

# beefup FORUM

## Hughenden BeefUp Forum

FRIDAY 23 JUNE 2023

**Hear** about the latest on-farm R&D

•

**Have your say** on R&D priorities in your region

•

**Gain** insights, tools and next steps to beef up your business

# Welcome

MLA's BeefUp Forums are held throughout northern Australia and are developed by regional Working Groups in collaboration with the BeefUp Coordinator (AA&P Events) and MLA. Thank you to the North Queensland Regional Beef Research Committee (NQRBRC) and the Queensland Department of Agriculture and Fisheries (DAF) for their support in planning this event.

MLA's BeefUp Forums have been developed to:

- give you an opportunity to see and hear about what MLA and industry partners are delivering
- highlight current and completed research that is relevant to you
- give you a chance to participate in regional research, development and adoption (RD&A)
- hear about your regional RD&A priorities
- provide practical tools and information to beef up your business.

BeefUp forums are about helping northern beef producers identify ways to improve the productivity and profitability of their beef enterprises. After today, use this booklet to find the information, tools and contacts you need to put your ideas into action.

## Event location

### **Diggers Centre**

21 Brodie Street

Hughenden QLD 4821

## Forum Coordinator Contact

### **Rosie Peace**

AA&P Events

M: 0410 518 884

P: 08 8942 3388

[beefup@associatedadvertising.com.au](mailto:beefup@associatedadvertising.com.au)

[rosiep@associatedadvertising.com.au](mailto:rosiep@associatedadvertising.com.au)

# About MLA

Meat & Livestock Australia Limited (MLA) delivers research, development and marketing services to Australia's cattle, sheep and goat producers. MLA has approximately 50,000 livestock producer members who have stakeholder entitlements in the company.



# Program

Time	Friday 23rd June
8:00am	<b>Registration and trade stands open</b>
8:30am	<b>Welcome &amp; housekeeping</b> Russell Lethbridge, Werrington Cattle Co. and MLA Director
8:35am	<b>RBRC Welcome</b> Eiren Smith, Chair North Queensland RBRC
<b>Grazing Land Management</b>	
8:45 am	<b>Why does grass need rest- technical perspective from a recent study</b> Brett Abbott, CSIRO
9:05am	<b>Grazing principles and rainfall simulator demonstration</b> Bob Shepherd, Department of Agriculture and Fisheries, Queensland
9:45am	<b>Stepping into resting country – producer experience</b> Facilitator: Michael Lyons, Lyons Family Grazing Russell Lethbridge, Werrington Cattle Co. Bob Shepherd, DAF Brett Abbott, CSIRO
10:15am	<b>Fences, waters and infrastructure</b> Facilitator: Eiren Smith, Chair North Queensland RBRC Jerome Leray, InFarm Agricultural Intelligence Roger Hill, Herron Todd White
10:45am	<b>Morning tea</b>
<b>Investing for industry</b>	
11.15am	<b>MLA R&amp;D and market update</b> Sally Leigo, Meat & Livestock Australia
11:35am	<b>Integrity Systems Company - eNVD</b> George Basha, Integrity Systems Company
11:50am	<b>Australian Feedbase Monitor</b> Alastair Rayner, Cibo Labs
<b>Opportunities in carbon</b>	
12:05pm	<b>Carbon Neutral 2030 (CN30) and emerging technologies for the beef industry</b> Julia Waite, Meat & Livestock Australia
12:35pm	<b>Making sense of carbon in northern Qld</b> The carbon sequestration potential in Northern Australia - Steven Bray, DAF Opportunities and considerations around carbon markets – Josh Peart, DAF Followed by Q&A
1:15pm	<b>Lunch (1 hour)</b>
<b>Breeding and Genetics</b>	
2:15pm	<b>Genetics and Genomics: an explainer</b> Geoffry Fordyce, GALF Cattle Pty Ltd
2:35pm	<b>Heifer management strategies</b> Geoff Niethe, Niethe Consultancies
3:05pm	<b>Panel – improving your herd performance</b> Facilitator: Sam Fryer, "A Place To Call Home Podcast" David Rankine, Bunuro Station Michael Lyons, Lyons Family Grazing Anita McNamara, Great Artesian Veterinary Surgery Ray Thieme, Cunningham Cattle Co.

3:50pm	Afternoon Tea (30 mins)
4:20pm	<b>Have your say – regional priority setting</b> RBRC & MLA
5:00pm	Closing remarks and wrap up
<b>BeefUp Networking drinks and dinner from 5.05pm</b>	



# RBRC Representatives

---



**Eiren Smith**

Phone: 0459342952

Email: [eirensmith@gmail.com](mailto:eirensmith@gmail.com)

Eiren Smith is the Chair of the NQRBRC. He is a beef producer from Dreghorn Station on the Burdekin River near Charters Towers. His operation is based around having good environmental, social and economic outcomes. He is very passionate about improving the Northern Beef Industry.

---



**Bec Clapperton**

Bec Clapperton is the secretary of the NQRBRC. Bec grew up on a family cattle property near Nanango, in South-East Queensland. She spent several years working across various roles in North Queensland before joining DAF in 2020 as a Beef Extension Officer based out of Townsville.

---



**Anita McNamara**

Email: [anita.mcnamara@uqconnect.edu.au](mailto:anita.mcnamara@uqconnect.edu.au)

Anita is a mixed practice veterinarian, and helps run her family's sheep and cattle property south of Hughenden. She has a keen interest in improving land condition to increase the viability of grazing businesses as well as the improvement to animal welfare that better stocking rate/carrying capacity management would have in the North. She has become involved with NABRC (NQ branch) since being involved in the pilot Advancing Beef Leaders program.

---



**Michael Lyons**

Phone: 0409 893 041

Email: [mmylons@bigpond.com](mailto:mmylons@bigpond.com)

---

---

Michael and Michelle Lyons and family own and operate Wambiana and Day Dawn Stations in the Charters Towers district. They have a focus on “working with nature” by promoting biodiversity, careful grazing management and selection of fertile, adapted cattle. They produce Brahman bulls backed by EBV’s and steers for live export and fattening. An on-farm Edu-tourism enterprise helps with diversification and advocating for the beef industry. In 2014, Michael was awarded a Nuffield Scholarship sponsored by MLA.

---



**Kylie Stewart-Moore**

Kylie Stewart-Moore, alongside her husband Jack and their children, operate a beef operation between Hughenden and Mt Surprise in North Queensland. Here they breed and background cattle, with a strong emphasis on producing a quality product with good animal welfare, ecological health of their country and development of the team around them. Kylie is a veterinarian with a background in, and love of, cattle production.

---

**Emily Corbett**

Support Secretary – NQRBC

Beef Extension Officer, Department of Agriculture and Fisheries, Mareeba QLD

**Jamie Gordon**

Mt Pleasant, Bowen

**Greg Brown**

Tolga

**Fran Lyons**

Basalt River, Basalt

**Roger Landsberg**

Trafalgar, Charters Towers

**Peter Chiesa**

Palmview, Kennedy

---



# MLA Representatives

---



## Harriet Bawden

Project Manager – Northern Beef Adoption

Meat & Livestock Australia

E: [hbawden@mla.com.au](mailto:hbawden@mla.com.au)

Harriet is an agricultural communications and extension professional with a focus on supporting on-farm adoption of new research, technologies and practices. She is currently the Project Manager for Northern Beef Adoption at MLA. Harriet works closely with industry and project partners across Queensland, NT and northern WA to deliver programs including BeefUp forums, integrated producer Demonstration Sites, the EDGEnetwork and FutureBeef.

---



## Sally Leigo

Program Manager – Producer Adoption

Meat & Livestock Australia

E: [sleigo@mla.com.au](mailto:sleigo@mla.com.au)

Sally is the Program Manager for MLA's Producer Adoption program, which aims to put in the hands of producers the latest research, technology and best practices to increase production and profitability of red meat businesses. Prior to joining MLA, Sally worked in the NT for close to 16 years delivering research and extension projects, with 13 years based in Alice Springs working with local beef producers.

---



## Julia Waite

Project Manager – CN30

Meat & Livestock Australia

E: [jwaite@mla.com.au](mailto:jwaite@mla.com.au)

Julia is an agri-professional with a background in startup, agtech and investment. In her role as CN30 Project Manager with Meat & Livestock Australia, Julia identifies high impact R&D opportunities to deliver progress against net zero emissions, without compromise on productivity. Prior to joining MLA, Julia was Head of Operations at SproutX – a national accelerator and venture capital fund for food and agtech startups, based in Melbourne.

---

# Speakers and Presentations

## Welcome

---



### **Russell Lethbridge**

General Manager  
Werrington Cattle Co Pty Ltd

E: [werringtoncattle@activ8.net.au](mailto:werringtoncattle@activ8.net.au)

---

Russell, with his family runs Werrington Cattle Co, a commercial beef cattle breeding, growing and fattening enterprise. The Werrington business runs over 15,000hd of cattle on 120,000ha of natural northern forest country located at Werrington, 250km west of Townsville and Amber, 50km north of Mt Surprise. The business also consists of Rainmore Station, a 27,000ha grower property south of Alpha in CQ. Russell has a deep understanding of cattle production systems, including managing breeder cattle under extreme environmental conditions utilising genetic selection, strategic herd management, and nutritional management to achieve production and business success. Russell is a director of MLA and Integrity Systems Company.

---

## RBRC Welcome

---



### **Eiren Smith**

Producer Rep  
South Queensland Regional Beef Research Committee

E: [eirensmith@gmail.com](mailto:eirensmith@gmail.com)

---

#### *Session overview:*

Eiren will introduce the purpose and initiatives of the North Queensland Regional Beef Research Committee (NQRBRC) and the North Australian Beef Research Council (NABRC).

As an independent association, NABRC connects producers, researchers and industry stakeholders to guide research and adoption priorities in Australia's northern grassfed beef industry.

---

#### *Key messages:*

- Producers can engage with their local Regional Beef Research Committee (RBRC) to contribute to regional RD&A priority-setting. Have a chat to RBRC members at the event today.
-

# Grazing Land Management

## Why does grass need rest- technical perspective from recent study



### **Brett Abbott**

Program Manager

Producer Adoption, Meat & Livestock Australia

E: [brett.abbott@csiro.au](mailto:brett.abbott@csiro.au)

<https://people.csiro.au/A/B/Brett-Abbott>

<https://people.csiro.au/b/r/rebecca-bartley>

---

#### *Bio:*

Brett Abbott is a Landscape Ecologist and Team Leader of CSIRO Environment's Sustainable Northern Australia team. Brett is a bit of an all-rounder, skilled in both field-based GIS and remote sensing methods. His interests primarily lie in solving NRM issues within the Australian rangelands, more recently focussing on landscape condition – linking on-ground data with GIS and Remote sensing techniques.

His projects deal with natural resource management issues in the North Australian rangelands (grazing and management, rangeland condition, water quality and effects on reef, landscape restoration), with landscape condition assessment within grazed pastures being a special interest.

---

#### *Session overview:*

- This study demonstrated that improvements in vegetation, soil and land condition can be obtained by implementing regenerative grazing principles, which include long periods of rest, in semi-arid rangeland areas of Northern Australia (see Figure 1). However, careful thought needs to be given to the grazing system applied, which will vary with the size and structure of the grazing business.
- This study suggests that planned rotational grazing is one mechanism to achieving this, however the literature suggests that there are various ways a landholder can reach this outcome. The main point being that well planned grazing, regardless of the grazing system adopted, is the key to improved land condition. It is well accepted that longer-term rest and reduced stocking, especially during favourable conditions for plant growth, contribute to the sustainability and recovery of grazed systems.
- Rates of landscape and pasture recovery are far slower than rates of degradation. It is likely to take a minimum of 3-5 years and up to 15-20 years for statistically significant improvements to be measurable at a site. That means decisions made today matter.
- Collecting and recording pasture and soil data in the paddock at regular (~5 year) intervals will be important for monitoring improvements over time. Remote sensing is useful; however, it currently only represents vegetation cover. Additional data on biomass, plant basal area, litter, species diversity, soil health etc will be important for monitoring land condition changes.
- Anecdotal evidence suggests that these grazing strategies are likely to improve the economic outcomes for grazing enterprises in most (but not all) situations. Further work is needed on the costs and benefits of these approaches; and the recent Nature Repair markets may provide additional incentives for landholders.





## Grazing principles and rainfall simulator demonstration



### Bob Shepherd

Principal Extension Officer – Grazing Land Management  
Dept. of Agriculture & Fisheries, Qld

E: [Bob.Shepherd@daf.qld.gov.au](mailto:Bob.Shepherd@daf.qld.gov.au)

---

#### *Bio:*

The management of grazing lands using stocking rates, fire, sown pastures and fences/stock waters to improve land condition; woody weed management, reclamation of severely degraded land, preventing and repairing erosion on access tracks and other linear features on grazing properties; working with school students to lift the profile of the northern grazing industry and highlight career opportunities in agriculture; and working with industry/agency teams to address industry issues, has been the broad focus of Bob's 47 year career as a Land Management Extension Officer with DAF in Qld.

---

This presentation presents the underlying grazing land management fundamentals required to improve land condition on broadacre northern grazing properties and discusses environmental (soil carbon) credits and grazing systems.

#### 1. **Stocking rates:**

By matching stocking rates to the available pasture, the pasture is utilised at a rate that allows individual tussocks to increase in size, including deeper and more extensive root systems. Deep rooted perennial grasses are more tolerant of drought and set more seed, facilitating an improvement in land condition.

Pasture utilisation rates are closely matched to the ratio of leaf to stem i.e. 25% leaf and 75% stem. Utilisation rates exceeding this ratio, forces cattle to eat more stem i.e. diet quality declines, compromising liveweight performance.

Calculated stocking rates retain high pasture cover at the end of the dry season maximising infiltration rates and subsequent pasture growth. Grass tussocks are the 'funnels' into the soil.

Adjust numbers by culling freeloaders from the breeder herd to increase weaning rates.

A simple forage budget will ensure that the needs of the pasture, cattle and the land are met, and the quality of runoff water leaving the property is improved.

#### 2. **Wet season spelling:**

Wet season spelling will accelerate the rate of improvement in land condition, particularly in good seasons. It allows for the recruitment and establishment of new grass plants and an increase in the size of existing plants.

Consider the following points before wet season spelling paddocks:

- How can cattle numbers be juggled?
- Which paddocks?
- What is the purpose? E.g. allow grass to 'get in front' of the cattle; allow tussock size to increase; recruit new grass plants; maximise seed set; sown legumes: accumulate fuel for a fire?

- Timing.
- Length.
- Frequency.

### 3. **Sown legumes:**

Sow legumes that are adapted to your soils and climatic conditions. The economics are very favourable. Select paddocks with high fertility soil types initially and treat low fertility paddocks last, or look for options to fly seed onto lower fertility country e.g., stylos in breeder paddocks. Consider replacement pastures (grass-legume) in special-use paddocks e.g weaner paddocks, but seek expert advice to ensure good establishment. Purchase uncoated seed – it is less expensive per kg of actual seed. Coated seed can be 50 to 80% coating – do your sums first! Sown pastures are not bullet-proof, they need management too. Don't feed pasture seed in supplements! You will get good germination of the seed that passes, but it will mostly be in cattle camps.

### 4. **Fire:**

All of Australia's rangelands evolved with fire. The removal of fire from the system has allowed native woody vegetation to thicken, exotic woody weeds to expand and reduced habitat diversity. Fire is part of the solution for addressing these issues, plus is useful to encourage cattle to grazing less preferred land types. Fire creates an adequate seedbed for the broadscale aerial sowing of some legumes e.g. stylos, and will encourage some 3P grasses to increase e.g. black speargrass. It may have a role in managing Indian couch dominance.

### 5. **Environmental credits:**

Be realistic about which credits can be accumulated and/or traded on your property. Soil organic carbon accumulation is favoured by low average temperatures, high average rainfall, low drought incidence and high clay content in the soils. Which of these do you have – high clay content soils possibly? Permanency of soil carbon is a big challenge across most of northern Australia. In future you may need carbon credits to access some markets for your beef, i.e. to offset your own emissions e.g. methane, so consider holding on to these.

Other environmental credits e.g. biodiversity and reef credits, may be possible and tradable, but do your homework thoroughly before trading.

### 6. **Grazing systems:**

There are a lot of claims about how good more intensive grazing systems are for all aspects of your beef business. What does the science say?

***International review:*** (D. D. Briske et al (2008) Rotational Grazing on Rangelands: Reconciliation of Perception and Experimental Evidence. Rangeland Ecology & Management 61(1):3-17)

- Plant production was equal or greater in continuous compared to rotational grazing in 87% of experiments.
- Animal production per head and per area were equal or greater in continuous compared to rotational grazing in 92% and 84% of the experiments, respectively.
- This experimental data demonstrates that a set of potentially effective grazing strategies exist, none of which have unique properties that set one apart from the other in terms of ecological effectiveness.

**Qld case studies:** 9 broadacre grazing properties:- (Hall TJ et al (2011) Investigating Intensive Grazing Systems in Northern Australia. Final Report MLA)

- Grazing system or method was relatively un-important, a more intensive grazing system is one way of achieving benefits, but simpler and less expensive management systems will achieve similar outcomes.

**The take home messages:-**

- Spend time, effort and finances on managing stocking rates, wet season spelling, legumes and fire to achieve on-ground changes in land condition.
- Assess the opportunities of environmental credits, but ‘Caveat Venditor’ (seller beware).
- Review your grazing system but be aware of the cost-benefit of any changes and investment.

---

*Key messages:*

- Proactively managing stocking rates while incorporating wet season spelling is the biggest driver of land condition, animal production and financial performance in a northern beef business.
- Avoid grazing management ‘recipes’ and align management practices to science-based principles.
- Good land condition allows soil carbon, water quality and biodiversity to coattail along for a free ride.
- Spend money on high return options, e.g. sown legumes, controlled mating, selecting for fertility & targeted supplementary feeding, rather than creating a property that is over-fenced and over-watered which increases expenditure on future repairs & maintenance.

---

*Next steps:*

1. Understand your land types and assess their current land condition.
2. Vary stocking rates based on a dry season forage budget <https://stocktakeglm.com.au/>
3. Incorporate wet season spelling into your program by adjusting numbers at every mustering round.
4. Take steps to improve breeder herd performance & efficiency.
5. Sow legumes that are adapted to your soils/climate situation.
6. Integrate fire into property management to address broadscale problems e.g. woodland thickening, exotic woody weeds, lack of 3P pasture species & manipulating land type grazing preference.
7. Determine the ability of your country to accumulate soil organic carbon

Visit the FutureBeef website ([futurebeef.com.au](http://futurebeef.com.au)) for relevant information on the above steps.

---

## Notes

---

---

---

---

---

---

---

---







## Fences, waters and infrastructure – panel discussion



### Michael Lyons

Lyons Family Grazing

E: [mmylons@bigpond.com](mailto:mmylons@bigpond.com)



### Jerome Leray

InFarm Agricultural Intelligence

E: [Jerome.leray@infarm.io](mailto:Jerome.leray@infarm.io)



### Roger Hill

#### *Bio:*

Roger is a rural property valuer who has been servicing North and North West Queensland with HTW for the last 20 years.

Roger has a side hustle with some private clients working with their business strategy and property investment decisions.

As a younger man, Roger worked on stations in the Charters Towers and Clermont areas before spending six years working on stations in the Gascoyne/Pilbara areas of WA.

## Notes

---

---

---

---

---

---

---

---

---

---





MLA's EDGEnetwork® (EDGE) delivers northern research & development and helps red meat producers improve productivity and profitability. Face-to-face workshops allow producers to develop new skills, learn from others in the industry and access the latest research, leading to effective practice change in their businesses.

## Grazing fundamentals EDGE

### Foundations for grazing production

A one-day workshop to give you a broad understanding of grazing production system components and the core, scientifically-backed principles to optimise grazing land productivity.



## Breeding EDGE

### Build a more reproductive herd

A three-day workshop to evaluate the performance of your breeding program and identify strategies for higher productivity and reduced reproductive loss.



## Nutrition EDGE

### Nutrition fundamentals to hit production goals

A three-day workshop to understand optimal use of supplements and the nutrition required to reduce mortality, improve fertility and boost weight gains in your herd.



## Business EDGE

### Know your business, grow your business

A two-day workshop to enhance your financial management and improve business efficiency and profitability. You will also develop strategies to deal with financial risk and external market factors.



## Grazing land management EDGE

### Strategies for long-lasting grazing potential

A three-day workshop to thoroughly understand your grazing environment and strategically manage your grazing business to optimise land condition and productivity in the long-term.



## More information



For more information about EDGE:

 [mla.com.au/edge-network](https://mla.com.au/edge-network)

To find an EDGE event near you:

 [mla.com.au/events](https://mla.com.au/events)

To request an EDGE event in your area, send an email to:

 [edgenetwork@mla.com.au](mailto:edgenetwork@mla.com.au)

# Market and industry insights

## MLA R&D and Market update



### Sally Leigo

Program Manager  
Producer Adoption, Meat & Livestock Australia

E: [sleigo@mla.com.au](mailto:sleigo@mla.com.au)

---

#### *Bio:*

Sally is the Program Manager for MLA's Producer Adoption program, which aims to put in the hands of producers the latest research, technology and best practices to increase production and profitability of red meat businesses. Prior to joining MLA, Sally worked in the NT for close to 16 years delivering research and extension projects, with 13 years based in Alice Springs working with local beef producers.

---

#### *Session overview:*

This presentation will look to provide an overview of the research and development (R&D) investments that MLA is making across the red meat supply chain to improve the prosperity of the industry. The presentation will look at the current operating environment for the red meat industry, drawing on the latest market insights to understand some of the current and future drivers for red meat sales and progressing on to the supply chain initiatives MLA is undertaking to double the value of red meat sales. Finally, the update will highlight how MLA is addressing some of the industry's priorities as outlined by the Red Meat Advisory Council, including achieving carbon neutrality by 2030 (CN30), doubling the value of red meat sales, doubling the investment in adoption and ensuring that red meat is the trusted source of high quality protein for consumers.

---

#### *Key messages:*

- Australian beef represents 4% of global beef production but 11% of global beef exports, competing with countries like the USA, Brazil, Argentina and India.
- Global retailers are driving sustainability requirements and international consumers associate sustainability more with Australian red meat than with New Zealand or the USA.
- International and domestic consumers are looking for a sustainable and affordable red meat product.
- Register for your next MLA Adoption event or activity via MLA's News and Events page: [www.mla.com.au/news-and-events/](http://www.mla.com.au/news-and-events/)

---

#### *Next steps*

- Pick up a copy of the Northern Beef Producers Resource Guide to see what information is available for you.
- Register for your next MLA adoption event or activity via MLA's events calendar: [mle.com.au/events](http://mle.com.au/events)





### George Basha

Operations Analyst  
Integrity Systems Company

E: [gbasha@mla.com.au](mailto:gbasha@mla.com.au)

---

#### *Bio:*

George Basha has been working at MLA since 1999, initially on the National Livestock Identification System (NLIS) and now as the Operations Analyst with Integrity Systems Company (ISC).

George was the first MLA employee to work on NLIS and subsequently has a good overall understanding of NLIS and the database.

In the last seven years George has worked on the other ISC programs such as Livestock Production Assurance (LPA), National Vendor Declarations (NVDs) and more recently the eNVD.

---

#### *Key messages:*

Can you Stand By What You Sell?

- How to do a transfer and check – NLIS
- Becoming accredited with LPA means that livestock producers agree to abide by the LPA Rules and Standards, which cover on-farm risks, animal management, pasture and feed management and livestock transport/movements.
- LPA accreditation will help increase marketing options through access to the LPA NVD or eNVD. eNVDs are free and always up to date.
- The new eNVD mobile app allows you to transfer livestock easily, even when there is no internet at the yards.
  - Works in-conjunction with the eNVD web-based system
  - Save time by only answering questions once
  - Pre-populate your regular consignments

---

#### *Next steps*

Visit [integritysystems.com.au](http://integritysystems.com.au) for 'How To' guides and more information.

Contact [info@integritysystems.com.au](mailto:info@integritysystems.com.au) with any queries.

---

## Notes

---

---

---

---

---

---



## Australian Feedbase Monitor



### **Alastair Rayner**

Cibo Labs Pty

E: [arayner@cibolabs.com.au](mailto:arayner@cibolabs.com.au)

---

#### *Bio:*

Alastair operates RaynerAg – an agricultural consultancy business in NSW, servicing the red meat sector with a focus on beef production. Alastair established RaynerAg in 2013, following a 17 ½ year career with NSW DPI as a District Livestock Officer (Beef Products).

RaynerAg offers a full range of on farm services including livestock management and selection, nutrition and drought management and breeding herd performance.

Alastair is well known for his skills in training and delivery and works closely with a number of organizations to deliver practical and tailored on farm training courses and workshops.

Alastair is highly regarded for his technical skills, writing for Beef Central as the Genetics Editor and in leading the national extension strategy for the Australian Feedbase Monitor Project. This joint project between Cibo Labs and MLA will offer every red meat producer real time satellite updates of pasture growth and feedbase changes, assisting in more informed grazing decisions.

---

#### *Session overview:*

The Australian Feedbase Monitor uses satellite imagery to provide information to producers to help improve grazing management, forage budgeting and groundcover.

The tool enables producers to see their property (or properties) linked to their LPA account, providing an image based on a 1ha resolution pasture biomass and ground cover. This image will be updated every 5 days (on a 30-day rolling median). The tool can be used to understand the feed base trends across a property.

Access is free to MLA members through their MyMLA account. However it is important to ensure their MyMLA details and MLA membership details are aligned and correct.

---

#### *Key messages*

The Australian Feedbase Monitor provides every livestock producer with access to new levels of objective information on trends in pasture biomass over their entire farm.

Combining traditional pasture assessment methods and satellite imagery can help producers better understand paddock variability in pasture growth, utilisation and ground cover throughout the season to inform business and grazing management decisions.

The new tools can help producers to get on the front foot by providing objective and transparent data to support emerging regulatory, supply chain, finance and consumer expectations.

---





# Australian Feedbase Monitor

## Information for producers

The Australian Feedbase Monitor is a world-first tool to help producers improve grazing management, forage budgeting and ground cover.



### The Australian Feedbase Monitor provides:

- access to farm-level rolling monthly pasture biomass estimates for every Livestock Production Assurance (LPA) account holder, updated every five days
- regionally calibrated predictions based on more than 6,000 sites, using world-leading satellite monitoring and data analysis systems
- data showing the trends in pasture growth and ground cover dating back to 2017
- support for more objective and accurate feed budgeting, leading to sustainable grazing management decisions.

### How will this tool help producers?

The Australian Feedbase Monitor will offer multiple benefits to producers and the wider red meat industry including:

- supporting more objective and timely grazing decisions allowing an increase in production and the ability to meet market specifications
- avoiding environmental or welfare issues in grazing enterprises due to increased ability to monitor and report on ground cover and pasture status and trends
- increased consumer confidence in the environmental stewardship of red meat producers.

### How to sign up

Want free access to the Australian Feedbase Monitor? The free subscription to this tool can only be accessed by MLA members via [myMLA](https://mymla.com.au), so make sure you've registered for [myMLA](https://mymla.com.au) and linked it to your current Livestock Production Assurance (LPA) account: [mymla.com.au](https://mymla.com.au).



### Not an MLA member?

You can still access the tool if you're not currently an MLA member:

- apply to be an MLA member (this process can take up to two weeks) at [mla.com.au/membership](https://mla.com.au/membership)
- sign up for a paid subscription through Cibo Labs: [support@cibolabs.com.au](mailto:support@cibolabs.com.au)

[mla.com.au/afm](https://mla.com.au/afm)

**AFM news and updates:** Sign up for MLA's e-newsletter, *The Weekly* ([mla.com.au/enews](https://mla.com.au/enews)), subscribe to *Feedback* magazine ([mla.com.au/feedback](https://mla.com.au/feedback)) or follow MLA on social media.

**Help with using the AFM:** [support@cibolabs.com.au](mailto:support@cibolabs.com.au)

**MLA membership support:** [membership@mla.com.au](mailto:membership@mla.com.au) or 1800 023 100



# Understanding carbon

## Neutral 2030 (CN30) and emerging technologies for the beef industry



### Julia Waite

Project Manager – CN30  
Meat & Livestock Australia

E: [jwaite@mla.com.au](mailto:jwaite@mla.com.au)

#### Session overview

### What is the emissions profile of red meat?

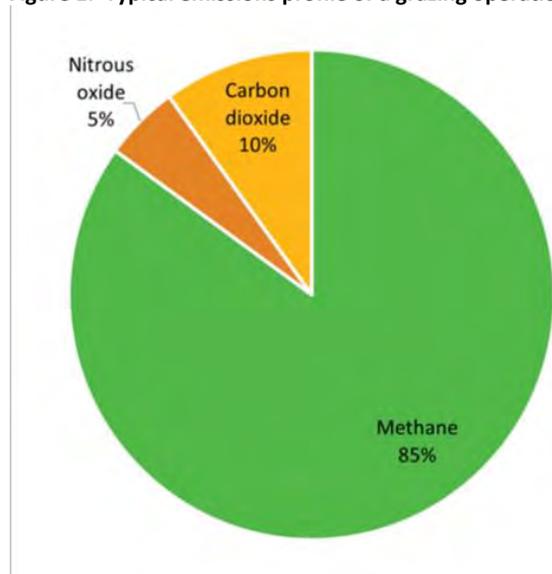
#### *Enterprise*

Methane from livestock contributes the largest share of emissions for a grazing business, between 85 – 90% of total.

Carbon dioxide from electricity, fuel and purchased inputs contribute approximately 10%, and nitrous oxide of fertilisers and manure a smaller 5%.

For this reason, managing for emissions in grazing systems focuses largely on herd efficiency for lower emissions per kilogram of liveweight.

Figure 1. Typical emissions profile of a grazing operation



### What is CN30?

CN30 is a voluntary, industry level target to generate net zero greenhouse gas (GHG) emissions from red meat production and processing by 2030.

Net zero emissions are achieved when the volume of emissions released are equal or less than the volume of carbon sequestered within the industry. The agricultural sector is fortunate that it is one of the only industries with capacity to store carbon directly, in vegetation and soils. Additionally, the red meat industry has opportunities to reduce its emissions through production efficiencies that are good for business.

Progress towards CN30 is **not related** to carbon markets, carbon credits or offsets. CN30 is measured only by direct, 'bio-physical' change in the industry.

---

## How far along is CN30?

Latest figures show the red meat sector has decreased its GHG emissions by **64.9% since 2005**.

	2005	2019	2020
<b>Total red meat emissions (Mt Co2E)</b>	145.82	54.76	51.25
Proportion of total national emissions (%)	23.5	10.6	10.3

Over 90% of red meat industry GHG emissions were associated with grazing and land management. The production and processing of beef cattle contributed most of the red meat industry GHG emissions (88.2%). Sheep and goats contributed 11.6% and 0.15% respectively.

Most emissions reduction is due to carbon stored in uncleared vegetation and some smaller contribution from increased production efficiency.

The 6.4% decline in GHG emissions from 2019 to 2020 is explained by reductions in sheep flock numbers from to drought.

## What does managing for emissions look like on farm?

### 1. Do at the desk:

- Estimate an emissions baseline for your property with **MLA Carbon Calculator** (SB-GAF).
- Explore short online training with **Carbon Toolbox 101**.
- Check out MLA & CiboLabs' **Australian Feedbase Monitor** to map your feed on offer and change over time.
- Keep clear farm records to future proof emerging opportunities, including herd inventory (numbers, stock class, weights, ADWG – mob averages) and purchased inputs (energy, chem, fuel).

### 2. Options to consider now.

#### Managing the herd:

- As always, a focus on production efficiency, reproduction success and weight for age will deliver benefits for the business and emissions.
- Ensure adequate nutrition, particularly during joining, pregnancy and weaning, through feed or supplementation.
- Select for desirable genetic traits for improved feed efficiency, reproductive performance and hybrid vigour.
- Stay on top of animal health, disease and parasite management.

#### Managing country:

- Managing for groundcover is important for land condition and feedbase production, as well as soil carbon retention.
- Integrate and maintain perennial pastures, legumes or species to fill feed gaps where suitable.
- Consider opportunities for strategic vegetation for production or welfare benefits.
- Use fertilisers, machinery/fuel and tillage strategically.

#### Other options:

- Consider renewable energy sources.

---

### 3. Watch and see - (2 – 5 years)

R&D is underway to develop additional tactics and tools to support emissions reductions in red meat business. These include:

- Low methane additives and mechanisms to supply them in grazing settings (e.g. through water, direct feed, lick block, bolus).
- EBVs for low methane traits in beef and sheep.
- New pasture varieties for a low methane diet.
- Expanding options to participate in carbon and natural capital markets.

#### Key terms:

- **Carbon** as a blanket term refers to 3 critical greenhouse gases (GHGs): carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O). All GHG gas emissions are measured as an equivalent amount of CO<sub>2</sub>. For example, 1t of CH<sub>4</sub> is equivalent to 25t of CO<sub>2</sub> (25 tCO<sub>2</sub>-e).
- **Emissions avoidance**/emissions reduction/carbon abatement = reducing carbon
- **Sequestration** = storing carbon
- **Net zero emissions** = carbon neutral
- **Emissions intensity** - The emission rate of a given pollutant relative to the intensity of a specific activity. For example, the ratio of greenhouse gas emissions produced per kilo of LW/meat/product.
- **Offset** - A discrete GHG emission reduction used to compensate for GHG emissions elsewhere (outside the boundary of the entity which produced the offset. Generally refers to traded offsets as ACCUs.
- **Inset** - When businesses can measure carbon sinks from trees and shrubs within their boundary and use this to reduce their net emissions without the creation of offset units. E.g. Carbon as trees/soils within the farm system.
- **Australian Carbon Credit Unit** - Projects earn carbon credits in the form of Australian Carbon Credit Units (ACCUs) for emissions reductions or removals. One ACCU is earned for each tonne of carbon dioxide equivalent (1 tCO<sub>2</sub>-e) stored or avoided by a project.
- **Clean Energy Regulator** (CER) - Body that administers the Emissions Reduction Fund.

---

#### *Next steps and helpful resources:*

- Ensure you are collecting key livestock inventory to capitalise on future opportunities.
  - Have a go at completing a carbon account:
    - [MLA Carbon Calculator](#) – the digitized SB-GAF for enhanced user-experience
    - [Carbon 101 - The Toolbox - MLA eLearning](#) - three part e-learning on carbon on farm and estimating your emissions.
  - Consider herd practices to improve livestock wellbeing, reproduction to reduce emissions per kilogram of liveweight produced.
  - Consider soil and land management strategies that boost soil carbon retention and livestock productivity.
  - Look out for Carbon EDGE – a new training program for red meat producers – coming soon!
-



**Want to know more about how the Australian red meat industry will become carbon neutral by 2030? Here are the answers to some of the frequently asked questions MLA receives from producers, industry stakeholders and the wider community.**

### When was the target set?

In 2017, MLA committed to support the Red Meat Advisory Council's goal to achieve net zero emissions by 2030.

### Will the CN30 target restrict productivity?

No. The CN30 target and productivity are complimentary goals. While the target is based on a herd size cap (28 million cattle, 75 million sheep) the goal can accommodate herd and flock increases through increased carbon efficiency in production.

### What progress has been made to date?

The red meat sector has reduced its emissions by 64.9% from 2005 baseline levels according to latest modelling by CSIRO.

### Why is 2005 the baseline year for the target?

Emissions are compared against the baseline year of 2005 as this is the year that Australia committed to a 26–28% reduction by 2030 on a 2005 baseline under the Paris Agreement.

### Will all farms have to become carbon neutral?

No, the industry goal can be achieved without every individual producer becoming carbon neutral. However, it will require significant adoption of carbon efficient practices by a large majority of industry to achieve this collective goal.

### Does carbon neutrality only refer to carbon? What about other greenhouse gases like methane?

The term carbon neutral encompasses the 3 key greenhouse gases, carbon dioxide (CO<sub>2</sub>), nitrous oxide (N<sub>2</sub>O) and methane (CH<sub>4</sub>).

### How can I lower emissions on-farm while maintaining productivity?

Focus on improving the emissions intensity of your business. Emissions intensity refers to the amount of emissions produced per kilogram of liveweight. The more efficiently we can produce meat, the better our intensity. Management decisions that improve reproduction rate, improve rate of weight gain or decrease time to turn off can all improve the emissions intensity per kilogram of liveweight of your operation, which is great for CN30 and productivity.

### What carbon farming practices are eligible to earn carbon credits?

Not all methods that have a positive impact on emissions and productivity are eligible to generate carbon credits. Under the Carbon Farming Initiative, only methods approved by the Emissions Reduction Fund (ERF) and the Clean Energy Regulator are eligible to earn ACCUs. You can view approved methods online at the ERF website. A 5-minute survey via **CSIRO's LOOC-C tool** can also guide you on the most suitable methods for your business and region. Some of the most common project methods for Carbon



Farming projects in livestock are revegetation, avoided clearing, soil carbon improvement and herd management.

### What is a carbon credit?

A carbon credit represents 1 tonne of carbon dioxide equivalent abated or stored. In Australia, the financial product for carbon is an Australian Carbon Credit Unit (ACCU) which is issued by the Clean Energy Regulator through the Emissions Reduction Scheme.

### What is carbon off-setting?

Offsetting is the practice of obtaining carbon credits to neutralise some or all emissions produced by a business. Credits are traded through a regulated marketplace. Offsets are used when a business wants to lower its carbon footprint but is unable to do so through practice changes. Landholders can generate carbon credits through audited

carbon farming projects, which may be sold to third parties as offsets or kept to offset the farm's own emissions.

### What is carbon in-setting?

Insetting refers to the building of carbon within a supply chain or property, without formal carbon credits. Carbon stocks in soil and vegetation on-farm are recognized in the calculation of a farm enterprise's carbon account. Demonstrating healthy carbon stock and net emissions balance could be beneficial to access trade, supply chain and other financial benefits.

### Where should I start?

Understand your sources and sinks of carbon on farm through **MLA's Carbon 101**



**online training.** Progress through the learning modules at your own pace to understand what management decisions can

improve your productivity, profitability and carbon efficiency. There is also step-by-step guide to completing a carbon account to estimate the net emissions



profile of your property. Use your own data to explore your property's emissions profile with **MLA's Carbon Calculator.**

### I want to register a carbon farming project. Where should I start?

- Complete a carbon account of your business, online or with an independent consultant.
- Consider your capacity to lodge the project yourself, or if you'd prefer to engage a carbon project developer to manage.
- Understand the feasibility of your project - expected carbon credit yield relative to any capital, costs and commission fees. Get second opinions.
- Have any contracts reviewed by a trusted advisor. Understand the implications and what they mean for your cash flow or autonomy.
- Check the carbon developer is a signatory to the Carbon Market Institute Code of Conduct.





## Making sense of carbon in northern Qld



**Joshua Peart**

DAF

E: [joshua.peart@daf.qld.gov.au](mailto:joshua.peart@daf.qld.gov.au)

---

*Bio:*

As part of the Method to Market team, Josh has been investigating the opportunities in environmental markets available to grazing businesses in Queensland. This has predominantly involved working to collate herd records to produce emission baseline estimates and assessing abatement options available to meet industry targets and projected market standards.

*Session overview:*

Pressure on red meat supply chains worldwide to account for and reduce their Scope 3 greenhouse gas (GHG) emissions means that red meat producers should now, more than ever, be aware of where they stand in relation to their GHG emissions. Industry targets like CN30 have spurred on millions of dollars of investment in GHG abatement and sequestration options for red meat producers; identifying a number of actions producers can undertake now to ensure they are well placed for any future obligations relating to GHG emissions.

**Calculate an emission baseline for your business:** an emission baseline is typically a three-year average of GHG emissions attributed to the operation of a grazing business. This includes methane and nitrous oxide from cattle, as well as emissions that result from farm inputs such as fuel, fertiliser, electricity and pesticide consumption etc. Methane (CH<sub>4</sub>) produced during rumination accounts for approximately 90% of emissions in extensive grazing systems, meaning that keeping accurate stock records (reproductive rate, weaning rate and stock number and weight by age and class) is key to calculating an accurate emissions baseline for a grazing business. The more precise your stock records, the more your management will be reflected in the emission intensity of your grazing business, i.e., the amount of methane your livestock produce per kilogram of liveweight. Revising your emissions baseline through ongoing record keeping will ensure you're able to demonstrate your production efficiency and highlight any improvements made in future years.

**Emissions reduction:** Your emissions intensity is largely driven by breeder herd efficiency, feed availability, and feed quality. Many options to reduce emissions intensity can therefore improve the profitability and resilience of your grazing business. For breeding operations, minimising age at first join through improved feed quality/strategic supplementation; culling empty or dry breeders at pregnancy test and weaning; and controlled joining are some of the most impactful management interventions managers can undertake to reduce their emissions intensity. For all grazing businesses, improving feed availability and quality; identifying and appropriately supplementing for nutrient deficiencies; and responding to seasonal cues early are all highly effective.

**Carbon sequestration:** There may be options to reduce your emissions baseline further through carbon sequestration in woody vegetation (or soil) on-farm. Areas of woody vegetation that represent genuine abatement include areas of regrowth that you intend to retain long-term. Identifying and mapping these areas is the first step to calculating the amount of carbon you are storing in woody vegetation on-farm. Remnant areas of woody vegetation have generally reached an equilibrium in terms of carbon loss/sequestration and so will have no impact on your emissions baseline however they will have the greatest impact on on-farm biodiversity.

---

---

Soil organic carbon (SOC) sequestration is highly variable, mostly being affected by rainfall, temperature, clay content. Abatement potential is highest where SOC has been significantly depleted, such as in cropping situations however, due to its natural variability, it is difficult to recommend SOC projects as a means of reducing emissions in grazing situations.

**Offsetting/Insetting:** Offsetting and insetting are two methods of balancing the remaining emissions of a business. The key difference is that while offsets can be obtained by purchasing carbon credits external to the business, insetting is the process of sourcing credits from within the supply chain (or on farm). Unlike ACCUs, insetting credits do not need to be sourced from 'new' activities, and are therefore a game changer for many graziers who find themselves ineligible for formal carbon projects under schemes like Australia's Emissions Reduction Fund.

---

*Key messages:*

Efficient beef production = low emissions per kg. Improving efficiency is good for both your bottom line and the climate.

Regeneration of native vegetation on as a means of offsetting emissions from grazing businesses is recommended only where other production and/or ecological co-benefits can be simultaneously achieved (e.g. improved shade and shelter for livestock, biodiversity outcomes, water quality etc).

Keeping accurate herd and business records is key to producing an emissions baseline. Check your data and try to consolidate the numbers where possible.

---

*Next steps:*

1. Get to know your emissions baseline – collate the business' data and use a calculator such as the MLA Carbon Calculator.
2. Think about opportunities for your business – what would fit into your management style and production goals?
3. Keep your finger on the pulse and stay informed via the Carbon Neutral Grazer Network.

<https://mailchi.mp/daf/carbon-neutral-grazier-network>

---

## Notes

---

---

---

---

---

---

---

---

---

---

---



# Breeding and Genetics

## Genetics and Genomics: an explainer



### Geoffry Fordyce

Galf Cattle Pty

E: geoffry.fordyce@gmail.com

#### *Bio:*

Geoffry Fordyce's RD&E over 40 years followed an apprenticeship in the family beef cattle business and private veterinary practice. Geoffry has worked in multi-agency RD&E teams, primarily in northern Australia and south-east Asia, where he has studied all aspects of tropical beef breeding herd systems including female and male reproduction, nutrition, health, genetics, behaviour and business.

### Breeding values

To achieve genetic change, businesses have several options to aid in selection, including:

- available phenotypes (the simple and traditional measure of an animal)
- Estimated Breeding Values (EBVs)
- Tropical Beef Genomic Breeding Values (GBVs)
- gene tests (e.g. for the double muscling mutation which is associated with severe fertility problems) and;
- some breeding values from other agencies.

Tropical Beef GBVs indicate the performance potential of an animal's progeny in relation to all beef cattle in northern Australia. For example, a GBV of 27 means 73% of animals are higher/better. EBVs have many similarities to Tropical Beef GBVs, even in their calculation. The main difference is that Tropical Beef GBVs can be used for any breed, whereas EBVs are still breed-specific. Therefore, those who have never had access to EBVs now have GBVs. In addition, Tropical Beef GBVs mostly cover traits that EBVs don't.

Tail hair follicles or ear snips are used to get a genotype to read the DNA. Genomics is analysis of genotypes to describe genetic control of a trait.

Examples:

**Poll genetics is read at one point**

**Determines whether the animal is PP (true poll), PH (polled but carrying the horn gene) or HH (horned)**

**Thousands of DNA points are used to calculate the probability of P4M**

Determines where the animal ranks against all other cattle in northern Australia

***P4M = Pregnant within 4 months of calving while lactating***

For specific traits, use the most accurate measure of genetic merit. For example, if a 600-day weight EBV is available and more accurate than a weight GBV, use the EBV. If targeting re-conception during pregnancy, a Tropical Beef P4M GBV may be the best option available, but also consider breeding history of a female or dam, if available, and a days-to-calving EBV if available.

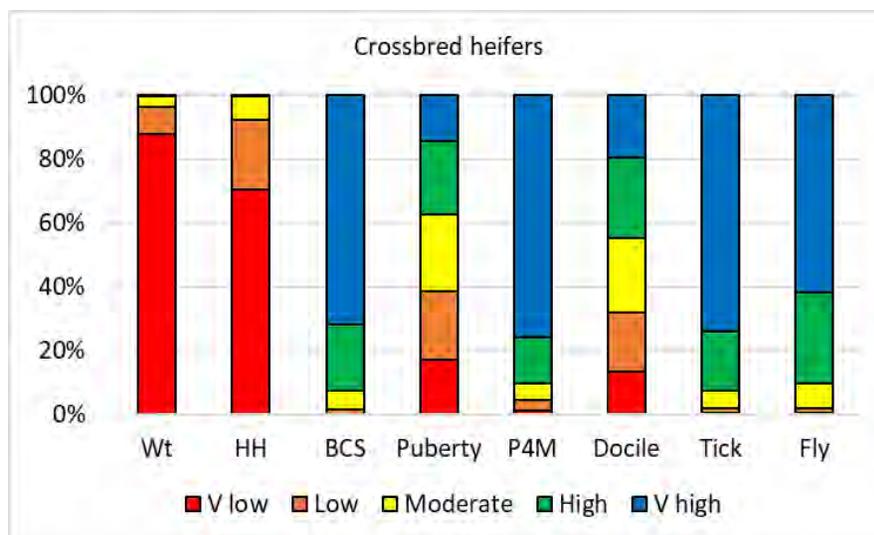
### Objectives when changing genetics

Business earnings before interest and tax (EBIT) = Product x Value – Costs

In a beef system, **the product is live weight**. All well-made management decisions, including changing genetics, consider the elements of EBIT. In Brahmans, GBVs for puberty and P4M explain half the genetic variation in liveweight production of breeding cattle. In *Bos indicus* x *Bos taurus* composites and crossbreds, weight, P4M and tick resistance GBVs have the largest impact on production.

The first steps in any genetic change program are to **define current genetics of a herd** and **breeding objectives**. A herd profile graphically rates the genetics of a herd against the rest of the north Australian herd. The distribution of GBVs from 25 of more randomly-selected animals from a year group is presented in quintiles, i.e. 20% groupings. It shows for each trait what percentage of a herd's cattle are within each quintile of all cattle across northern Australia. The results give strong direction to selection strategies.

In the example to the right, these cattle have low genetic merit for weight and height, compared to all cattle in northern Australia. They are average for puberty and temperament. But they have very good genetics for achieving pregnancy during lactation, and for tick and fly resistance.



#### Key messages:

- Genetic change should be made using breeding objectives, defined within a business product-value-cost framework.
- A herd profile provides a herd's genetic situation analysis.
- Genomic Breeding Values (EBVs) add to the suite of valuable measures of genetic merit available.

#### Next steps:

- Register for a new one-day Bred Well Fed Well workshop.
- Find a Breeding EDGE workshop near you via the MLA events calendar – [mla.com.au/events](http://mla.com.au/events).
- Visit the MLA website where you can find Tips n Tools on reproductive performance.
- Visit the MLA Genetics Hub – [genetics.mla.com.au](http://genetics.mla.com.au)





# Better your business



MLA offers red meat producers a range of educational resources, tools and programs to improve profitability

## Training programs/workshops

MLA delivers a range of programs and workshops to equip producers with the latest best-practice knowledge:



## MLA resource hubs

MLA has compiled this series of hubs containing relevant resources on a range of on-farm topics:

- **Livestock:** Genetics, beef, sheep, goats
- **Feedbase:** Healthy soils, phosphorus, leucaena, pasture dieback, dung beetles
- **Sustainability:** Carbon neutral by 2030, dung beetles
- **Climate:** Climate, disaster recovery
- **Other resources:** Seasonal resources, COVID-19 resources and market insights hub, mental health, MLA's e-newsletters



[mla.com.au/hubs](http://mla.com.au/hubs)

## The toolbox

Self-guided online tools and training packages to upskill anytime, anywhere. Topics include:

- assessing nodulation in legume pastures
- establishing a new pasture
- pain relief use in southern cattle
- pain relief use in sheep
- introduction to MateSel
- soil testing
- visual indicators of soil condition



Online training, tools and resources

[elearning.mla.com.au](http://elearning.mla.com.au)

## Keep informed

Stay ahead with MLA resources:

- **Red meat industry events:** [mla.com.au/news-and-events](http://mla.com.au/news-and-events)
- **Feedback magazine:** [mla.com.au/feedback](http://mla.com.au/feedback)
- **Feedback podcast:** [mla.com.au/feedback-podcast](http://mla.com.au/feedback-podcast)
- **On the ground podcast:** [mla.com.au/on-the-ground](http://mla.com.au/on-the-ground)
- **e-newsletters:** [mla.com.au/enews](http://mla.com.au/enews)



## Become an MLA member today

MLA membership is **free** to levy-paying producers of grass or grainfed cattle, sheep, lambs or goats. MLA members receive the following free or discounted products:



Market information



Discounted entry to MLA events



Publications and information tools



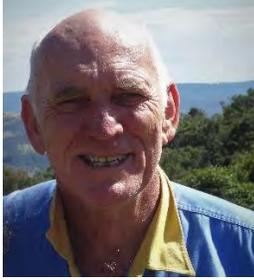
Subscription to MLA's Feedback magazine

**FREE**  
to levy-paying  
red meat  
producers



To become an MLA member call **1800 023 100**, visit [mla.com.au/membership](http://mla.com.au/membership) or scan the QR code above.

## Heifer management strategies



### Geoff Niethe

Niethe Consultancies

E: [g.niethe@bigpond.com](mailto:g.niethe@bigpond.com)

---

#### *Bio:*

Geoff has a Masters in Productive Herd Health & Management from the University of Melbourne. - He was a Principal Animal Production Officer – NT and spent 12 years on the Barkly Tableland supporting the successful implementation of BTEC.

Geoff was a Director of the University of Queensland's Pastoral Veterinary Centre at Goondiwindi, a Lecturer of Beef Cattle Medicine and Production, and supervised postgraduate training in pastoral herd management.

Geoff also spent time in Turkey establishing a successful lot feeding operation for McDonalds. He was President of the Australian Association of Cattle Veterinarians (1994/95) and National President of the Australian Veterinary Association (1998/99).

Currently Geoff does veterinary consultancy in Australia and overseas.

---

#### *Key messages:*

Replacement heifers are the foundation on which the breeder herd is built. Maiden and 1<sup>st</sup> calf heifers comprise approximately 40% of a normal herd yet they are the worst performing group – higher calf losses and lower reconception rates.

Determining target critical mating weights and addressing a range of factors to achieve these targets is paramount in maximising young breeder performance.

A group of motivated Desert Uplands producers are identifying the barriers to meeting targets in their region and will develop cost options to maximise the outputs from their young breeding animals – check out the Girl Power project.

---

#### Next steps:

Visit the MLA website for Tips n Tools on herd reproduction.

Find a Breeding EDGE course near you via the MLA events calendar: [mla.com.au/events](http://mla.com.au/events)

---

## Notes

---

---

---

---

---



# An introduction to Breeding and feeding to maximise profit

On the back of a decade of success, the BredWell FedWell workshops have been redeveloped to reflect evolving best practice genetics and nutrition management.

- Develop a customised breeding plan for your livestock enterprise aligned to your profit drivers
- Identify sires and select animals that help you meet your objectives
- Learn about feeding animals well to achieve your objective and maximise your genetic investment



### Informative

Presentations and discussions with deliverers and peers



### Interactive

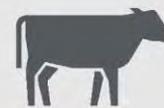
Practical and written activities hosted on-farm



### Individualised

Learning outcomes you can apply in your own enterprise

So far, BFWW workshops have delivered \$17.2m in total net benefits to participating producers



**1.9M**

cattle influenced by the BFWW workshop

**\$2.98**

net benefit per cow mated

**639k**

breeding females



**19.6M**

sheep influenced by the BFWW workshop

**\$2.48**

net benefit per ewe joined

**12.7M**

breeding ewes

\*Calculated as net present value of adoption to 2045, discounted at 5% annually.



New workshops are available for all sheep types, southern cattle and northern cattle production systems. Register your interest to participate or host a workshop.

[mla.com.au/bredwellfedwell](http://mla.com.au/bredwellfedwell)



## Panel – improving your herd performance



### Sam Fryer

“A Place To Call Home Podcast”

E: [samfryer89@gmail.com](mailto:samfryer89@gmail.com)

---

#### *Bio:*

Sam lives just outside of Hughenden with his wife, Emily and their three children. Together they manage a cattle operation and are both extremely passionate and active members within their rural community.

It is Sam’s deeply ingrained passion in the beef industry and the region that led to him being awarded the Queensland Agribusiness Rising Champion in 2021. He sits on the board for Southern Gulf Natural Resource Management as well as the Northern Council and Young Producers Council for Agforce Queensland.

Sam also hosts the ‘A Place to Call Home’ podcast which focuses on bringing the next generation into the agricultural industry, all while balancing a full-time professional career.



### David Rankine

Bunuro Station

E: [ddrankine@gmail.com](mailto:ddrankine@gmail.com)

---

#### *Bio:*

David Rankine grew up on Meadowbank station south of Mt Garnet. His family sold there in 1989, worked contract mustering, yard building and fencing with breeders on agistment. This included work across various properties in Valley of Lagoons GreenVale, Strathstewart and Hughenden. With the support of his wife Donna, who has extensive stock handling skills from her time and upbringing in Cape York, David managed properties at Torrens Creek, Hughenden and Muttaborra.

David and Donna purchased Bunuro in 2000 and are slowly developing the 76,000 acre property, including 40,000 acres heartleaf poison. They are now rotating 2,000 head in one mob through 23 paddocks with 2km water radiuses, branding 800 head of weaners this year.

David and Donna are also embracing DAF and MLA research with grazing and animal management. They are involved in genomics research with Geoffry Fordyce, and have participated in the RCS business and grazing courses, which instigated their property development and grazing practices.



**Michael Lyons**

Lyons Family Grazing

E: [mmylons@bigpond.com](mailto:mmylons@bigpond.com)

---



**Anita McNamara**

E: [anita.mcnamara@uqconnect.edu.au](mailto:anita.mcnamara@uqconnect.edu.au)

---



**Ray Thieme**

CCC Cunningham Cattle Co

---

*Bio*

Ray Thieme is the General Manager for the Cunningham Cattle Company. The properties are a part CCC's extensive beef cattle property portfolio extending across 7 stations and 70,000 head of cattle, with a geographic spread across Queensland and a footprint of over 1 million hectares.

CCC is the operating company for the Gunn Agri Cattle Fund and was established in 2016 by the Gunn Agri Partners as the fund managers, on behalf of institutional investors. The company's focus is producing beef cattle into the supply chain at low cost and scale, with the adoption of best practice management.

Ray has over 35 years' experience in the northern cattle industry, starting as a Jackeroo through to managing properties in Qld and NT. Ray's career has developed through many facets of the beef cattle supply chain from extensive commercial, feedlot, farming and genetics of a range of Bos taurus and Bos indicus breeds. Ray is passionate about the development of people, genetics and northern Australia.

---

**Notes**

---

---

---

---

---









# North Australia Beef Research Council



## DRIVING INNOVATION & PROSPERITY

NABRC connects producers, researchers and industry stakeholders to drive improved production in Australia's northern grassfed beef industry.

As an independent association, NABRC breaks down barriers between research scientists and grassroots producers to enrich research and enhance adoption.

We draw on the knowledge, insight and expertise of our vast network to prioritise and influence RD&E/A efforts in northern Australia.

## GET INVOLVED

NABRC is made up of 11 Regional Beef Research Committees across northern Australia.

By engaging with their local RBRCs, producers can highlight issues their region faces and help set the research priorities for agencies like Meat & Livestock Australia.

- Identify needs that may be solved by research, development, education, extension and training.
- Assess their relative importance and the potential benefits to the region.
- Provide input to assist the development of research proposals.
- Facilitate the dissemination of research results to producers in the region and to provide feedback on the adoption of new technologies.



## NORTH QUEENSLAND RBRC CONTACT US:

Chair - Eiren Smith  
Charters Towers  
m: 0459 342 952  
e: eirensmith@gmail.com

Lead Secretary - Bec Clapperton  
Department of Agriculture and Fisheries  
m: 0477 345 843  
e: bec.clapperton@daf.qld.gov.au











**Forum Coordinator Contact**

Rosie Peace

AA&P Events

M: 0410 518 884

P: 08 8942 3388

[beefup@associatedadvertising.com.au](mailto:beefup@associatedadvertising.com.au)

[rosiep@associatedadvertising.com.au](mailto:rosiep@associatedadvertising.com.au)