and establish environmental baselines. Examining chemical elements in groundwater is an effective way to identify mineral and energy resources buried deep under cover. As groundwater moves through the earth and interacts with bedrock and aquifers, various chemical elements can be dissolved into the water, providing clues about what is hidden beneath the surface.

Early results show that there may be new mineral targets such as copper over the survey region. Further research is underway to analyse the data in more detail and map areas where the groundwater is high in various base metals. The new data also provide environmental information that can be used to assess the impacts of any future development in the area.

Data releases

For more information and to download the data visit www.ga.gov.au/eftf/data-and-publications. More detailed information about the mineral potential, environmental information and groundwater flow systems will be released in mid-2020. The groundwater sampling survey was undertaken with support from the Northern Territory Geological Survey.

Planned fieldwork

Fieldwork for sampling additional groundwater bores is planned in June (western Barkly Tableland) and August-September (central and eastern Barkly Tableland). A further 80 or so pastoral and community bores will be sampled in those regions, which will provide valuable scientific, prospectivity, water quality and baseline information.

Contact Details

Please contact us if you have any questions.

Free Call 1800 091 964 (Mon-Fri, 9:00am to 5:00pm AEST)

Email: EFTF@ga.gov.au

Website: www.ga.gov.au/eftf

Groundwater samples being tested in the Barkly Tablelands, Northern Territory.

New Chief Veterinary Officer for the Territory

In May, Sue Fitzpatrick was appointed as the Northern Territory Chief Veterinary Officer. Many pastoralists will know Sue from her time as the Principal Veterinary Officer in Darwin, and her time spent in the Katherine region as Field Veterinary Officer.

Sue first came to the Northern Territory in 2003 working with the Katherine region stockies and vets on the Tuberculosis Freedom Assurance Program (TFAP) following the eradication of Bovine Tuberculosis from Australia. Since this time, Sue has worked in various veterinary field and policy roles overseeing disease surveillance and control programs including cattle tick management.

NT Chief Veterinary Officer, Sue Fitzpatrick

Sue also worked for Department of Agriculture in 2016 and 2017 as the NT Regional Manager and Director of Disease Surveillance for Northern Australian Quarantine Strategy overseeing the Northern Australian Biosecurity Surveillance Projects.

Sue has represented the NT on a number of committees and working groups, including the national Animal Health Committee and Animal Welfare Committee. Sue has also been involved in numerous disease responses in the Northern Territory, and has operated as planning manager and incident controller.

Sue remains committed to working with industry and community stakeholders to ensure that the livestock and veterinary industries are protected and government provides the support and simple regulation to meet the standards for industry growth and development.

Livestock disease investigations

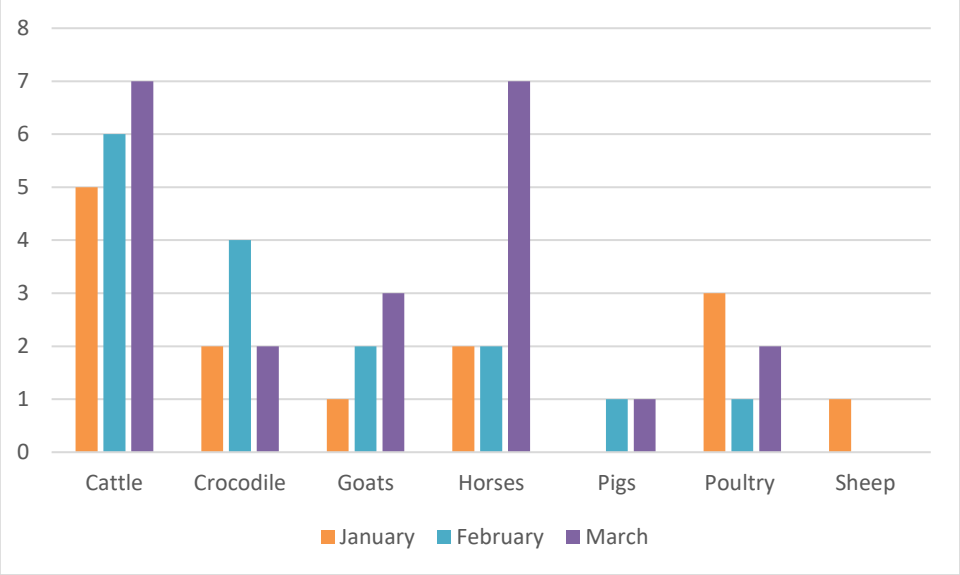
The Department of Primary Industry and Resources provides a free disease investigation service, including free diagnostic testing through the Berrimah Veterinary Laboratory, to livestock owners for diagnosis or exclusion of notifiable emergency, exotic and endemic disease, including zoonotic diseases. Subsidies are available for producers to contact private veterinarians for significant disease investigations in livestock.

Subsidies for disease investigation

- subsidies of up to $2,000 are available for disease investigations in cattle conducted by private vets as part of the Northern Australia Biosecurity Surveillance project
- for disease investigations in horses and other species, subsidies of up to $250 are available
- remember that $300 is available for cattle showing nervous signs where a post-mortem is performed and the brain is collected for “Mad Cow” exclusion testing.

Please contact your local vet or regional Livestock Biosecurity Officer for more information.

During January to March 2019, 52 livestock disease investigations were conducted to rule out emergency diseases or investigate suspect notifiable diseases across the NT.



Livestock disease investigations in the NT, January to March 2019

Zamia poisoning in cattle in the Katherine Region

Megan Pickering, Katherine Regional Veterinary Officer

Cycads or zamia palms in Australia, belong to an ancient family of plants which have existed since the Mesozoic era, pre-dating flowers, grasses and trees. They were the cause of the first documented plant poisonings by European explorers: Vlaming (1697), Cook (1770), La Perouse (1788) and Flinders (1801) all mention consumption of zamia palm as the cause of sickness in men, pigs and cattle[1].

Cycad genera are likely to cause toxicity syndromes in livestock are Cycas, Macrozamia and Bowenia; in the Northern Territory; they are primarily found around the Top End and in coastal areas around the Gulf of Carpentaria. The plants have palm-like leaves arranged in a rosette formation around a single trunk, which in most species remains quite low to the ground, and is therefore easily accessible to grazing livestock (see pictures on page 13). The leaves, seeds and roots contain at least two toxins: an unidentified neurotoxin which causes irreversible damage to the spinal cord in cattle, and cycasin which, when metabolised to formaldehyde and methylazoxymethanol (MAM), is hepatotoxic in herbivores, pigs, dogs and humans[2]. Early explorers who ate small amounts of cycad nuts suffered from severe vomiting and diarrhoea; modern case reports include accidental poisonings of small children and dogs who have developed fulminant liver necrosis with devastating consequences[3].

Livestock may graze cycads when other feed is scarce or if new shoots and leaves are within easy reach; seeds and young fronds appear to be quite palatable, but are most likely to be consumed during very dry conditions or when re-growth appears after a bushfire. In cattle, chronic exposure leads to progressive and irreversible paresis or paralysis, which producers may refer to as ‘wobbles’, zamia staggers or (mistakenly), ‘rickets’[4]. Ataxia and paralysis result from degeneration of nerves in the mid-cervical and lumbar spinal cord, both of which should be included as sampling sites for histopathologic diagnosis. Laboratory findings

include bilateral demyelination and axonal degeneration of the spinal cord. Clinical signs may develop as soon as 14 days after eating the plants, or may be slowly progressive over a number of years, and initially include:

- Goose-stepping gait in the hind limbs
- Knuckling of the hind fetlocks
- Wasting of the hindquarters

Differential diagnoses to consider in cases of chronic bovine neurological disease include:

- Bovine Spongiform Encephalopathy
- Rabies
- Tetanus
- Encephalomyelitis
- Sarcostemma poisoning
- Space-occupying lesion of the central nervous system – abscess, cyst, neoplasia
- Lead poisoning
- Botulism

Affected cattle do not improve as the changes to the central nervous system are irreversible. Cattle may die from misadventure (falling into ditches, gullies and watercourses) or may perish when they become too weak to access water. Despite the meat being unaffected, animals exhibiting clinical signs are not suitable for slaughter through abattoirs as they are not fit to load for transport. There have been a number of confirmed cases of zamia poisoning on properties in the Katherine region over recent months; some animals are native-born, while others have been purchased from elsewhere in the NT or from Queensland, with clinical signs developing sometime after purchase. In each case, cattle have presented with progression of signs of knuckling (see picture below), falling/staggering and plaiting of the hind limbs, increasing debilitation, weight loss, and inability to rise and eventually, either death or humane destruction has resulted.

Control of cycads may be problematic for livestock producers. Many cycads are protected under conservation laws and cannot be destroyed. One solution if production losses are significant, is to fence off zamia country and limit access to it unless grazing is plentiful and cycads are not in an active growth phase. Diagnosis of zamia staggers is presumptive in the field (based on clinical signs, access to plants and evidence of grazing), but definitive confirmation is made on post-mortem histology in the laboratory. Animals with suspected zamia staggers are suitable for TSE-exclusion testing, which attracts a producer subsidy under the National TSE Freedom Assurance Program. This programs provides evidence to support international market access for the cattle industry.

Typical presentation of developing zamia staggers: note knuckling of right hind fetlock causing staggering and ataxic gait

Common Cycad species of the Northern Territory:

Photo credits: Clare Pearce, Parks & Wildlife Commission, Katherine NT

Seeds and fronds: Cycas

Cycas calcicola

Cycas angulata

References:

1. *Hall, WTK 1964 – cited in Cycad (zamia) poisoning in Australia Aust Vet Journal Vol.64 No.5 May 1987: 149-151*
2. *Australia's Poisonous Plants, Fungi and Cyanobacteria – A guide to species of medical and veterinary importance. McKenzie, R. CSIRO Publishing 2012 p.122-138*
3. *https://onlinelibrary.wiley.com/doi/full/10.1111/j.1939-1676.2011.00755.x*
4. Whiting MG. *Toxicity of cycads. Economic Botany* 1963;***17**:270–302.*

Bovine Johne's disease: testing and import requirements for beef cattle travelling to WA

Johne's Disease (JD) is caused by a bacterial infection with Mycobacterium paratuberculosis, an organism that lives in the intestinal tract of ruminant animals, causing thickening of the intestine wall and gradual reduction in food absorption over time. Affected animals are hungry, but cannot absorb the nutrients they are eating. They commonly have diarrhoea, and may also have "bottle jaw", which is a result of low protein in the circulation, caused by malnutrition. Animals with JD lose weight and may eventually die from starvation. There is no treatment for the disease and pastoral properties impacted by the disease may have restricted market options. Currently, most south-east Asian live export markets require a property to have been disease free for at least 5 years. Eradication of JD from an infected herd is difficult with removal of the infected animals and extensive testing of the herd required.

Infected animals pass the JD bacterium in the faeces; it may then be transmitted between animals through faecal contamination of pasture, watercourses and yards. Direct heat and sunlight destroy the bacteria within 6 weeks, but in wet and shaded conditions, the organism can survive in the environment for more than a year. Cattle are most often infected as calves, but as the bacterium is slow growing and the changes in the intestine take place over a prolonged period, infected animals may shed the organism and thus infect other animals, before showing any clinical signs.

The Johne's Beef Assurance Score (J-BAS) is a risk management tool developed by the cattle industry and managed by Animal Health Australia, that provides a guide to the risk of JD occurring on a beef cattle

property. For more information on the requirements for JD testing and the scoring system, go to Animal Health Australia's website (https://animalhealthaustralia.com.au/wp-content/uploads/J-BAS.pdf). There are a range of laboratory testing options available to assess the herd risk for JD and to establish herd J-BAS status, however, diagnosis is challenging owing to the nature of the organism. Further information on sampling is available at the Animal Health Australia website (https://animalhealthaustralia.com.au/what-we-do/endemic-disease/johnes-disease-in-cattle/testing-and-diagnosis/). With respect to check and sample testing herds to satisfy WA entry requirements, HT-J PCR or faecal culture are considered acceptable. If you require Western Australian import documents please follow this link to the Western Australian Government website (https://www.agric.wa.gov.au/livestock-movement-identification/documentation-importing-ruminants-western-australia).

For beef cattle entering Western Australia from the Northern Territory and Queensland, there are specific border controls that are designed to minimize the risk of JD in cattle entering WA, which differ from J-BAS testing requirements and the movement requirements for entry to other states. The consignment must be accompanied by a declaration from the owner/producer stating that the animals meet the following conditions:

Beef cattle entering the Western Australian beef **herd** from the Northern Territory and Queensland must:	Beef cattle entering Western Australia to be sent **directly to export or to abattoir facilities** must**:**
• have been born and grazed only in the Northern Territory and • have been born and grazed only on eligible properties and only with cattle that meet these conditions; and • are not from a herd infected or suspected to be infected with JD for the last 5 years; and • are **from a property of origin that has a J-BAS 7 or higher**, and • from 1 January 2018, **the property of origin must have a negative check test within the last 12 months.** • JD testing laboratory report Property Identification Code (PIC) number must match the PIC number on the NLIS device in the animal's ear. Therefore, cattle in the consignment born or originating from a different PIC must have JD testing laboratory documentation from the original property.	• have been born and grazed only on eligible properties and only with cattle that meet these conditions; and • are not from a herd infected or suspected to be infected with JD for the last 5 years; and • are from a property of origin that has a J-BAS 6 or higher; and • are accompanied by an NLIS file • any animals that are rejected from export or abattoir may be required to be exported back out of WA or euthanized.

For further information on J-BAS requirements for cattle entering Western Australia from the Northern Territory, including further specific documentation for movement of animals not born in the NT, please contact your Regional Biosecurity Officer.

Property Management under exceptional seasonal conditions

With most NT regions experiencing lower than anticipated rainfall during 2018/2019 seasons and a reduction in available feed, many pastoral properties have an increased risk of running short of feed, managing lighter conditioned cattle and considering destocking options, especially those properties carrying high stock numbers. Acting Chief Veterinary Officer, Anthony Kettle and Principal Livestock Biosecurity Officer, Thomas Haines visited twelve properties in the Barkly region over a three day period in March 2019. The trip was made to identify issues that pastoralists were experiencing as a result of the below average season.

During the visits pastoralists outlined their management plans for the coming year. All of the properties visited had started implementing strategies to best manage the condition of their livestock and land for the year to come. The majority of pastoralists were in the midst of destocking and finding further agistment on properties in either Western Australia or Queensland. Pastoralists had also begun adding water points and opening up new country to be grazed by livestock, weaning early when practical and providing supplements for cattle to help maintain their condition.

The Livestock Biosecurity Branch are very grateful for the time the pastoralists took out of their busy schedule to show the pasture and livestock conditions across the Barkly and discuss their plans for the coming year. Resources for the 2019 northern pastoral season available to assist with management planning can be sourced from the Western Australian Government website https://www.agric.wa.gov.au/2019-northern-pastoral-season?nopaging=1.

The department is also coordinating the water infrastructure rebate scheme where eligible NT pastoral properties are entitled to a 25% rebate of up to $25,000 for the purchase and installation of operational water infrastructure that manages the welfare of livestock and improves drought resilience. For more information and applications go to the Northern Territory Government website https://nt.gov.au/industry/agriculture/farm-management/get-financial-help-farm-businesses/water-infrastructure-rebate.

Reminder: 2018 Audit of NT Brands Register

Have you received the 2018 Audit of NT Brands Register form and instructions?

Yes, you have received the form

Have you completed the form as per instructions?

Have you returned the form to LISA for processing?

No, you have not received the form

You must urgently complete the Brands Audit form. If lost, please complete the form on the Northern Territory Government website www.nt.gov.au/agriculture/livestock and return for processing.

Changes required

If there are any changes to your brand registration, please write notes on the audit form so that the appropriate paperwork can be sent to you. For example, 'brand no longer being used' would require a cancel brand form, or registered owner change paperwork.

Contact

Please return audit form via any of these options:

- Email adele.kluth@nt.gov.au or susan.gillis@nt.gov.au
- Fax (08) 8999 2089, (08) 8973 9759 or (08) 8962 4480
- Post to DPIR, GPO Box 3000, Darwin NT 0801

Thank you for completing the audit.

Travelling livestock movements: imported livestock

Obligations of the owner of the imported livestock

1. Must ensure there is a completed NT Health Certificate/Waybill (NTHCW) issued for the livestock before they enter the NT.
2. NTHCW must have all sections completed and signed off by an Inspector from the State or Territory where the travel of the livestock begins.
3. Ensure there is a National Cattle Health Statement (NCHS) completed by the previous owner of the livestock.
4. Ensure all livestock meet NT entry requirements and are fit for the intended journey.
5. Deliver completed NTHCW and NCHS documents to the person in charge.

Travelling livestock movements: internal NT

Obligations of the owner of the livestock

1. Issue a completed waybill for the primary livestock which you are the owner of.
2. Issue a completed waybill for the other livestock which you are not the owner of but are travelling with the primary livestock.
3. Deliver completed waybills to the person in charge.

Obligations of the person in charge of travelling livestock

1. Must sign the waybills for the livestock
2. Have possession of the completed waybills during the entire period of travel.

Contact the Livestock Biosecurity team

Darwin		**Katherine**	
Regional Livestock Biosecurity Officer	08 8999 2034	Regional Livestock Biosecurity Officer	08 8973 9767
Livestock Biosecurity Officer	08 8999 2030	Livestock Biosecurity Officer	08 8973 9765
Tennant Creek		**Alice Springs**	
Principal Livestock Biosecurity Officer	08 8962 4458	Senior Field Veterinary Officer	08 8951 8181
Livestock Biosecurity Officer	08 8962 4492	Regional Livestock Biosecurity Officer	08 8951 8125

Department website: nt.gov.au/industry/agriculture/livestock

NORTHERN TERRITORY GOVERNMENT

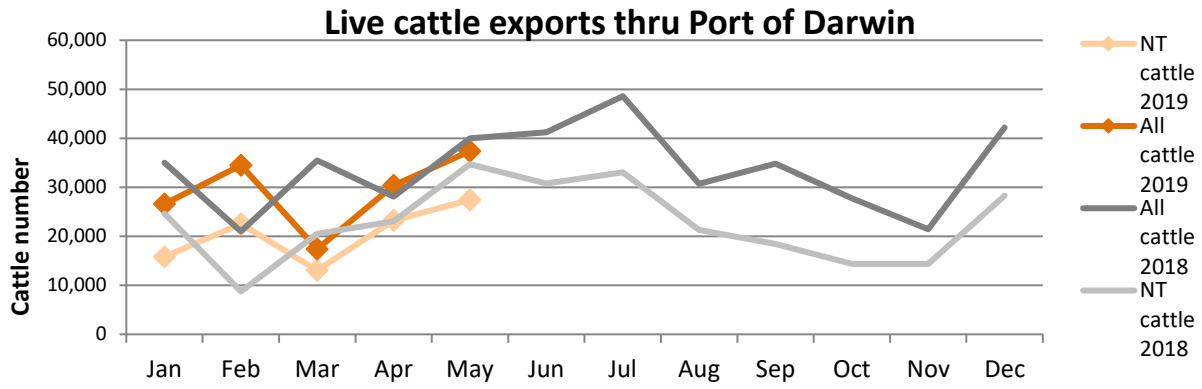
Pastoral Market Update

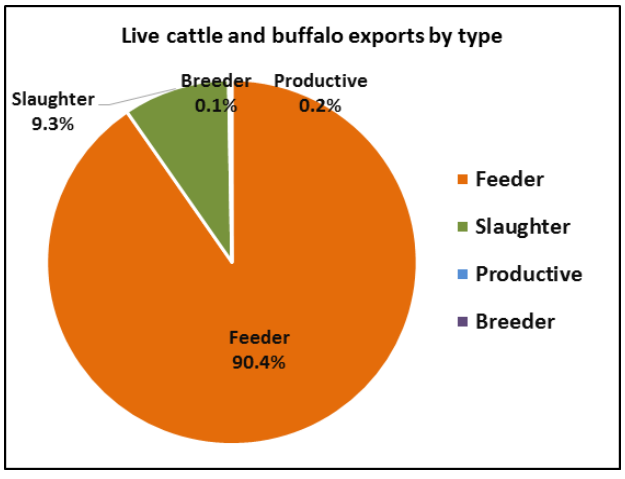
DEPARTMENT OF PRIMARY INDUSTRY AND RESOURCES

Live Exports via Darwin Port – MAY 2019

Please note: figures are for stock exported through the Port of Darwin only; some NT stock are exported through interstate ports.
Please note: the NT Cattle figures here have been rounded respectively and may not tally to totals.
The figures listed below are correct as at May 31 2019 and are subject to change as further data becomes available.

Destination	Export of ALL CATTLE (including interstate)							Export of NT CATTLE (estimate only)						
	2017	2018	Last year to 31/05/18	YTD to 31/05/19	May	Last month	*Difference*	2017	2018	Last year to 31/05/18	YTD to 31/05/19	May	Last month	*Difference*
Brunei	3,872	3,653	1,596	1,958	**997**	**0**	997	2,423	2,292	949	1,453	**732**	**0**	732
Indonesia	245,544	326,768	127,438	113,203	**32,363**	**19,928**	12,435	150,489	216,634	87,787	78,942	**23,745**	**15,266**	8,479
Philippines	0	10,482	1,832	5,860	**1,499**	**2,798**	-1,299	0	7,262	1,590	4,264	**1,100**	**2,143**	-1,044
Sabah	2,640	0	0	0	**0**	**0**	0	1,680	0	0	0	**0**	**0**	0
Sarawak	2,743	2,106	1,110	1,227	**1,227**	**0**	1,227	1,594	1,631	963	900	**900**	**0**	900
Malaysia	13,257	11,813	7,228	4,057	**0**	**2,098**	-2,098	8,109	7,848	4,935	2,886	**0**	**1,607**	-1,607
Vietnam	39,989	49,771	19,495	19,935	**1,299**	**5,556**	-4,257	25,884	35,342	14,825	13,683	**953**	**4,256**	-3,303
Egypt	0	0	0	0	**0**	**0**	0	0	0	0	0	**0**	**0**	0
Thailand	800	1,720	800	0	**0**	**0**	0	535	1,274	658	0	**0**	**0**	0
Cambodia	0	0	0	0	**0**	**0**	0	0	0	0	0	**0**	**0**	0
TOTAL	**308,845**	**406,313**	**159,499**	**146,240**	**37,385**	**30,380**	**7,005**	**190,715**	**272,282**	**111,708**	**102,128**	**27,429**	**23,273**	**4,157**





OTHER LIVESTOCK 2019

Destination	Buffalo		Goat		Camel	
	YTD	May	YTD	May	YTD	May
Brunei	70	0	0	0	0	0
Indonesia	541	142	0	0	0	0
Philippines	0	0	0	0	0	0
Sabah	0	0	0	0	0	0
Sarawak	0	0	0	0	0	0
Malaysia	740	0	0	0	0	0
Vietnam	397	0	0	0	0	0
Egypt	0	0	0	0	0	0
Thailand	0	0	0	0	0	0
Cambodia	0	0	0	0	0	0
TOTAL	1,748	142	0	0	0	0

LIVESTOCK MOVEMENT STATISTICS

Reports for livestock movements from NT to Interstate, within NT and Interstate to NT are updated biannually - see www.dpir.nt.gov.au/primary-industry/primary-industry-strategies-projects-and-research/livestock-movement-statistics

Total of ALL CATTLE through Port of Darwin						
2012	2013	2014	2015	2016	2017	2018
246,990	359,616	493,958	510,860	372,251	308,845	404,401

Total of NT CATTLE through Port of Darwin						
2012	2013	2014	2015	2016	2017	2018
234,249	308,784	324,477	295,738	236,511	190,715	271,001

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Prepared by NT Department of Primary Industry and Resources. For further information contact PMU@nt.gov.au.

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