



final report

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Delivery of Feedlot E-Newsletter 2018-2020

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Executive summary

The Quarterly Feed e-newsletter was launched in 2016 by Meat & Livestock Australia (MLA) in consultation Australian Lot Feeders' Association (ALFA), as a new way of engaging with lot feeders and industry stakeholders across the beef supply chain.

The Quarterly Feed is distributed four times per year, providing updates to feedlot stakeholders on current and completed feedlot R&D projects that are funded by grainfed levies through MLA in consultation with ALFA.

It also promotes adoption of new R&D, technologies and cattle management strategies; provides relevant grainfed marketing updates; and informs stakeholders of upcoming MLA and MLA-ALFA feedlot events.

Under project B.FLT.7014, Cox Inall Communications was contracted to provide all content for the e-newsletter from June 2018 until June 2020, starting with the spring edition in September 2018 and concluding with the winter edition in June 2020.

Over the past two years, the number of subscribers receiving the e-newsletter has more than doubled, from approximately 3,500 subscribers in 2018, to 7,544 subscribers in 2020.

In that time, Cox Inall has delivered the eight contracted editions of The Quarterly Feed, working with MLA Feedlot Project Manager, Dr Joe McMeniman.

A summary of the content produced for each edition is contained below.

1 Results

1.1 2018-19 content

1.1.1 Spring 2018

Bunk scanner proves its accuracy: Extensive in-feedlot testing of a prototype bunk scanner by Manabotix demonstrates it is more accurate in predicting feed remaining in bunks than human callers, offering potential productivity and profitability benefits to the feedlot industry.

VIDEO + STORY - MLA-ALFA scholarships up for grabs: Encouraging feedlot industry representatives looking to enhance their leadership skills to apply for MLA-ALFA scholarships funded jointly by grainfed levies and the Australian Government. Video features JBS Riverina Feedlot Manager, Will McCrohon, who was awarded the 2017 MLA-ALFA ARLP Scholarship.

R&D to be showcased at BeefEx: Preview of R&D projects managed by MLA being showcased at ALFA's BeefEx event in October 2018.

BRD surveillance project underway: R&D to determine the status of antimicrobial resistance for bovine respiratory disease (BRD) pathogens in Australian feedlot cattle, to help the industry maintain the effectiveness of its registered antimicrobials. Led by Professor Darren Trott at the University of Adelaide.

Grain Fed Finished standard introduced: Story supplied by ALFA about the introduction of the National Feedlot Accreditation Scheme's (NFAS) new standard, Grain Fed Finished (GFF).

Kerwee backs AMS guidelines: Kerwee Feedlot on Queensland's Darling Downs welcomes the industry's move to promote responsible antimicrobial use through the release of the Antimicrobial Stewardship Guidelines for the Australian Cattle Feedlot Industry.

New records for grainfed exports: feeder cattle market update.

1.1.2 Summer 2018-19

VIDEO - Feed bunk scanner launched: A new automated feed bunk scanner available for adoption by the Australian feedlot industry. R&D led by Manabotix.

Connectivity guide released: Release of a new guide to help Australian feedlot operators assess their connectivity requirements and identify potential solutions. Led by Professor David Lamb from the University of New England and Dr Kimberley Wockner from Premise Agriculture.

Managing pregnant heifers: Release of a new best practice management guide, *Feedlot best practice management – Pregnant heifers*, to help lot feeders develop and implement their own programs to manage pregnant heifers and newborn calves. Led by Dr Enoch Bergman, Swans Veterinary Services, Esperance, WA.

Grain Fed Finished underway: Lot feeders gear up to produce their newest product – Grain Fed Finished (GFF) beef. MSA Program Manager, Sarah Strachan, explains more about its development.

Grounds for confidence in Grain Fed Finished: Results of MSA grading in 2017–18 suggest more than 99% of eligible carcasses will satisfy the lot feeding industry’s new Grain Fed Finished (GFF) Standard once animals start to flow to slaughter.

Future of weather forecasting: The ability to predict the risk of heat stress at the individual animal level could be a reality for the feedlot industry within the next decade if ongoing improvements in weather forecasting and animal monitoring continue. Insights from Katestone Managing Director, Christine Killip.

Cattle on feed hits a new high: feeder cattle market update.

1.1.3 Autumn 2019

VIDEO + STORY - Auto-delivery system on-track: A prototype feed truck auto-delivery system, suitable for retrofitting on existing feed trucks in feedlots, is developed to ensure a more consistent and efficient delivery of feed into bunks. Led by Manabotix.

AMS online modules coming soon: Lot feeders will soon have access to modules to help develop antimicrobial stewardship (AMS) plans for their feedlots. Two-part webinar hosted by Dr Kev Sullivan.

Free water quality tests available: As part of a project assessing the quality of feedlot drinking water, researchers from University of New England offer free water analysis to the first 200 respondents of a short survey.

Animal welfare workshops: Promoting a series of animal health and welfare workshops across Australia.

Lot feeding outlook: feeder cattle market update.

1.1.4 Winter 2019

Woodchip bedding benefits revealed: R&D into providing feedlot cattle with woodchip bedding demonstrates a range of production and animal welfare benefits. Led by Dr Fran Cowley, University of New England (UNE) Ruminant Research Group.

Clean cattle manual released: New guide for lot feeders to prevent, manage and remove dags from cattle released, produced by Premise.

BRD’s impacts quantified: The economic impact of Bovine Respiratory Disease (BRD) in Australian feedlots is quantified for the first time, providing valuable insights into its effects on animal performance and economic return. Led by Associate Professor Luciano González from The University of Sydney, with assistance from PhD student Claudia Blakebrough-Hall.

See BunkBot in action: Preview of cutting-edge automated feedlot technology being showcased at SMARTBEEF 2019.

Cattle on feed at record highs: feeder cattle market update.

1.2 2019-2020 content

1.2.1 Spring 2019

VIDEO + STORY - BunkBot testing underway: Update of the on-site evaluations of a new autonomous robot for manoeuvring a feed bunk scanner around a feedlot, developed by Manabotix.

Quantifying lairage duration impacts: Pilot research into the effect of lairage timing and duration on Australian feedlot cattle finds time of transportation, slaughter and time off feed have significant effects on carcass yield and quality. Led by Dr Melissa George and Dr Matt George, Bovine Dynamics.

Feed truck auto-delivery system fit for purpose: In-feedlot testing of a prototype feed truck auto-delivery system demonstrates it can deliver feed into bunks accurately, evenly, and efficiently to assist feedlot staff. The technology was subjected to eight weeks of testing by Manabotix on a Roto-Mix feed truck at Bindaree Beef Group's Myola Feedlot at North Star, NSW.

Feedlot drinking water gets the all clear: Australian-first R&D finds drinking water quality at most Australian feedlots is considered suitable for cattle consumption and would not impact animal performance. R&D undertaken by University of New England.

Orchard fan results revealed: R&D into the effect orchard fans to reduce heat load in Australian feedlot cattle finds there were no animal wellbeing, productivity or financial benefits resulting from fan usage. Led by Associate Professor John Gaughan, University of Queensland.

1.2.2 Summer 2019-2020

VIDEO + STORY - It pays to have shade: Nine years after an initial MLA-funded trial explored 'shade vs no shade' in feedlots, the animal welfare and productivity benefits continue to outweigh the cost of installation, according to a translation of changes in feed intake and carcass weight from the original study to the current market conditions for the implanted short-fed export market.

Cut out dark cutting: R&D evaluating the effect of production, climate, animal, lairage and processing factors on dark cutting in 142,228 grainfed carcasses over a one-year period finds increasing the time between slaughter and carcass grading to more than 20 hours can reduce the incidence of dark cutting and boost MSA compliance in Australian feedlot cattle. Led by University of New England's Dr Peter McGilchrist and University of Melbourne's Professor Robyn Warner.

Heat load ration put to the test: R&D into the effects of feeding a heat load ration to cattle and the timing of its inclusion in diets to prepare for, or respond to, a sudden high heat load event produces new insights for the industry. Led by Dr Gene Wijffels from CSIRO along with Associate Professor John Gaughan and Dr Megan Sullivan from the University of Queensland.

Australia's best MSA feedlots: Wrap-up of the five feedlots awarded for consistently producing cattle that achieve outstanding compliance rates to Meat Standards Australia (MSA) specifications, in the 2019 MSA Excellence in Eating Quality Awards.

Market update: cattle on feed: feeder cattle market update.

1.2.3 Autumn 2020

Deworming delivers production benefits: New R&D into the impact of deworming feedlot cattle finds an average 4kg hot carcass weight advantage for treating cattle with a dewormer, compared to no treatment. Led by Bovine Dynamics in collaboration with Dr Andrew Kotze, CSIRO.

Rumen modifiers: what combination should you use?: Key findings from a new R&D project into the impact of rumen modifiers on the performance of feedlot cattle. Led by Professor Roger Hegarty, University of New England.

Grain import options reviewed: With ongoing dry conditions putting a squeeze on grain supplies for Australian lot feeders, a new report explores how the industry can better position itself to prepare for future droughts. Review and report undertaken by the Colere Group.

Feeder market update: feeder cattle market update.

Fast facts at your fingertips: Supplied by MLA. Resources for producers in response to the coronavirus (COVID-19) pandemic.

1.2.4 Winter 2020

New insights into cattle behaviour and BRD: A study of cattle behaviour in Australian feedlots has identified new behavioural distinctions that could help in earlier diagnosis and treatment of Bovine Respiratory Disease (BRD). Led by Professor Brad White, Kansas State University and Precision Animal Solutions.

Teys targets energy usage: Finding solutions to reduce energy usage and the environmental footprint of Australian feedlots is the focus of R&D underway at Teys Australia Condamine Feedlot. Led by Smart Business Hub Director, Carl Duncan.

Shade and shelter benefits: For the first time in Australia, the benefits of providing shade and shelter to feedlot cattle in temperate climates will be examined through two new research projects in Victoria and WA. R&D being conducted by the University of New England at a commercial feedlot in Victoria, and by Murdoch University at a commercial feedlot in southern WA over two years.

Cattle on feed fall from record highs: feeder cattle market update.