





**Program** 

18 September 2025 Toowoomba, Queensland





# **Agenda**

Event emcee: Liz Pearson - Feedlot Project Manager, MLA

Time	Speaker	Торіс	Company
8:00am		Breakfast	
Session one – Strategy 2030 and the future of health monitoring and management			
8:50am	Dr Matt Van der Saag & Tom Green	ALFA and MLA grainfed research and development program	MLA & ALFA
9:20am	Sarah Strachan	MLA Strategic Plan 2030 – delivering innovation for a sustainable future	MLA
9:40am	Dr Tony Batterham	Data, tech and machine learning – the next frontier of animal health management	Apiam
10:00am	Mick Finucan	Trialing animal health monitoring the – the good, the bad and the ugly	JBS
10:20am		Morning tea	
Session two – Optimal performance at the feedlot and the plant			
10:50am	Prof Luciano Gonzalez	What box should your feeder go in – performance and profitability	Syd Uni
11:10am	Dr Emma Lynch & Craig Price	Short duration lairage and commercial adoption – who benefits and by how much?	UNE & Kilcoy Global Foods
11:40am	Q&A Panel	1 <sup>st</sup> and 2 <sup>nd</sup> session speakers	
12:30pm		Lunch	
Session three – Economic and sustainability value creation			
1:30pm	Prof Fran Cowley & Dr Rob Lawrence	New and improved grainfed methane equation	UNE & IAP
1:30pm 2:00pm	•	New and improved grainfed methane equation  Cutting methane and boosting growth – is dual success possible?	UNE & IAP
·	Dr Rob Lawrence	Cutting methane and boosting growth – is dual success	
2:00pm	Dr Rob Lawrence Dr Sarah Meale	Cutting methane and boosting growth – is dual success possible?  Economic contribution of regional feedlots to the	UQ
2:00pm 2:20pm	Dr Rob Lawrence Dr Sarah Meale Cedric Hodges	Cutting methane and boosting growth – is dual success possible?  Economic contribution of regional feedlots to the Australian economy	UQ Deloitte
2:00pm 2:20pm 2:40pm	Dr Rob Lawrence Dr Sarah Meale Cedric Hodges Dr Stuart McCarthy	Cutting methane and boosting growth – is dual success possible?  Economic contribution of regional feedlots to the Australian economy  Feed smarter, perform better	UQ Deloitte
2:00pm 2:20pm 2:40pm	Dr Rob Lawrence Dr Sarah Meale Cedric Hodges Dr Stuart McCarthy	Cutting methane and boosting growth – is dual success possible?  Economic contribution of regional feedlots to the Australian economy  Feed smarter, perform better  Afternoon tea	UQ Deloitte
2:00pm 2:20pm 2:40pm 3:00pm	Dr Rob Lawrence Dr Sarah Meale Cedric Hodges Dr Stuart McCarthy Session four	Cutting methane and boosting growth – is dual success possible?  Economic contribution of regional feedlots to the Australian economy  Feed smarter, perform better  Afternoon tea  - Animal welfare links to performance and profitability  Evaluation of economic implications of partial pen coverage in a commercial feedlot  Insights, experience and lessons learned with feedlot shelter	UQ Deloitte Manabotix
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## Meet the speakers



Dr Matt Van der Saag Feedlot Program Manager MLA

Presentation: MLA and ALFA grainfed research and development program

#### **About:**

**Dr Van der Saag** is committed to delivering research and development (R&D) outcomes that align with the needs of the Australian lot feeding industry. With a background in animal science and postgraduate qualifications in animal health, he brings broad experience across government, academia, and the commercial sector. His work specialises in sustainability, animal health and welfare, and productivity initiatives within the feedlot program.



Tom Green
General Manager
Camm Agricultural Group

Presentation: MLA and ALFA grainfed research and development

program

## **About:**

**Mr Green** is the General Manager of Camm Agricultural Group and has significant experience in the agricultural and feedlot sectors. His career began in North America on large-scale bull breeding operations, before transitioning to feedlot management in Australia in 2012. Tom held key roles at Teys Australia's Jindalee feedlot, progressing from graduate manager to operations manager, later leading operations at Thomas Foods International's (TFI) Iranda Beef yard. In 2018, he was appointed General Manager of TFI's feedlot and farming operations.

Tom was named ALFA's 'Young Lot Feeder of the Year' in 2017 and became a Nuffield Scholar in 2019. He has contributed to ALFA through committee roles and was elected to the Board in 2020, currently serving as Vice President.

## Session:

Meat & Livestock Australia (MLA) partners with the red meat industry and government to deliver marketing, research, and development services that support the prosperity of Australian beef, sheep, and goat producers. Within MLA, the feedlot program works closely with the Australian Lot Feeders' Association (ALFA) to identify and prioritise initiatives that drive industry impact. The Grainfed R&D Strategy focuses on accelerating outcomes that deliver economic, social, welfare, and environmental benefits. Key objectives include enhancing the feedlot sector's \$4.4 billion Gross Domestic Product (GPD) contribution and supporting over 31,000 jobs.







Sarah Strachan
General Manager Research, Development and Adoption
MLA

Presentation: MLA Strategic Plan 2030 - Delivering innovation for a sustainable future

#### **About:**

Mrs Strachan is the General Manager of Research, Development and Adoption at MLA, which annually invests over \$140 million into initiatives to boost profitability and productivity of the red meat industry. She is passionate about turning quality research into practical, adoption-ready tools that deliver value across the supply chain and benefit producers. Her work includes commercialising genetics research through BREEDPLAN and Sheep Genetics, as well as delivering eating quality outcomes via the MSA grading system, which now annually grades over half of all Australian processed cattle.

#### Session:

This session will explore how the *MLA Strategic Plan 2030* will support the feedlot industry to contribute to broader industry prosperity through innovation, value creation, and collaboration across the supply chain. Key themes include advancing environmental sustainability and net zero goals, unlocking opportunities in value-based marketing and brand alignment, strengthening community trust through market demand and social capital, and investing in the people who drive our industry forward.



Dr Tony Batterham Intensives Business Manager Apiam Animal Health

Presentation: Data, tech and machine learning - The next frontier of animal health management

#### **About:**

**Dr Batterham** is a senior veterinary consultant to beef feedlots and the Business Unit Manager for Intensive Animals at Apiam Animal Health. A Sydney University graduate, he also holds a Master of Clinical Epidemiology, a Graduate Certificate in Data Analytics, and is a Graduate of the Australian Institute of Company Directors. Tony has a strong interest in advanced diagnostics, animal welfare metrics, and antimicrobial stewardship. He lectures in feedlot medicine at the University of Melbourne and is currently completing a PhD at Sydney University. He has led and contributed to numerous Meat & Livestock Australia projects, including research on acclimation, BRD diagnostics, autogenous vaccines, and wearable tech for remote animal monitoring.

#### **Session:**

While data collection for monitoring health and productivity are well established in modern feedlots, new technologies, like wearable devices and chute-side diagnostics, are making richer datasets more accessible. Combined with platforms that rapidly process and interpret this data, feedlot operators can now gain timely insights to guide interventions. The rise of machine learning techniques that don't require explicit programming is also shifting animal health management from retrospective analysis to predictive decision-making.







Michael Finucan
General Manager Marketing and Innovation
JBS Australia

Presentation: Trialling animal health monitoring tech - The good, the bad and the ugly

#### **About:**

**Mr Finucan** is a seasoned agribusiness executive with deep expertise in international trade, livestock exports, and red meat marketing. He began in agricultural commodity exports after earning a Bachelor in Agricultural Science, later spending 13 years at Meat & Livestock Australia leading global trade initiatives and managing international markets. Now General Manager – Marketing and Innovation at JBS Australia's Northern Division, Michael drives brand growth and technology adoption across its feedlots and processing facilities, delivering premium beef to global markets.

#### Session:

The feedlot industry is focused on improving productivity by enhancing animal health and welfare to reduce cattle morbidity and mortality through early detection and better management of illness. In partnership with MLA, JBS conducted a research project to assess the viability of various technologies addressing this challenge. Following extensive market research, JBS ran commercial trials to evaluate these technologies in Australian feedlot conditions. This presentation will explore the key challenges, insights, and opportunities uncovered through this R&D initiative



Prof Luciano Gonzalez Sustainable Animal Production University of Sydney

Presentation: Which box should your feeder go in - Performance and profitability

#### **About:**

**Prof Gonzalez** is an expert in livestock production and emerging technologies, with a research focus on improving the sustainability, profitability, and efficiency of livestock systems. His work spans precision livestock farming, remote sensing, animal behaviour and welfare, and greenhouse gas management. With a farming background and experience across Argentina, the USA, Spain, Scotland, and Canada, Prof González brings global insight to his role. He holds a BSc in Agronomic Engineering and MSc and PhD in Animal Production.

## **Session:**

'The Australian Optimal Carcase Endpoint and Sorting System project' set out to answer these questions by developing data-driven tools that predict the optimal carcass weight and fatness for each animal to maximise profitability. This presentation outlines the development of these tools, which use big data analytics and predictive modelling to guide feeding programs and market selection based on key factors such as breed, induction weight, body condition, and price. To build these models, the project conducted detailed body dissections and chemical analyses across multiple breeds fed for increasing days on feed, tracking intake and performance. This domestically sourced data, based on Australian genetics, underpins decision support tools tailored to local cattle, production systems, and climate.







Dr Emma Lynch Lecturer Ruminant Production University of New England

Presentation: Short duration lairage and commercial adoption - Who benefits and by how much?

## **About:**

**Dr Lynch** is a Lecturer in Ruminant Production at the University of New England. She grew up on a sheep property in Central West NSW and holds a Bachelor of Animal Science with Honours, as well as a PhD in ruminant nutrition and meat science (2022) from Charles Sturt University. Her research explores how on-farm production factors influence meat and eating quality in both sheep and cattle. Emma is passionate about educating students in agriculture with direct linkages to industry.

#### **Session:**

Reducing lairage time from 24 to under 5 hours significantly increased hot standard carcase weights (HSCW) by 2.62 kg, 4.64 kg, and 1.66 kg after 75, 125, and 340 days on feed, respectively. Shorter lairage also lowered dark cutting incidence without compromising carcase grading or food safety compliance. This winter trial highlights improved production efficiency, profitability, and animal welfare across the supply chain.



Craig Price Livestock Relationship Manager Kilcoy Global Foods

Presentation: Short duration lairage and commercial adoption - Who benefits and by how much?

## **About:**

Mr Price brings over three decades of experience in the Australian beef industry, with a career spanning livestock procurement, supply chain development, and producer engagement. He began his journey in 1988 as a Trainee Livestock Buyer with Riverstone Meat Co, then spent a decade with Cargill Foods as a Livestock Buyer based in Canberra and Dubbo. From 2002 to 2023, he served as General Manager of Livestock at Kilcoy Global Foods, where he was instrumental in developing a supplier model that significantly expanded the company's grainfed program. He now continues to strengthen industry relationships in his current role as Livestock Relationship Manager.

#### **Session:**

Kilcoy Global Foods is a major processor of grainfed cattle in Queensland, sourcing most livestock from within 200 km of Dalby, not far from its facility. The proximity has enabled the business to successfully trial and implement short duration lairage, with cattle delivered in the morning and processed the same day. The approach has significantly reduced dark cutters and delivered additional benefits to suppliers.







Prof Fran Cowley
Livestock Production
University of New England

Presentation: Proving the carbon credentials of grainfed beef and feedlot application of the revised enteric methane equation

## **About:**

**Prof Cowley** is a ruminant nutritionist and Professor of Livestock Production at the University of New England. Fran leads the UNE Ruminant Research Group, Australia's leading livestock emissions research centre, and home to the world's largest ruminant emissions research facility. Fran's research passion is grainfed cattle nutrition and improving the production and carbon efficiency of Australian red meat production systems.

#### **Session:**

It's long been suspected that the carbon footprint of feedlot beef in Australia was significantly more climate friendly than the official greenhouse gas inventory would have us believe. A lengthy research effort to accurately quantify the methane footprint of grainfed beef in Australia has culminated in a change to the way grainfed emissions are calculated, showing that grainfed methane emissions from Australian cattle are 43.5% lower than previously thought.



Dr Robert Lawrence Consulting Nutritionist Integrated Animal Production Pty Ltd

Presentation: Proving the carbon credentials of grainfed beef and feedlot application of the revised enteric methane equation

## **About:**

**Dr Lawrence** has been a consulting nutritionist with Integrated Animal Production (IAP) since 2001, supporting clients across Queensland, Northern NSW, and Western Australia. Prior to IAP, he worked with Ridley Agriproducts and spent five years as feed manager at Whyalla Feedlot. Rob holds a Bachelor and Master of Rural Science, a Certificate in Meat Science and Technology from the University of New England and a PhD from the University of Queensland. Based in Tamworth with his family, Rob's greatest passion outside work is mastering the bagpipes.

### Session:

The adoption of a revised enteric methane equation by the Australian National Greenhouse Accounts allows for more accurate estimation of methane emissions from grainfed cattle compared to the outdated 1979 model. Based on feedlot-specific data, such as dry matter intake (DMI), neutral detergent fibre (NDF), and ether extract (fat), the new equation uses values already captured in standard feedlot records. This enables methane reporting by lot feeders and helps identify how operational or dietary changes impact emissions.







Dr Sarah Meale Senior Lecturer Animal Science and Production University of Queensland

Presentation: Cutting methane, boosting growth - Is dual success possible?

#### **About:**

**Dr Meale** is a Senior Lecturer in Animal Science and Production at the University of Queensland. Her research integrates ruminant nutrition, gut microbiology, and sustainable livestock production, with a focus on improving feed efficiency and reducing methane emissions through rumen manipulation. Her work spans laboratory studies to large-scale grazing and feedlot trials, often in collaboration with industry partners.

## **Session:**

As pressure grows to reduce livestock emissions, the key question remains: can we cut methane without compromising growth? This presentation explores the use of feed additives in feedlots and backgrounding systems, highlighting current successes, knowledge gaps, and progress toward solutions that are both economically viable and environmentally sustainable.



Cedric Hodges
Director
Deloitte Access Economics

**Presentation:** Economic contribution of regional feedlots to the Australian economy

## **About:**

**Mr Hodges** leads Deloitte Access Economics in Tasmania and heads the firm's national economic modelling team. With over 15 years of experience, he specialises in applying advanced economic models to inform public policy and assess the economic impact of major infrastructure and investment projects. His work bridges complex data analysis with real-world decision-making, helping governments and businesses navigate critical economic challenges.

## **Session:**

Meat & Livestock Australia has commissioned Deloitte Access Economics to update *the Regional Feedlot Investment Study*, building on previous editions from 1994, 2003, 2015, and 2018. This long-standing series provides a robust evidence base to highlight the feedlot sector's contribution to the beef industry and its broader economic impact. The 2025 edition updates national and state-level economic footprint estimates and includes a regional case study focused on Queensland's Western Downs.

Cedric, Partner at Deloitte Access Economics, will present key findings from the 2025 study and discuss what they reveal about the current state and economic significance of Australia's feedlot industry.







Dr Stuart McCarthy Managing Director Manabotix

Presentation: Feed smarter, perform better

#### About:

**Dr McCarthy** is the Managing Director of Manabotix, an Australian technology company dedicated to advancing livestock feeding operations with robotics and automation. Since founding the company in 2016, he has focused on collaborative innovation, working closely with industry peers, research bodies and technology partners to create solutions that address real world feedlot challenges.

## **Session:**

In modern feedlots, every mouthful counts. Through MLA investment, recent developments bring a new era of precision to bunk management, turning data into decisions and decisions into performance. With accurate and precise bunk monitoring and actionable analytics via Feedmetrix, and pinpoint feed delivery with the new DeliverEase, innovative tools can work together to cut waste, boost feed efficiency and enhance animal productivity. This session will showcase project insights, practical implementation successes, and how appropriate technology can turn bunk management from a daily chore into a competitive advantage.



Jordan Peach
Principal Carbon and Sustainability
Integrity Ag

Presentation: Evaluation of economic implications of partial pen coverage in a commercial feedlot

### **About:**

**Mr Peach** is a key member of the leadership team at Integrity Ag, where he plays a pivotal role in supporting Australian and international agribusinesses to evaluate and articulate their sustainability strategies. With deep expertise in the feedlot industry and northern Australian beef production, Jordan brings valuable insights and practical experience to the evolving landscape of sustainable agriculture.

## **Session:**

This evaluation considered the economic viability of partial pen coverage with shelter in a commercial feedlot across three management approaches. Using cost benefit analysis over a 25-year horizon, the impact of each approach was considered in relation to performance and profitability.







Grant Garey General Manager Feedlots Teys Australia

Presentation: Insights, experience, and lessons learned with feedlot shelter

#### **About:**

**Mr Garey** is the President of the Australian Lot Feeders' Association (ALFA) and General Manager of Feedlots at Teys Australia. With more than 30 years in the beef industry, he has worked across family and large scale operations, bringing a practical, grounded perspective to lot feeding. At Teys, Grant oversees three company feedlots supplying premium beef to domestic and global markets. As ALFA President, he is passionate about people, sustainability and strengthening industry resilience.

#### Session:

Grant will share his practical experiences with feeding shedded cattle in Southern Australia, drawing on his firsthand knowledge of managing these systems in a commercial context. His presentation will explore the unique characteristics of operational considerations involved in their feeding programs, and the economic and logistical challenges faced in real-world applications. Attendees will gain valuable insights into the benefits and limitations of shedded systems, as well as strategies for optimising performance and profitability in diverse production environments



Dr Helen Golder Research Director Scibus Pty Ltd

Presentation: Bovine appeasing substance - Effects on production, health and stress

## **About:**

**Dr Golder** is the Research Director at Scibus, where she leads a diverse portfolio of field and desktop studies focused on animal health, nutrition, and the microbiome. Raised on a beef property in South Australia, Helen's passion for cattle led her to complete an Agricultural Science degree at the University of Adelaide, followed by a PhD on ruminal acidosis in dairy cattle through Scibus and the University of Sydney. Based in Camden, NSW, Helen brings deep industry insight and scientific expertise to every project she undertakes.

#### **Session:**

We conducted a meta-analysis to assess the impact of bovine appeasing substance (BAS), a synthetic version of a calming pheromone naturally released by lactating cows, on growth, health, and stress in cattle. BAS significantly reduced blood cortisol levels, indicating its potential to alleviate stress from routine husbandry. However, no consistent improvements in production or health outcomes were observed. Some individual studies showed promising effects on final body weight, mortality, and viral antibody levels, warranting further research to evaluate its cost-effectiveness and ethical justification.





## **Recently completed feedlot projects**

- Evaluation of automated bunk management
- BunkBot lot feeder demonstration
- Bovine respiratory disease preventive practices handbook
- Evaluation of the benefits of shade for feedlot cattle in a temperate climatic region
- Feedlot covered housing systems: Best practice design and management manual
- Effect of feed withdrawal on truck effluent, animal welfare, carcase characteristics and microbiological contamination of feedlot cattle
- Methane emissions of Australian feedlot cattle as influenced by 3-Nitrooxypropanol (Bovaer-10)
- Best practice manual Feedlot cattle staging facilities
- Correlation vs causation does hydatid disease in cattle decrease carcase weight?