

NBRUC 2026

NORTHERN BEEF RESEARCH UPDATE CONFERENCE

FROM RESEARCH TO RESULTS: DRIVING Paddock PERFORMANCE



10-13 MARCH 2026

VOCO BRISBANE CITY CENTRE, QLD

www.nbruc.com.au

PROGRAM

TUESDAY 10 MARCH 2026

4.00pm – 6.00pm	Conference registration <i>Grand Chelsea Lobby</i>	
6.00pm – 8.00pm	Welcome Reception <i>Chelsea Lane</i>	<p><i>Sponsored by</i></p>  <p>LALLEMAND ANIMAL NUTRITION</p>

WEDNESDAY 11 MARCH 2026

6.15am for a 6.30am start	Meat & Livestock Australia Beef Industry Breakfast <i>The Grand Palms</i>	 <p>MEAT & LIVESTOCK AUSTRALIA</p>
7.30am	Conference registration <i>Grand Chelsea Lobby</i>	
8.30am – 9.00am	Arrival tea and coffee – <i>Grand Chelsea Lobby</i>	
9.00am – 10.30am	Session 1 – Welcome to the 8th Northern Beef Research Update Conference	
9.00am	Conference welcome and opening <i>Richard Cox, NBRUC Chair</i> <i>The Honourable Tony Perrett MP, Minister for Primary Industries, Queensland Government</i>	
9.25am	Keynote presentation: Research to results – using data and technology <i>Derek Bailey, Director of Research and Outreach, Deep Well Ranch (Arizona, USA)</i> <i>Sponsored by</i> 	

9.55am	Keynote presentation: Lessons learnt - how the north can keep winning <i>David Foote, DF Agrifood Advisory</i> Q&A		
10.30am – 11.00am	Morning tea – <i>Grand Chelsea Lobby</i>		
11.00am – 12.30pm	Session 2 – Stretching the research dollar <i>Chair: Jayne Cuddihy</i>		
11.00am	Framing the future of R&D investment: The MLA strategic plan 2030 <i>Sarah Strachan – General Manager - Research Development and Adoption, Meat & Livestock Australia</i>		Sponsored by 
11.20am	Moving the dial for northern beef research in a cost price dilemma Ian McLean – Managing Director, Bush Agribusiness Pty Ltd Kieren McCosker – Senior Research Fellow, QAAFI, The University of Queensland Geoff Murrell – Pastoral Partners Australia		
12.00pm	Table talk: Does “leaner have to be meaner” for meaningful research to have impact for northern beef herds? Moderated by Jayne Cuddihy <i>Industry and representatives for state agencies reflect on the cost of applied research and challenges in making budgets deliver meaningful outcomes that move the dial for northern beef production systems.</i>		
12.30pm – 1.30pm	Lunch – <i>Grand Chelsea Lobby</i>		
1.30pm – 3.00pm	Session 3 – Concurrent sessions: Animal health, reproduction and herds on the move		
Session	3A - Ticked off: vaccines, vectors and disease detection <i>Sponsored by</i> 	3B - Crush to cradle: optimising reproductive performance <i>Sponsored by</i> 	3C - Environmental stewardship: pastures on the radar
Room	Daintree	Topaz	Sundown
Chair	Johann Schröder	Greta Dunne	Dianne Mayberry
	<ul style="list-style-type: none"> Paul Stewart – Remote surveillance for emergency animal disease using artificial intelligence (10) Lida Omaleki – Pasturella multocida and Bovine Respiratory Disease: What does the diversity of Lipopolysaccharide tell us? (10) Jess Morgan – Update on synthetic pyrethroid insecticide resistance in buffalo fly (10) Hannah Siddle – Safe guarding beef production with rapid chemical resistance tests in ticks (3) Guilherme Klafke - RaTexT® as a rapid field alternative to laboratory bioassays for detecting acaricide resistance in cattle ticks 	<ul style="list-style-type: none"> Elsie Vincent – Validation genomic breeding values for beef female fertility (10) Benjamin Wood – Incidence of Trichomonas foetus increases with bull age indicating culling for age may be a suitable control option (10) Ella Watkins – Pawsitive pregnancy: Investigating detection dogs for cattle pregnancy diagnosis (10) Antonio Reverter – Enhanced multi-breed genomic prediction for bull fertility using breed-adjusted genomic relationship matrices (10) 	<ul style="list-style-type: none"> Robyn Cowley – Finding the Sweet Spot: Pasture utilisation that maintains land condition is the most profitable over the long term (10) Baisen Zhang – Seasonal pasture budgeting at property scale – a FORAGE online tool (prototype) for assessing stocking rates for Queensland grazing lands (10) Jason Barnetson – Mapping Pasture Quality: Using Remote Sensing to Address Northern Australia's Fodder Gap (10) Luis Woodrow – Adjusting the Seasonal Persistent Green Product for Green Grass Signal (10) James Dougherty – Cottonseed supplementation of Rhodes grass hay improves growth of

	<ul style="list-style-type: none"> • Tim Schatz – Assessing the effectiveness of a new type of insecticidal cattle ear tag (3) • Zheto Zhang – Pilot trial of a whole-cell killed Bovine Genital Campylobacteriosis vaccine (3) • Caity Kelly – The occurrence of vaccine injection site reactions in a northern beef herd (3) • Harvey Santos – Efficacy and safety of an Australian whole-cell killed Tritrichomonas foetus vaccine in T. foetus naïve young bulls (3) • James Copley – Using a test and cull strategy reduces Trichomoniasis prevalence in northern Australia beef bulls (3) • Mark Trotter – The case for on-animal sensors as a tool for endemic and exotic disease surveillance (3) <p>Q&A where time permits</p>	<ul style="list-style-type: none"> • Matt Wolcott – Genomic benchmarking in commercial beef herds to inform bull selection decisions in extensive, northern production systems (3) • Mel Wooderson – Improving the fertility of a Brahman herd through the use of high fertility bulls in the Northern Territory (3) • Piper Smith – Mooternal: Investigating relationships between maternal investment, calf loss and productivity in Northern Australia (3) • Rebecca Burnham – ‘Beefing Up Genomics’ - A producer driven approach to reference populations (3) • Samantha Rudd - Topical wound treatments targeting haemorrhage and infection in amputation dehorned calves (3) • Kim Hubbard – The effect of lactation anoestrous of first-calf cows on weaning weight (3) <p>Q&A where time permits</p>	<p>Brahman cross steers in the Northeast Kimberley (10)</p> <ul style="list-style-type: none"> • Georgia Anderson – What drives cattle landscape use in Central Australia? (3) • Luis Prada e Silva/Tamara Freitas-Kirk – Bluetooth ear tags can help track supplement intake in grazing cattle (3) • Gretel Bailey-Preston – FireGraze: Using strategic patch burning to influence cattle grazing behaviour and improve land condition (3) <p>Q&A where time permits</p>
3.00pm – 3.30pm	Afternoon tea – <i>Grand Chelsea Lobby</i>		
3.30pm – 4.30pm	Session 4 – Concurrent sessions: Methane, practice change and the R&D legacy		
Session	4A - The “not the methane” session?	4B - Good projects, good results: delivering the R&D legacy for northern systems	4C - Drivers of practice change
Room	Daintree	Topaz	Sundown
Chair		Simon Quigley	
	<ul style="list-style-type: none"> • Richard Heath - Zero Net Emissions from a thriving Australian agriculture sector (20) • Melissah Dayman – From weaning to research ready: Enhancing Greenfeed Emissions Monitoring (GEM) unit interaction in extensive grazing systems (3) • Melissa Matthews – Methane emissions from cattle grazing Desmanthus pastures on property (3) 	<ul style="list-style-type: none"> • Steven Bray – Sixty-year experiments, hidden in the Mulga, informing today’s issues (10) • Robyn Cowley – Why are woody plants increasing? The value of long term studies – lessons from a 30+ year burning experiment and 50+ year grazing exclosures (10) • Stuart Buck – Sowing seeds of legume success in central Queensland (10) 	<ul style="list-style-type: none"> • Harry Evans – Understanding herd performance requires clarity in classifications (10) • Sampath Dissanayake – Unveiling the performance drivers of northern Australian beef systems: A time series analysis (1990-2022) (10) • Kieren McCosker – Key Drivers of Profitability within North Australian Beef Breeding Businesses (10) • Sampath Dissanayake – Bioeconomic evaluation of prepartum nutritional supplementation in

	<ul style="list-style-type: none"> • Hayley Norman – Advancing faecal NIRS for predicting intake and methane emissions from Northern cattle herds (3) • Marina Fortes – Measuring methane emissions under grazing conditions in Brahman heifers (3) • Diane Ouwerkerk – Discovering Northern Australia’s low methane feedbase potential (3) • Lachlan Godson/Zac Geldof – Legume-enhanced pastures with fertiliser inputs improve productivity and reduce net GHG emissions in a Central Queensland beef system (3) • Céline Chaléat – Controlled-release technology for methane mitigation in grazing beef cattle: 3-nitrooxypropanol (3-NOP) release profiles in water (3) • Gonzalo Martinez-Fernandez – Use of Bovaer in drinking water for Northern Australian cattle (3) • Cameron Whistler – Genomic prediction to select for lower methane production in purebred, crossbreed and composite cattle in northern Australia (3) • Elaine Mitchell – Evidence for enhanced soil carbon and nitrogen stocks under time-controlled grazing in the Australian subtropics (3) • Tien Chinh Nguyen – Biodiversity and carbon storage in a Corymbia hybrid silvopastoral system in northern Australia (3) • Julia Waite – Wrap up and discussion <p>Q&A where time permits</p>	<ul style="list-style-type: none"> • Gavin Peck – Old evaluation trials delivering a legacy of new persistent legume varieties (10) • Mary Williams – Augmenting native pastures with legumes as a pathway to resilience and increased productivity in the Victoria River District of the NT (3) • Michael Finey – Demonstrating the challenges of augmenting native pastures with legume cultivars on cracking clay soils in the Victoria River District (VRD), NT (3) • Jaidyn Eastaughffe – Long-term dynamics of species composition in the Northern Territory Rangelands: a 50-year perspective (3) • Juan Guerschman – Improved monitoring of pastoral landscape productivity and trends in the Rangelands (3) • Bernie English – Legume production paddocks improve dry season diet quality and animal performance on fertile soils in north Queensland (3) • Greta Dunne – Species proportion trends on the Richmond Downs post 2019 flood (3) <p>Q&A where time permits</p>	<p>northern Australian beef production systems (10)</p> <ul style="list-style-type: none"> • Harry Milbank – Economic evaluation of establishing pasture legumes in the Brigalow Belt (10) • Tim Schatz – Crops for Cattle – Increasing the efficiency of north Australian cattle production systems through strategies to improve dry season weight gain (3) • Carrie-Ann Wilson – BeefVantage: Collaborative intelligence for better beef decisions (3) <p>Q&A where time permits</p>
6.30pm – 10.30pm	<p>Conference Dinner and NABRC Medals Awards Night <i>Grand Chelsea Ballroom</i></p>		
<p>THURSDAY 12 MARCH 2026</p>			
7.30am	<p>Conference registration</p>		

	<i>Grand Chelsea Lobby</i>		
7.30am – 8.00am	Arrival tea and coffee – <i>Grand Chelsea Lobby</i>		
8.00am – 10.00am	Session 5 – Plenary session: Industry led innovation, partnerships and extension		
	<p><i>Facilitated by Jean Kittson</i></p> <p>Capture, engage and keep valuable people Barb Bishop</p> <p>Driving adoption of innovation at scale through experiential learning Claire Mahony, IRDA Foundation</p> <p>Campfire Chat – the use of VR and AI technology in an Indigenous Peer to Peer Learning Group Ian Perkins</p> <p>Delivering outcomes for the Kimberly-Pilbara Bron Christensen</p> <p>Extension and adoption across Gascoyne Krystie Bremer</p>		
	<p>Pilbara Voices: Rethinking Research from the Ground Up <i>Sponsored by Pilbara Innovation Partnership</i></p> <p>Pilbara producers are reshaping how research happens across northern WA. This session brings together pastoralists to share what producer-led research looks like in practice – the opportunities, barriers, and lessons learned from working directly with scientists and funders. Facilitated by Dr Kelsey Pool (UWA), the panel will explore how producers identify research-able issues within their own stations and regions, what makes research relevant and scalable, and how stronger producer involvement can drive greater adoption and long-term impact across the rangelands.</p>		
10.00am – 11.00am	Morning tea – <i>Grand Chelsea Lobby</i>		
11.00am – 12.00pm	Session 6 – Concurrent sessions: Decision tools, legumes and reproduction		
Session	<p>6A - Decision tools & technology for improved management <i>Sponsored by</i></p> 	<p>6B - Legumes, trees, rangelands and carbon <i>Sponsored by</i></p> 	<p>6C - Improved reproduction and resilience</p>
Room	Daintree	Topaz	Sundown
Chair	Dale Miller	Kendrick Cox	Hayley Norman
	<ul style="list-style-type: none"> Ian Dunbar – Spatial survey to assess legume adoption in Queensland (3) Roger Sneath – Excel dry season pasture budget soon to be available on FutureBeef (3) Mehrnush Forutan – Genetic tools to support fertile and productive cattle (3) Tim Emery – Using smart collars to help keep an eye on your bull team 24/7 (3) 	<ul style="list-style-type: none"> Jane Evans – Production potential of improved pastures on northwest Queensland downs (3) Vanessa Macdonald – Spatial Analysis of Legume Suitability in Queensland (3) Saranika Talukder – In vitro total gas production and nutritional evaluation of tropical legumes (3) Ajay Augustin – Evaluating seed yields of <i>Stylosanthes seabrana</i> and <i>Stylosanthes</i> 	<ul style="list-style-type: none"> Dana Walkington – On-property research and strong relationships result in practice change that increases land condition and carrying capacity in Western Queensland (10) Kirsty Moore – Managing myostatin mutations (double muscling) in northern Australian tropically adapted beef breeds (10) Elizabeth Ross – Solving the discordance between poll genotypes and phenotypes in Northern Beef Cattle (10)

	<ul style="list-style-type: none"> • Greg Campbell – Automated, Remote Detection of Oestrus in Grazing Cattle Using CERES TAG Sensors (3) • Christie Pearson – Virtually fencing cattle onto new water points in Northern Australia (3) • Stephen Wiedemann – Updating the life cycle carbon assessment of Australian livestock exports (3) • Kate Holzapfel – Developing sustainable carrying capacities in the Victoria River District of the Northern Territory (3) • Thomas Williams – Tracking reveals cattle group into spatial and social clusters, but performance does not differ between groups (3) • Tony Cavallaro – Field prototype for oral sample collection in grazing ruminants (3) • Grant Stone – The FORAGE system – the ‘track record’ (10) • Kara-glenn Worth – Reducing barriers to agriculture technology adoption through innovation-readiness assessments (10) • Mark Peart – Unlocking a new source income in livestock production: Literature Review (3) <p>Q&A where time permits</p>	<p>scabra in southern Queensland Compared to northern Queensland (3)</p> <ul style="list-style-type: none"> • Kendrick Cox – Cultivated strips fast-track legume establishment in red basalt woodland (3) • Kerry Goodwin – Silvopastoral establishment provides insight into animal production (3) • Joe O’Reagain – Vegetative propagation of putatively sterile Leucaena genotypes (3) • Stuart Buck – Feed availability in mature leucaena paddocks (3) • Kate McCullough – Urea Boosts Biomass but Reduces Litter Cover in Gully Remediation (3) • Gavin Peck – New stylo varieties for frosty locations (3) • Dana Walkington – Testing pasture establishment techniques in the Desert Uplands (3) • Elaine Mitchell – Soil carbon sequestration under tropical perennial legume Desmanthus in northern Australian grasslands (10) • Nahuel Pachas – Steak n Wood project: Silvopastoral systems research in Queensland and northern New South Wales (10) <p>Q&A where time permits</p>	<ul style="list-style-type: none"> • Mark Peart – Water-Based vs. Traditional Supplementation in Cattle: A Case Study (3) • Tim Schatz – Easy P – evaluation of a Phosphorus supplementation strategy that is easy to implement in areas that are difficult to access during the wet season (3) • Janna Sim – Breedcow Lite – streamlined for dynamic use by graziers and advisors (3) • Luis Prada e Silva – Pre-calving nutrition improves reproductive efficiency in northern beef herds (3) • Niilo Gobius – Breedcow+ provides northern producers with options to improve gross margins and improve land condition (3) • Gretel Bailey-Preston – Observations of early calving history on a cow’s third and fourth mating outcomes in a high fertility Brahman herd (3) <p>Q&A where time permits</p>
12.00pm – 1.00pm	Session 7 – Concurrent sessions: Tools and tech, building capacity and managing for improved productivity		
Session	7A - Decision tools & technology for improved management (continued)	7B - Extension, building capacity & regional capability	7C - Managing stressors for improved productivity and sustainability
Room	Daintree	Topaz	Sundown
Chair		Stacey Holzapfel	
	<ul style="list-style-type: none"> • Christie Warburton – How many SNPs are required to perform multi-breed genomic predictions in Australian cattle populations? (10) • John Carter – Seasonal forecasting: A simple analysis of various statistical and 	<ul style="list-style-type: none"> • Liz Moss – Pilbara Extension Network: Producer-led research and extension in the Pilbara beef industry (10) • Beth Penrose – Building research capacity and capability in the north: the new Research Institute for Northern 	<ul style="list-style-type: none"> • Ben Allen – Novel animal welfare assessment tools for mass euthanasia of intensive livestock (3) • Michele Tree – Impact of long-distance transport on cross-bred Bos indicus beef cows (3)

	<p>weather model forecasts for Queensland (10)</p> <ul style="list-style-type: none"> • Dianne Mayberry – National Climate Risk Assessment – key messages for the Australian northern beef herd (10) • Fiona McCartney – Understanding FORAGE report user experience to improve its usefulness for grazing land management decision-making (10) • Ana Carla Leite De Almeida – Biodiversity into focus: ESG metrics and reporting in the beef sector (10) • Laercio Porto-Neto – Combining reproductive and genomic biotechnologies to further improve beef production (10) 	<p>Agriculture at Charles Darwin University (10)</p> <ul style="list-style-type: none"> • Ted Callanan – Ramping up extension delivery as pasture dieback spreads south (10) • Nicole Sallur – FutureBeef—widely valued, driving practice change (3) • Kylie Hopkins – Queensland Pastures e-newsletter increases beef industry engagement (3) • Marcia Smith – The value of knowledge diversity - what if I am wrong (3) • Natalie Hughes – Strengthening the beef industry’s drought, business, and financial resilience through the Advancing Beef Leaders program (3) • Stacey Holzapfel – Research to reality: investigating barriers to on-station practice change (3) • Ryan Honor – The Northern Breeding Business program – Peer to peer learning fostering the adoption of improved cattle grazing business management practices and technologies in the Fitzroy River catchment (3) • Greta Dunne – Producer-focused demonstration site increases engagement in north west Queensland (3) • Megan Willis – Developing a formal staff induction and mentoring program for the Department of Primary Industries Extensive Livestock Systems RD&E work group (3) <p>Q&A where time permits</p>	<ul style="list-style-type: none"> • Harriet Dunne – Livestock refuge mounds in northwest Queensland (3) • Samantha Rudd – Evaluation of Post-Dehorning Wound Treatments in Extensive Australian Beef Systems to Improve Performance and Wound Healing (3) • Samantha Rudd – Evaluating novel and existing wound treatments for cattle (3) • Samantha Rudd – Attitudes and practice on pain relief for dehorning cattle in Northern Australia (3) • Angela Lees – Influence of heat tolerance classification on rumen temperature regulation (10) • Vicki Mayne – Thriving through change: Integrating climate science into livestock thermal stress management in northern Australia (10) • Jill Fernandes – Is there a return on cattle welfare investment? (10) • Vitor Mercadante – Unravelling the reproductive, hormonal and metabolic differences between Bos indicus and Bos taurus cows while under nutritional restriction (10) <p>Q&A where time permits</p>
1.00pm – 2.00pm	Lunch – <i>Grand Chelsea Lobby</i>		
2.00pm – 3.00pm	Session 8 – Plenary session: Getting results & adoption		
	<p><i>Facilitated by Kylie Hopkins</i></p> <p>Adoption: The journey that delivers industry impact Sally Leigo (15)</p> <p>Typology of Australian beef producers and the sustainability challenges Bradd Witt (10)</p> <p>The role of CRC in translating results to adoption</p>		

	Richard Heath (10) Catchment collaboration – facilitating NRM groups to succeed Amanda Roughan (10) Panel session Q&A
3.00pm – 3.30pm	Afternoon tea – <i>Grand Chelsea Lobby</i>
3.30pm – 4.30pm	Session 9 – Closing plenary session
	<i>Facilitated by Tim Schatz</i> Research, results & reflection – why the 3 Rs still matter Wayne Hall Eating that elephant in my paddock Jayne Cuddihy Concluding remarks and farewells from NBRUC2026 Paul Burke
5.30pm – 8.30pm	Closing drinks - Northern Beef Olympics: After-Hours Limber up for Brisbane 2032 and enjoy a podium-worthy wind-down. Come solo or rally a team — and show us your best Olympic-themed outfits! <i>Chelsea Lane</i>

FRIDAY 13 MARCH 2026	
7.30am – 5.30pm (approx.)	Field Trip (optional) <i>Limited numbers, please purchase your ticket via the online registration form.</i> Depart voco Brisbane City Centre. Site visit: Aroona Station (a Queensland Trust for Nature property) including morning tea and lunch. Site visit: Queensland Animal Science Precinct, The University of Queensland, Gatton for a tour within the non-containment area. Led by Milou Dekkers, the theme for the visit will be ‘Research Capabilities’. Refreshments to be served at UQ, Gatton prior to departure. Return to voco Brisbane City Centre.