

FEEDBACK

MLA – FOSTERING PROSPERITY

AUTUMN 2024



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FEEDBACK

MLA fosters the long-term prosperity of the Australian red meat and livestock industry by delivering world-class research, development and marketing outcomes.



Cover (page 30): Queensland beef producers Emma and Angus King, with their children Ted, Pippa and Tilly.

Have your say!

We'd love to hear from you.

- ✉ info@mla.com.au
- ☎ 02 9463 9333
- 🌐 mla.com.au
- 📧 @meatandlivestockaustralia
- 📷 @meatandlivestockaustralia
- 📺 meatandlivestock
- 🐦 @meatlivestock

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A note from the MD

Welcome to the autumn edition of *Feedback* magazine.

As you're reading this, the countdown is on for the biggest beef event on the calendar – Beef Australia.

MLA is proud to once again be a major partner of the event in Rockhampton from 5–11 May. We'll be hosting seminars and networking opportunities, presenting research, development, adoption and marketing updates, and supporting the school education program and national carcass competition.

I look forward to joining the MLA Board and staff at Beef Australia 2024, so be sure to stop at the MLA trade site to chat to us and learn more about our research, tools and resources, and other initiatives. Learn more on page 2.

Lamb has also been in the national spotlight recently, with our anticipated Summer Lamb ad which aired in January and February. Turn to page 44 to see what impact it had on lamb sales.

Weathering the challenges

Last year was a significant year for weather events, with El Niño and a positive Indian Ocean Dipole (IOD) declared in September, followed by four cyclones making landfall in the 2023–24 wet season.

For this year, Australia is expected to remain within a neutral IOD, while the El Niño–Southern Oscillation (ENSO) outlook, which indicates an El Niño or La Niña event, notes we are likely to move out of the El Niño phase by May. Long-term forecasts for a La Niña event in 2024 are varied.

While forecasts remain crucial for business management, the expected relative climate stability in 2024 suggests decision making may not be as reactive to long-term forecasts as observed in the reactive markets of 2023. Turn to page 4 to see what this means for the sheep and cattle industry in 2024.

As we move away from the volatile seasonal conditions experienced this summer, it's timely to reflect on how red meat businesses can weather challenging conditions.

In this edition, we meet producers from across the country who share insights into how they approach challenges. Queenslander Sam Fryer shares his personal story on page 12, and SA sheep and cattle producer Ben Carn opens the gate to his low rainfall enterprise on page 6.

Our cover story producers (page 30), Emma and Angus King, share how they use ag-tech to make informed decisions to suit their environment and meet their production goals.

We also revisit Marie and Tom Copley's Brahman enterprise on page 24, to see how their unwavering genetic goals underpin a herd which thrives despite tough seasonal conditions.

What stood out to me about all these producers is their measured approach – rather than jumping from one idea to the next, they have all implemented a range of well-thought-out strategies and embraced on-farm practice changes which match their production goals.

Sustainability

As we, as an industry, continue tracking towards the carbon neutral by 2030 (CN30) target, it's exciting to see new tools for more producers to measure and monitor their greenhouse gas emissions – learn more on page 3.

One of the sustainability measures for the Australian sheep and beef industries is animal health and wellbeing. Beef producers Herb and Sue George share their approach to pain relief in their cattle – and the range of benefits they've seen as a result – on page 22. There are also insights into the new animal welfare standards in one of Australia's live export markets on page 36 and 37.

It's great to see the lot feeding industry make strides towards their shade initiative. Turn to page 34 to step inside the shade and shelter infrastructure on a Victorian feedlot and learn about the flow-on benefits from having cool cows.

Industry news

Recruitment for MLA's Managing Director role is ongoing. Please ensure you subscribe to MLA's e-newsletter, *The Weekly*, to stay updated on this and other industry news. ■



- Andrew Ferguson MLA Acting Managing Director
- Have a question for me? managing.director@mla.com.au

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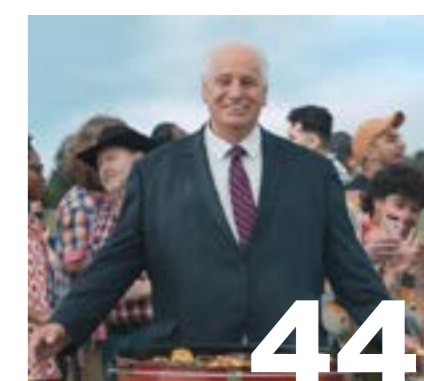
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This season...

Read

the 2024 cattle and sheep industry projections: [see page 4](#)

Learn

the benefits of pain relief: [see page 22](#)

Try

lime as a top dressing on high acid soils: [see page 21](#)



Bring on Beef Australia 2024

MLA is proud to once again be a major partner of the biggest event on the beef calendar – Beef Australia 2024.

The event, which is held in Rockhampton every three years, attracts more than 100,000 visitors.

The six-day event brings together the Australian beef community and provides a unique platform to showcase MLA's work and network with a broad range of stakeholders.

As a major partner, MLA will host two seminars and the sustainability lounge, as well as taking part in the school education program and the national carcass competition.

MLA will also have a trade display marquee right near the Beef Australia entrance to showcase research and development projects, on-farm practical adoption programs, market insights, and marketing and communication activities.

MLA and Integrity Systems Company (ISC) staff will be on hand to provide support to producers who are keen to learn more about carbon neutral by 2030 (CN30) initiatives, myMLA and MSA feedback, eNVDs and other tools and services.

Within the MLA trade site, MLA also plans to host mini information sessions for producers on key initiatives, and a networking opportunity for industry stakeholders to meet with the MLA Board, executives and staff.

Join us in Rockhampton from 5–11 May 2024, for this week-long exhibition and celebration of the best of beef.

➔ mla.com.au/beef24
➔ beefaustralia.com.au



ROCKHAMPTON AUSTRALIA MAY 5-11

Transport hub hits the road

MLA will launch a new Transport hub this month to increase awareness and understanding of the industry's important role in best practice livestock transport. The hub includes new and existing resources to help producers identify best practice in dispatching and receiving stock, including the latest industry trends, hands-on practical advice and scientific research.

Turn to page 26 to learn more.



➔ mla.com.au/transport-hub

MSA farm gate returns

The 2023 Australian Beef Eating Quality Insights (ABEQI) report has shown the Meat Standards Australia (MSA) program generated \$463 million in farm gate returns for producers over the past two years.

The ABEQI report was generated through the analysis of all MSA-graded cattle in the 2021–22 and 2022–23 financial years using data collected by MSA-accredited graders, along with additional data from sources such as the National Livestock Reporting Service (NLRS) and further information such as animal disease and defects.

The farm gate returns reflect the premiums for MSA-compliant cattle, combined with the growing numbers of cattle being MSA-graded with higher carcass weights.

In 2021–2023, non-grainfed cattle which met MSA and company requirements potentially received on average an additional \$0.36/kg over-the-hooks (OTH) compared with non-MSA cattle. The premium for grainfed cattle which met MSA and company requirements was an additional \$0.15/kg OTH compared with non-MSA grainfed cattle.



➔ Scan the QR code to read the full report or visit mla.com.au/abeqi



Save the date

MLA supports major events on the industry's 2024 calendar – make sure you save these dates:

5–11 MAY BEEF AUSTRALIA 2024 ROCKHAMPTON AUSTRALIA Rockhampton	7–9 AUGUST LambEx Adelaide	10 OCTOBER MLA Updates Perth
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➔ Visit mla.com.au/events or subscribe to MLA's e-newsletter, *The Weekly*, at mla.com.au/enews for updates on events in your region.

Feedlots and goats now in carbon calculator



MLA has released an updated version of the online, web-based greenhouse gas (GHG) calculator.

It now includes goat and feedlot capability and updates the calculations to the latest University of Melbourne Greenhouse Accounting Frameworks (GAF) – giving more producers a user-friendly interface to complete their emissions calculations and allowing for mixed commodities to be combined.

The previous version enabled sheep, beef and grain producers to calculate their baseline carbon emissions by digitising the Sheep and Beef Greenhouse Accounting Framework (SB-GAF) and Grain Greenhouse Accounting Framework (G-GAF) tools.

Now, enterprises which include goat and feedlot production systems can also use the tool, as it has integrated with the Goat and Feedlot Greenhouse Accounting Frameworks (Go-GAF and F-GAF).

The digitised version of the GAF tools is based off the free Excel versions of the tools available on the Primary Industries Climate Challenges Centre (PICCC) website to ensure consistency across the sector.

MLA's Program Manager – Environmental Sustainability, Dr Margaret Jewell, said completing a carbon account is the first step producers should take to increase their carbon awareness and determine what their net GHG emissions position is.

"This helps them identify strategies to reduce their emissions and improve carbon storage on farm, which has multiple opportunities, one of which is improved productivity and profitability," she said.

"A carbon account can be used in on-farm decision making and sets a benchmark to show progress over time.

"Just as financial accounting aids financial decision making and reporting, carbon accounting aids decision making and reporting around how carbon is – or is not – utilised on farm."

The calculator also enables the calculation of an emissions intensity

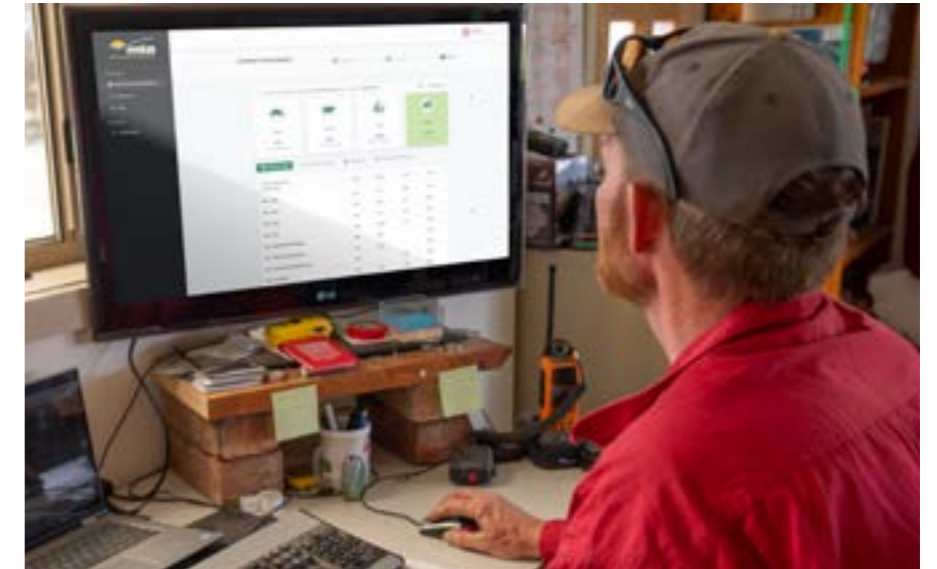


figure and improves on-farm data collection and storage capabilities.

The updated full version of the carbon calculator links with the Environmental Credentials for Grassfed Beef Platform, which was developed by the MLA-led consortium funded by the Australian Government's Smart Farms Program. The Environmental Credentials Platform will be officially launched later this year.

Quick start

Along with this update, a new tool has been developed.

The Quick Start Carbon Calculator allows producers to get a rough estimate of their on-farm emissions totals using a few data points they are likely to have on hand. These include livestock numbers, land size, rainfall and tree plantings.

In less than five minutes, producers can toggle approximate values on their farm, trial different scenarios and get an estimate on what that means for their net emissions position. Producers can look at what impact rainfall, tree species, pasture planning and herd or flock makeup would have on total emissions. This also allows those just starting out on their emissions baselining journey to get an idea of where they are starting from.

This short version of the calculator has also been incorporated into a new

eLearning module, Carbon in Action, to walk producers through some key concepts around carbon emissions and the resources that are available.

Although it does not equate to a full calculation, it is an excellent tool to support planning or for any producers looking to get a very quick estimate of their emissions.

The Quick Start Carbon Calculator is not designed to act as a supplement for a full carbon emissions calculator but is an interactive and approachable interface for planning. Producers should still complete a full calculation on the MLA Carbon Calculator or other GAF tools to fully understand their emissions baseline. ■

TOOLBOX

➔ Find out more about tools and services to support CN30 initiatives – scan the QR code to read MLA's *Targeting CN30 for Australian red meat: On-farm strategy guide*

➔ Carbon calculator: carbon-calculator.mla.com.au

➔ Quick start carbon calculator: elearning.mla.com.au/lessons/quick-balance-carbon-calculator

➔ Carbon in Action eLearning module: elearning.mla.com.au/courses/carbon-in-action



➔ mla.com.au/cn30 ✉ Jenny Lim jl@mla.com.au

2024 industry projections

Lamb production set to break a new record

After three years of consecutive growth, the Australian sheep flock is set to decrease by 2.9% to 76,500,000 in 2024, according to the latest MLA industry projections.

During the 2020–2022 rebuild phase, producer focus on productivity and genetics led to impressive marking rates across the sheep flock. However, the shift from beneficial weather conditions to average conditions in 2023 led to elevated turn-off of unproductive breeding stock, resulting in a 46.7% lift to sheep slaughter.

According to Stephen Bignell, MLA's Manager of Market Information, as the sheep turn-off will mostly be limited to older, unproductive ewes, this year's lamb cohort is expected to remain solid, but slightly smaller, than previous years.

"The current resilience of the sheep flock means high lamb slaughter will have a less intense impact on the national flock size than in previous maintenance periods. This means there will be a decrease in overall flock numbers, but not as dramatic as in comparative years," Stephen said.

"After 2024, the flock is expected to stabilise and remain above the 10-year average."

Record processing

Slaughter and production are projected to peak in 2024, causing record supply of Australian sheepmeat into the global market.

This comes after Australia produced the most lamb on record in the calendar year 2023, with 599,461t of lamb produced in 2023, putting it 11.6% higher than 2022, which was another record year.

As the largest exporter of sheepmeat, high Australian production will increase globally traded sheepmeat volumes.

Lamb production is set to break a new record in 2024, beating the previous record achieved in 2023 and reaching 621,000t in 2024 – a 9% or 54,000t increase compared to 2023. If this eventuates it will be 21.3% or 109,359t above the 10-year average.

Next year, the lamb production forecast is set to ease to 587,000t and then rise in 2026 by 19,000t to 606,000t due to improved carcase weights.

Mutton production will be the largest since 2006, set to produce 254,000t in 2024 up by 3.14% on 2023 volumes. Production will remain elevated in 2024 due to a small lift to slaughter.

In 2025, fewer breeding ewes will be turned off. ■

📍 Industry projections 2024 – Australian sheep: mla.com.au/sheep-projections

The sheep flock is set to decrease by 2.9% to 76,500,000



Australian cattle herd to ease slightly

Following three years of herd growth leading to the largest cattle herd in 10 years in 2023, the Australian cattle herd is expected to ease by less than 1% to 28.6 million head by 30 June 2024, according to MLA's latest projections.

Female retention remains above long-term averages, particularly within northern production systems, illustrating the herd has entered a maintenance phase as elevated turn-off has been driven by high supply rather than producer intention to destock.

Stephen Bignell, MLA's Manager of Market Information, said above-average female retention contributes to the northern Australian cattle herd staying in a growth phase.

"Following an above-average wet season across much of the north of the country, the cattle herd is expected to grow further, especially as consistent rainfall events brought on by cyclones and low-pressure weather systems continue throughout the summer," he said.

"For the southern herd, we expect it to constrict further into 2024 as it reaches maturity. This leads to increased turn-off while the cattle cycle enters a herd maintenance phase."

Increase in slaughter

MLA projects a lift in the slaughter rate which will drive production close to record levels in 2025. However, labour availability remains a concern for processors.

Carcase weights will fall during these high production years, though will remain well above long-term averages, thanks to the investments in genetics and consistent improvements to Australia's feedlot sector.

The US remains Australia's main supply competitor, alongside Brazil, who export beef to key markets shared with Australia.

With the US forecasting an easing to drought conditions across cattle-producing regions, a strong and extensive herd rebuild is expected to start during 2024.

The result is expected to be a contraction in the American supply, which will create an opportunity for Australian beef in global markets. Additionally, solid domestic supply will support strong demand for live cattle exports into major markets.

This year is looking to be a positive year for the cattle industry with the herd staying within a maintenance phase. While forecasts remain crucial for business management, the expected relative climate stability in 2024 suggests decision making may not be as reactive to long-term forecasts as observed in the reactive markets of 2023. ■

📍 Industry projections 2024 – Australian cattle: mla.com.au/cattle-projections

The cattle herd is expected to ease by less than 1% to 28.6 million head



ON FARM

RESEARCH IN ACTION



Seasonal action plan

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Manage heifers to get more calves on the ground.

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Set long-term genetic goals to help weather unpredictable seasons.

Southern

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Set up successful containment feeding to look after ewes and protect pastures.

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Invest in shade and shelter to improve feedlot productivity.

Productivity flourishes in arid lands

Fifth generation sheep and beef producer Ben Carn's careful land management, coupled with his ability to think on his feet and make the most of passing opportunities, have helped him thrive in the low-rainfall north-east SA pastoral region.

Attending workshops such as MLA's one-day Grazing Fundamentals (Southern Rangelands) EDGE workshop is another way Ben positions himself to deal with challenging and changeable conditions at 'Umberatana Station', 100km from Lyndhurst.

Careful management

When it comes to managing land and livestock in his variable environment – where stock tend to favour areas with higher concentrations of more palatable feed – Ben said it's vital to prevent overgrazing.

"If you let land condition get too poor, it will take a significant amount of time and effort to restore and the first thing to respond to rain on bare ground can be problem weeds like pimelea," he said.

For example, a paddock of good feed at Umberatana is surrounded by hilly country, and stock prefer to stay on the flatter ground where the better feed is.

Ben plans to lock stock on the higher ground for at least eight months as a strategy to restore the Mitchell grass which used to flourish there, and protect sandalwood from overgrazing.

This will mean livestock are compelled to eat the less desirable – but adequate quality – feed they usually avoid when more palatable feed is available.

During good seasonal conditions, 'Umberatana Station' produces plentiful pastures of annual grasses and some seasonal native verbine. Acacia and mulga are also present. Image: Ben Carn.



"It's like if we have the choice of a good lunch we'll go for it, but if it's a dry old sandwich we won't want to eat it as a preference," Ben said.

"We've found putting younger sheep on harsher paddocks still allows them to grow well where older stock might not thrive, which hinders clean musters."

Adequate nutrition

Ben provides additional nutrition as needed via molasses licks, in addition to urea – a practice reinforced by advice he received at the EDGE workshop.

"Molasses gives sheep the energy to go and find available feed and helps them handle the dry conditions. They'll still do quite well on dry feed if we provide the licks," he said.

"The licks also get the good bugs going in their gut so they can eat more while aiding with protein from the urea. I can't just feed out hay because it's not cost-effective for our enterprise."

The Carns have a second property at Quorn, which they strategically use to prevent overgrazing at Umberatana.

"If we do have to remove stock from Umberatana to our southern property, we graze them with the addition of grain feeders in the paddock."

Riding out the dry

Ben has grown accustomed to the environment at Umberatana – and it's helped shape his pragmatic approach to the current climate challenges.

In late 2023, in response to reduced income from low cattle prices, he put some of the bigger projects – such as establishing new water points and building yards – on hold.

"We're just holding on to ride it out," Ben said.



Ben, partner Connie, and daughter Annie. Image: Ben Carn.

SNAPSHOT

BEN CARN,
'Umberatana Station' –
Lyndhurst, SA

AREA
57,500ha

ENTERPRISE
3,000 Merinos, 300 Hereford
and Brahman breeders,
joined to Angus bulls

PASTURES
Native – mix of acacia and mulga
over annual and perennial grasses

SOILS
Shallow calcareous soils, skeletal
fine-textured soils and clay loam soils

RAINFALL
225mm

Ben transports his own livestock with a prime mover which reduces freight costs.

"We can transport 60 head of cattle or 400 sheep at a time – we like to move them around a bit between our properties to take advantage of where the best feed is," Ben said.

While Ben hasn't needed to destock (as of December) due to sufficient feed being available – in the past destocking or agisting might have been the only option.

Umberatana responds well to thunderstorms and grows good grass year-round except during very cold weather. After rain, creeks and springs run for quite a while and Ben makes the most of them through a system of bores and troughs. Image: Connie Fox.

"There's always something you can do to improve – there's no bad outcome from going to a workshop like EDGE – you come out with more ideas which are backed up with research."

"It frees up some money to do improvements and also removes the workload and mental stress that you can feel when feeding," Ben said.

Taking opportunities

Ben's ability to leverage changing conditions has seen him make gains despite stretches of dry weather being forecasted.

"If we get a transient storm with some big rains and it looks like we're going to get good feed, then I like to trade some stock. What type depends on how long the feed is going to last. If you've got a lot of feed, you can get good stock such as ewes and make money off them by lambing.

"If the feed is only going to be short-term, I might consider buying some stock to fatten them up."

Ben recalls when he bought 600 ewes after a thunderstorm. By transporting them himself and grazing them for a short period on a paddock with good feed, he was able to sell them again at an increased value.

Getting through

When it comes to managing more difficult seasons, Ben's philosophy is to be open-minded and consider different strategies. He admires other producers who have stuck it out during hard times and managed to hold on.

"Be positive, accept the fact that it's going to be dry and work out how to cope," Ben said.

Taking weather forecasts with a grain of salt has been another way Ben has kept mentally resilient.

"Weather forecasts can affect your mood and influence your decisions. I try to work with what I've got and ask other people who are doing a good job for advice. How are they balancing their stock to feed availability? What meetings or workshops can I go to and network at?"

"There's always something you can do to improve – there's no bad outcome from going to a workshop like EDGE – you come out with more ideas which are backed up with research," Ben said. ■

Turn the page to learn more about the Grazing Fundamentals (Southern Rangelands) EDGE workshop, which will be delivered nationally in 2024.

mla.com.au/edgenetwork SA Arid Lands Landscape landscape.sa.gov.au/saal
Ben Carn ben.carnnominees@gmail.com Mitch Plumbe mplumbe@mla.com.au

LESSONS LEARNT

- Continuously assess and adjust stocking rate to suit the current condition of feed and the possibility of no rain for the next few months. This ensures we're prepared for the worst-case scenario but can also take advantage of good seasonal conditions should they eventuate. Options include using any surplus feed to trade livestock or resting paddocks to improve condition.
- Take advantage of workshops in your area and the networking opportunities they offer.
- Take advantage of the natural grazing habits of different breeds. We retain a percentage of Brahman breeders in our herd, to encourage the herd to graze on tougher country. Visual observations and data from mOOvement GPS tags confirm the Brahmans lead our Herefords out (instead of just feeding on softer ground around creeks and waters).
- Spell pastures when seasonal conditions provide the opportunity, in alignment with plant species' needs. For example, spell paddocks to give struggling or valuable pastures like Mitchell grass a chance to recover during their period of higher growth.

Five ways to give land and livestock **the EDGE**

MLA's Grazing Fundamentals (Southern Rangelands) EDGE workshops provide red meat producers in the southern rangelands pastoral zone with targeted advice focused on grazing land management and livestock production.

During late 2023, 11 workshops were delivered across SA, providing practical support for producers to manage livestock and the natural resource base, regardless of the season or market conditions.

Workshop materials were developed in partnership with experts from across the southern rangelands as part of a project offered through the From the Ground Up project, which is delivered by the SA Arid Lands Landscape Board, with funding from the Australian Government's Future Drought Fund.

This year, the Grazing Fundamentals (Southern Rangelands) EDGE program will be available nationally.

Managing Director of Range IQ, Dionne Walsh, was part of the team which designed and delivered this new workshop. Here, she shares five tips from the course.

➔ See previous page to meet a producer who attended one of the workshops.

1 Know your species

It's important to be able to identify local indicator species in your pasture. "These will tell you how the land is going. Get in touch with your local natural resource management group or find a neighbour who knows their pasture plants. They can help you work out what your key dozen species are to use as barometers for land condition," Dionne said.

➔ Landscape South Australia fact sheets: landscape.sa.gov.au/saal



➔ Dionne Walsh supporting participants with native pasture identification skills at the Lyndhurst training day. Image: SA Arid Lands Landscape Board.

2 Assess land condition

Matching land condition to production goals is key. To do this, assess:

- Will your carrying capacity support your livestock performance goals?
- Do you have adequate skills to assess land condition and determine the productive potential of your country?

At the workshops, Dionne walked producers through how to use the 'ABCD framework' to classify and score land condition as:

A: Good **C: Poor**
B: Fair **D: Very poor**

These skills help inform pasture growth estimates and the appropriate management options to achieve livestock production and land condition goals.

"Reading land condition accurately will help inform decisions around managing land – what's involved in maintaining it or getting it to a more productive state. It's also a consideration for purchasing or agisting land and how much you're willing to pay for it," Dionne said.

She said what producers assume is the main issue may, in fact, be a symptom.

"People might know they have a soil erosion issue but may tackle it the wrong way. The workshop can help them identify the root of the problem."

Soil erosion might be related to areas of bare land further up country which have allowed the speed of water to get going across the landscape, such as from grading fence lines or a road.

➔ Land condition 'ABCD' classification: futurebeef.com.au/land-condition

3 Avoid overgrazing

Overgrazing can cause ground cover loss, soil disturbance and land degradation.

"Having an adequate number of paddocks so that you can spell or rest some during the year will help rehabilitate the land," Dionne said.

➔ MLA grazing land management hub: mla.com.au/grazing

4 Look back, move forward

Dionne recommends newcomers to an area use historical climate data to identify key decision dates relevant to the location when formulating plans and production goals for the land.

"Key information to source includes long-term rainfall, evaporation and temperature patterns," she said.

"Ascertaining when you're most likely to get season-breaking rains is also important to identify key decision dates for calving/lambing to ensure livestock have access to good nutrition when their energy demands are high."

➔ Australian Feedbase Monitor: mmla.com.au/afm

➔ AussieGRASS: longpaddock.qld.gov.au/aussiegrass



➔ Dionne Walsh conducting the Grazing Fundamentals (Southern Rangelands) EDGE workshop. Image: SA Arid Lands Landscape Board.

5 Find solutions together

Dionne recommends landowners and managers, as well as their staff, come along to the workshops.

"When you all attend together, you'll be speaking the same language. It helps move the needle a bit when taking on new approaches, especially around land management.

"Producers may know there's something not quite right on their land, but sometimes they don't quite know how to articulate the problem. The workshop helps get them unstuck and move along to find solutions," Dionne said.

➔ MLA EDGE workshops: mmla.com.au/edgenetwork

➔ Dionne Walsh dionne@rangeiq.com.au ➔ Mitch Plumbe mplumbe@mmla.com.au

Perfecting the recipe for productive pastures



➔ Mathew Hall in one of the limed winter-active phalaris paddocks.

SNAPSHOT

MATHEW HALL,
'Mount Glenfarms' –
Stawell, Victoria



AREA
3,000ha

ENTERPRISE
4,500-head, self-replacing Merino flock

PASTURES
Phalaris, canola, vetch,
arrow leaf clover

SOILS
Sandy loams, clay loams and clay rises

RAINFALL
500mm

Liming has played a role in the Hall family's feedbase management for almost two decades, delivering a boost to the productivity of their Victorian mixed enterprise.

Mathew Hall produces Merinos at Stawell with his wife Malinda and his parents Philip and Trudy.

Before they started treating their pastures with lime as part of their cropping cycle 17 years ago, the pH levels in their paddocks were in the low to mid 4s.

"Within the first paddock we renovated to sow down Porto cocksfoot on buckshot soils, the pH (CaCl₂) was recorded as 4.1 before the first application of lime to our pastures," Matt said.

By their 10th year of liming pastures in the spring before cropping, the Halls found their soils were still showing high levels of acidity.

"We were applying 2.5t/ha of lime after the original establishment of cocksfoot but when we tested our soils again, the pH had only improved to 4.8," Mathew said.

In 2016, the decision was made to perform another renovation across all paddocks to move away from cocksfoot and establish phalaris.

"While cocksfoot is a very acid-soil tolerant grass, we felt if we developed a stronger soil and feedbase management plan, phalaris would be the way to go to get that huge quantity of highly nutritious feed," he said.

"However, in order to achieve good establishment of phalaris, we would have to reach a pH level at least within the low to mid 5s across all our paddocks."

Making the change

To ensure they were making the most of their renovation and combat their soil constraints, Mathew

decided to join the Perennial Pasture Systems Healthy Soils project.

"I hadn't done a lot on soils, in fact, we'd really only attempted to deal with its constraints through liming our pastures just before cropping," he said.

"Throughout the project we discussed combating soil acidity, and when the deliverers suggested I continue with lime, I felt a bit hesitant."

In autumn, the Halls applied 4t/ha of lime to their soils and sowed Holdfast GT phalaris as the pasture base, targeting a pH (CaCl₂) of approximately 5.5.

"After sowing, we monitored the pastures through their first spring before reintroducing a cropping program," Mathew said.

"The cropping program ended up being the key ingredient to our pasture improvement recipe as it created the perfect opportunity to control weeds and reapply lime in the lead-up to pasture establishment."

On-farm benefits

The change in pasture paired with the increase in lime use has allowed the Halls to change their time of lambing from April to June.

"The additional feed wedge is ideal for ewes to lamb down on and is keeping consistent during the winter, so we're now able to wean in spring," Mathew said.

Better lambing and weaning times are not the only benefit the Halls have seen from their soil and pasture improvement program. They've also seen an increase in production.

TOOLBOX

➔ Learn how to test your soils and interpret the results: mmla.com.au/soil-testing

➔ Access soil management resources and case studies: mmla.com.au/healthy-soils

"The combination of our steady liming over the past 17 years and more recent pasture changes has allowed for a system which has become much more productive in the past 10 years," Mathew said.

"We've doubled our cropping program to 1,100ha and we've increased our ewe flock numbers by 30% to around 4,500 head.

"We are definitely seeing a return on investment." ■

➔ sfs.org.au/project/healthy-soils ➔ Mathew Hall hall.mathew@bigpond.com ➔ Andrew Morelli amorelli@mmla.com.au

Pasture tool grows profits and productivity

Producers now have better access to data to help them decide which pasture varieties perform best in their environment.

Resowing pasture, while expensive, can significantly boost productivity.

This is why a long-term partnership between MLA, Dairy Australia and seed companies conducts collaborative trials through the Pasture Trials Network (PTN). The PTN data allows producers and advisors to compare more than 100 temperate pasture varieties to determine which varieties perform best in their specific environments.

These PTN trials contain varieties from a range of seed companies, all compared in the same trials. To ensure independent rigour, trials are scrutinised by auditors and all trials are governed by a panel of industry experts. Data is also analysed by an independent statistician before it's uploaded into the PTN eTool, which is available on the MLA website, so producers can access the trial data for free.

PTN Executive Officer, Tony Butler, said the network had offered robust grazing feedbase variety performance information for more than a decade. Data is collected via numerous trials in temperate areas across Australia by independent agronomists.

"With the recent increase in funding from MLA to expand the PTN, we can really set a solid strategic direction and grow the program into the future," he said.

"Making better varietal selection decisions can deliver considerable productivity and profitability benefits to producers, with much greater liveweight gains possible from the extra feed delivered by the better performing varieties."

TOOLBOX

▶ Pasture Trials Network (PTN): pasturetrials.com.au

✉ PastureTrialsAu

📘 pasturetrialsnetwork

🌐 pasture-trials-network

▶ Access the PTN eTool: etools.mla.com.au/ptn

▶ PTN instructional video: 

▶ For trial opportunities: letstalk@pasturetrials.com.au

▶ MLA feedbase hub: mla.com.au/feedbase-hub

Insights into PTN



Emma Goodall

Agronomist – Elders, Ballarat, Victoria

How do you use the PTN data?

I regularly advise clients on the best performing cultivar and/or species for their area that fits their production system. Knowing what different species do in different rainfall areas helps quantify how different options may perform in difficult (drier or wetter) areas.

The PTN shows what the varieties actually do, in the paddock, at a given time of year and season.



Sinead Barker

Pasture and livestock consultant, Meridian Ag – Casterton, Victoria

How do you use the PTN data?

Knowing the data is independent and can be accessed from local trials means we can tailor recommendations to producers' needs. PTN figures on seasonal growth highlight which varieties will best fill feed gaps on farm and give us more confidence in recommending new varieties or those not previously seen in our area. This information, alongside local knowledge, helps us determine whether these varieties can grow under our conditions.

Here, two agronomists share how they use the Pasture Trials Network (PTN) data to help producers make informed feedbase choices.

The tool also aligns the pasture industry to the broadacre Grains Research and Development Corporation-run National Variety Trials (NVT) data standard. Varieties not in the NVT essentially aren't in paddocks, as planting an untried/unproven variety is considered too high risk for profitable enterprises.

How does the PTN data improve economic outcomes for producers?

Realistic, independent data of expected output versus input cost is a huge benefit to the pasture renovation bottom line, along with realistic feed budgeting. Cross-referencing production outside the local rainfall zone provides good/bad/ugly scenarios of seasonal and total quantity.

Strategic decisions based on the commercial realities of what can and can't be mixed between proprietary companies, can be made. Knowing a product marketed 'the same as' actually is 'the same as' – or is at least statistically similar, but with a short turnaround for mixes – can mean the difference between autumn and winter grazing and the requirement to buy-in feed, or not.

How does the PTN data improve economic outcomes for producers?

On top of the initial cost per hectare of pasture seed, the potential benefits due to increased feed production from a more productive pasture variety should also be considered. When sowing a new paddock, the seed is often a small cost overall when we consider the preparation, fertiliser, herbicide, pesticide, etc. I'd encourage producers to include the PTN data as part of their decision-making toolkit when choosing a pasture variety for their livestock.

What advice do you have for producers for the season ahead?

Feed gaps over winter are common due to factors including colder weather, less sunlight, moisture and nutrients. Identifying more winter-active pasture species, with the help of the PTN data and your local agronomist, is one solution.

Applying a nitrogen fertiliser or sowing higher autumn growth rate pasture varieties will promote autumn growth rates and provide a feed wedge in front of stock to eat over the slower

What advice do you have for producers for the season ahead?

On-farm system requirements are the key driver for pasture selection coming out of summer. In an average season, understanding which cultivars or species will 'get away' to form a feed wedge most quickly will reduce pressure on supplementary feeding (both amount of feed as well as the workload of feeding out). It's also important to set realistic expectations for establishment of new pastures to the point of first graze.

Using PTN data for feed budgeting allows producers to plan mitigation strategies for elevated risk periods, such as for phalaris and ryegrass toxicity, and to start planning spring management early.

In tough seasons, the data quantifies challenges such as lack of autumn production and can enable well-timed decision making on shelving a preferred 'plan A' in support of 'plan B' for faster feed and better weed control strategies, reducing risks of establishment failure for high-value perennials. ■

growing winter months. The plant hormone, gibberellic acid, is naturally lower during colder months so applying it can increase pasture growth by increasing the stem and leaf. Nitrogen and gibberellic acid together can further increase pasture growth. Often these measures are more cost-effective than supplementary feeding. ■

"When sowing a new paddock, the seed is often a small cost overall when we consider the preparation, fertiliser, herbicide, pesticide, etc. I'd encourage producers to include the PTN data as part of their decision-making toolkit."

Green light for goat sustainability project

A new project is underway to quantify the greenhouse gas (GHG) emissions of goats as well as assess the carbon balance and potential for sequestration.

When addressing growing concerns about agriculture's contribution to GHG emissions, the focus has primarily been on the beef, dairy and sheepmeat sectors.

There is a significant gap in data and research when it comes to the goat industry, particularly for extensive and rangeland goat enterprises.

With the majority of goats raised in these types of systems in Australia, understanding and addressing their emissions and sustainability is critical.

To bridge this knowledge gap, a three-year Goat Sustainability Project has been launched, funded through the MLA Donor Company (MDC) in partnership with the University of Queensland (UQ).

Project researcher and Senior Lecturer in Animal Science and Production at UQ, Dr Sarah Meale, said the project aims to provide a comprehensive understanding of goat emissions and sustainable management practices and showcase evidence-based opportunities for producers to adopt more sustainable management practices on farm.

Project research is currently underway, collecting data from various goat producers in Queensland to gain a comprehensive understanding of goat diets.

The second year of the project will focus on selecting three feeds which yield the best outcomes and testing them in animals. This will involve measuring actual methane emissions and digestion in animals.

The second year will also include a trial investigating the effects of pregnancy and parasite loads on goat emissions.

In the final year, methane emissions from goats under heat stress will be quantified, alongside on-farm measurements of methane emissions throughout the three years. ■

Sam's road to resilience

Sam Fryer wears many hats: devoted husband and father, regional area manager for Queensland Rural and Industry Development Authority (QRIDA), beef producer and mental health advocate.

After listening to his earnest conversation on the Humans of Agriculture podcast, it's clear why the host Oli Le Lievre described Sam as 'someone you wish was your best mate'.

Sam shared the personal strategies he's developed to overcome the series of profound life challenges he's faced.

His decision to reach out to his family and ask for help was the first step towards building resilience, and he hopes to encourage others, particularly those living and working in rural Australia, to also take that step.

Bouncing back

Sam's ability to bounce back repeatedly from the slew of successive life traumas he's faced is testament to his grit, resilience and the close relationship he shares with his family.

Having the self-awareness to recognise when it was time to ask for help, coupled with the tenacity to maintain his ongoing wellbeing, have been key to his resilience.

When he was just 10, Sam lost his beloved younger sister and best friend, Alex, due to complications with her cerebral palsy. At 17, he almost lost an arm in a motorbike accident – an experience which shook his youthful sense of infallibility to the core. The lament of loss continued to feature in his adult life as he dealt with the grief of losing members of his community to suicide.

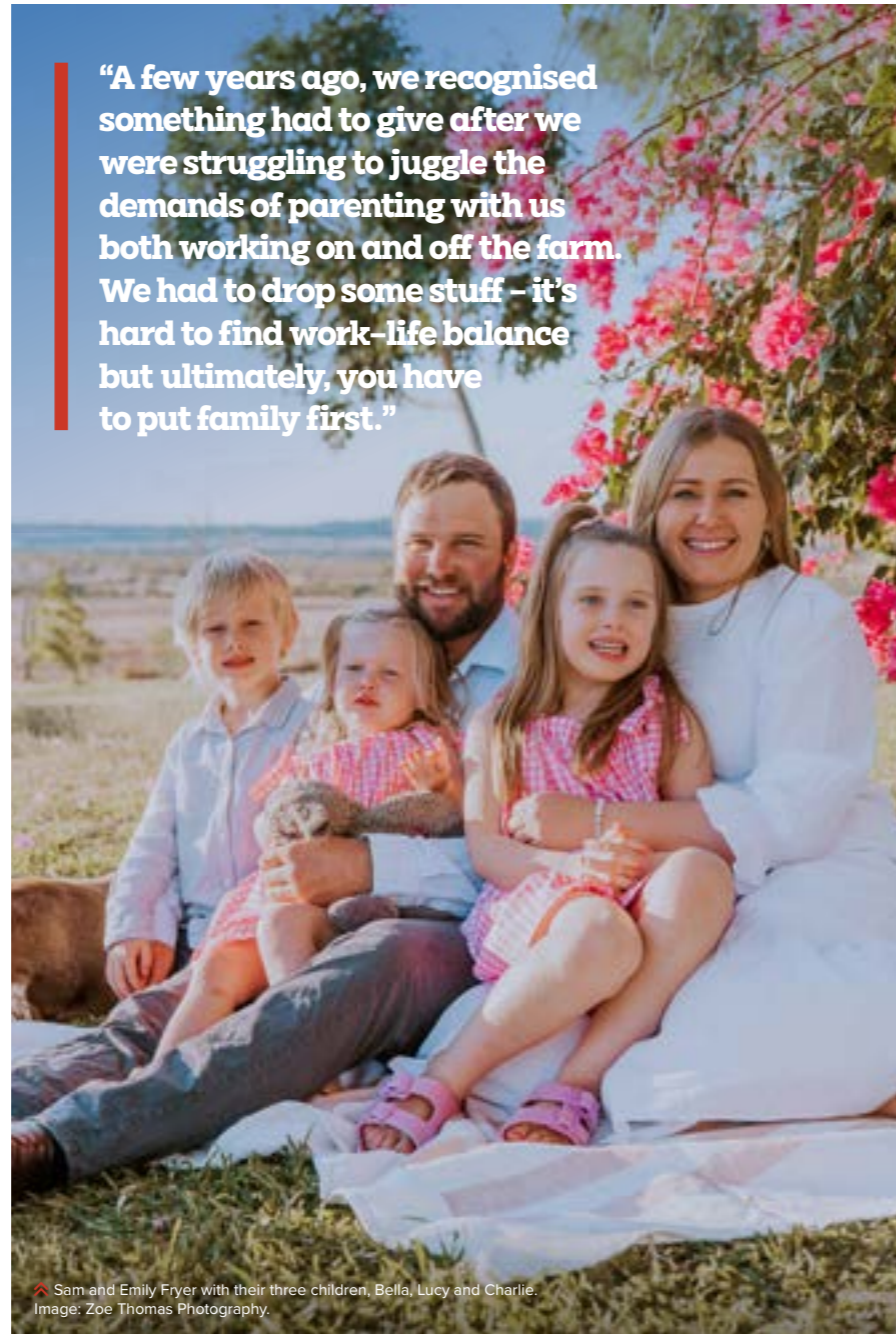
Mental health support is key

Sam acknowledged the missed opportunity to access mental health support as he struggled as a young person at boarding school.

"I needed to see someone and talk to someone, but at that time no one taught us about mental health – it was all about physical fitness and eating right. It was a massive hole," Sam said.

Years later, Sam's realisation that he required this support saw him reach out to his parents and begin the healing process.

"Mum and Dad noticed I was different. I just broke down and cried for hours in the kitchen. It was too much. I'd had enough. They just said, 'well why don't you see someone?' The hardest thing anyone



Sam and Emily Fryer with their three children, Bella, Lucy and Charlie. Image: Zoe Thomas Photography.

can do is admit there's a problem and then do something about it," Sam said.

Sam went on to see a mental health specialist in Townsville who explained how everyone has a cup which can only take so much stress until it overflows.

"It took me a few sessions of seeing her and I started making a bit of a turnaround. It took me about three years

to get it right – getting my routine right. I stopped drinking alcohol during the week and now I'll just have a couple on the weekend. I know what triggers me.

"I'm a work in progress – every day I work on it. I do yoga and meditate five times a week. I'm forever reading stories about people who have overcome things in life," Sam said.

A team approach

These days, Sam and his wife Emily strive to balance the need to provide for their young children, Bella, Charlie and Lucy, while also prioritising family time.

"A few years ago, we recognised something had to give after we were struggling to juggle the demands of parenting with us both working on and off the farm. We had to drop some stuff – it's hard to find work-life balance but ultimately, you have to put family first.

"We've made some radical changes. At the moment, Emily is full time at home with the kids. It's a sacrifice but we have a team approach and try to be flexible," Sam said.

Switching off

Sam keeps himself on-track by implementing regular self-care activities into his daily routine.

"Doing something not related to your business helps – I need alone time to have a run or walk with the dogs. You need to reset – put your phone down. You might like reading or going to the footy. It needs to be more than sitting around and drinking," Sam said.

Ensuring he gets eight hours of sleep a night and switching from watching

TV to reading a book before going to bed, have been worthwhile changes.

Sam and Emily's involvement in various clubs in town has kept them connected to their local community and provided diversion from focusing solely on on-farm issues.

Practical help

In Sam's professional role as QRIDA regional area manager for the North West and Gulf, he provides practical help for producers feeling the impact of natural disasters and prolonged seasonal challenges.

"We're the first point of call for grants and disaster relief. When producers need financial assistance to help recover from disaster or find ways to improve the productivity and profitability of their enterprise, we're here to help walk them through the application process and answer any questions they may have.

"We do a lot of drought preparedness work and discuss how water infrastructure and fencing can help them manage their country better," Sam said.

QRIDA's grants and loans help producers fund practical drought strategies, such as building feed sheds or adding water infrastructure.



Sam Fryer. Image: Zoe Thomas Photography.

Sam Fryer sam.fryer@qrda.qld.gov.au Lindsey Perry lperry@mla.com.au

"Splitting up country according to its land type is also effective. We discuss strategies such as fencing off riverbeds to prevent erosion and allow grass to grow.

"Some country has sweet spots and the cattle always hammer that after rain – but if you fence it off and move water to different parts of the property using pipe bores, you can make use of the available water and control where it goes," Sam said.

"A Drought Preparedness Grant can be really effective for producers because it takes the financial burden off funding these sustainable practices themselves."

Other tips include fencing off dams to prevent stock getting bogged and accessing artesian water.

He said in terms of decision making around drought, being prepared and informed are key.

Proactively accessing the available support will put producers in a better position to deal with whatever eventuates over the coming year. ■

TOOLBOX

- MLA wellbeing and disaster recovery hub: mla.com.au/mental-health
- Lifeline: 13 11 14, lifeline.org.au
- Beyond Blue: 1300 224 636, beyondblue.org.au
- FutureBeef: futurebeef.com.au
- TIACS (free phone and text counselling service offering mental health support): 0488 846 988, tiacs.org

Sharing our stories

Sam Fryer's podcast, 'A place to call home' explores how to achieve agricultural land ownership and personal and business success:

aplacetocallhome.com.au

Scan the QR code to hear Sam's story on the Humans of Agriculture podcast. MLA partnered with Humans of Agriculture to share other stories from the red meat industry – such as MLA's chef and business development manager Sam Burke (pictured):

humansofagriculture.com.au/stories

Humans of Agriculture



BIGG PDS producer Georgie Keynes' containment pens.

BIGG benefits of containment feeding

When South Australia's Barossa experienced a run of drier than average seasons, local sheep producers turned to containment feeding to meet the nutritional needs of their ewes and protect the value of lambing pastures.

MLA supported a Producer Demonstration Site (PDS) with the Barossa Improved Grazing Group (BIGG) to measure the effectiveness of ewe containment in:

- increasing reproductive rates
- maintaining stocking rates
- protecting ground cover
- improving ewe condition scores.

The project was facilitated by consultant Deb Scammell of Talking Livestock and ran across three major sites (each with at least 1,000 ewes in containment) and eight minor sites.

Confidence and control

Deb explained how in 2019, many producers in the region had received only half their average annual rainfall and, while some had already built pens, didn't have the knowledge or experience to contain their stock successfully.

"We started the PDS later that year to help provide the skills they needed to manage their containment feeding well," she said.

"By the end of the project, we saw a 41% uplift in core producer confidence."

As well as more confidence in their skills, the project also gave producers a sense of greater control in their business.

"Containment offered more choice in how they managed their stock," Deb said.

"Instead of having to destock when conditions got too dry, they could put their ewes in containment and be confident their paddocks would recover quickly after some rain."

Benefits of containment

- **Improved ground cover:** The three major sites had 90–100% ground cover across the life of the project. The minor sites which contained most of their ewes exceeded the project's 70% ground cover goal, apart from two where severe kangaroo grazing impacted ground cover.
- **Pasture recovery:** Feed on offer from pastures on the three major sites was 570kg of dry matter per hectare

higher compared to similar properties in the region without containment.

- **Increased lamb marking:** The project aimed to achieve a 10% increase in lambing percentages. This goal was exceeded across most sites, with the three major sites recording an average increase of 12% over the duration of the project.
- **Economic advantage:** The project quantified the time, labour and costs associated with pasture feeding in comparison to containment. As a result, it estimated a benefit of between \$5.30 and \$8 per ewe.
- **Improved stock management:** Containment enabled better management practices, such as precise nutrition and opportunities for more frequent condition scoring, which allowed producers to get more ewes to their condition score targets for lambing. It's likely the benefits seen in areas such as cost savings and increased lambing percentages are a flow-on effect of the improved management that comes with containment.

Improved ewe survival

When the PDS began in 2019, ewes had been on feed for an extended period due to the dry conditions. As a result, ewe mortality rates rose due to calcium deficiency and hypocalcaemia.

Blood testing showed that while the younger ewes responded to calcium supplementation when they were deficient, this wasn't the case for older ewes whose bone reserves had depleted over several years.

"We monitored calcium levels during every breeding season to make sure the ewes' bone reserves weren't being irreversibly depleted," Deb said.

"By the end of the project, contained ewe mortality rates were equivalent to paddock-run ewes at 1.8%."

Decision support

The project outcomes demonstrated the benefits of containment feeding and Deb said it will be a valuable tool in helping improve outcomes for those planning to adopt the practice in the future.

"The work that's been done on the BIGG PDS has been really critical to understanding and overcoming some of those challenges, such as ewe mortality," she said.

"For those producers now coming into containment feeding without much experience, the PDS has removed a lot of those hurdles and it's going to make getting those great outcomes a lot easier." ■

Read report at mla.com.au/bigg-pds



BIGG PDS producer Paul Schutz installed heavy-duty shade across his containment pens.

Four tips for site selection

It isn't a perfect science, but there are four aspects to consider before starting to build containment pens.



BIGG PDS producer William Hurn's low-cost and time-saving communal trough system.

Is containment feeding right for you?

When deciding if containment feeding is the right move, Deb suggested producers ask the following four questions:

- 1 **Is stock water available?**
- 2 **Are ewes suitable for entry?**
For example, they aren't in full wool or at the point of lambing.
- 3 **Is the 'value' of feeding the stock justified from an economic or emotional perspective?**
- 4 **Do appropriate facilities for containment exist or can they be constructed?**

If the answer to any one of these four questions is no, then containment may not be the right solution and destocking or agistment may be a more viable option.

If the answer to all four questions is yes, then containment may be a viable option to help retain stock and protect ground cover during the dry season. However, Deb said it's important to get expert advice on pen set-up and the specific nutrition required before you make any decisions.



Containment feeding PDS projects

Four MLA Producer Demonstration Sites (PDS) with a containment feeding focus are currently underway. Contact the individual PDS facilitators for more information or to get involved.

Levy-funded PDS projects

Which set-up? Implementing confinement feeding

This project covered three sites in mid-west WA. It helped producers understand why and when to implement containment feeding, as well as assisting with set-up design and overall management, and identifying the financial benefits.



Confinement feeding and deferred grazing management system

This project had two sites in WA's Wickepin region. It demonstrated how supplementary containment feeding matched ewe nutritional requirements with pasture availability during the lambing period, to deliver efficiency and economic benefits.



Co-contributor PDS projects

Sheep containment in focus

This project established three sites around Cowra, NSW. It helped increase producer capability, increased adoption of best practice sheep containment, and encouraged the use of ag-tech to quantify the value of containment.



Assessing economic benefits of confinement feeding

This project established three sites on WA's south coast. It set out to increase adoption amongst sheep producers and improve productivity of producers already using containment feeding.



Use the PDS Search Tool at mla.com.au/pds-search to learn more about other projects.

mla.com.au/pds | Deb Scammell deb@talkinglivestock.com.au
Alana McEwan amcewan@mla.com.au



Methods of feeding ewes in containment pens: Scan the QR code to watch on YouTube.



TOOLBOX

- Subscribe to receive ongoing PDS Updates: mla.com.au/pds-sub
- Visit mla.com.au/containment-feeding for resources including:
 - Barossa Improved Grazing Group (BIGG) producer demonstration site:
 - > BIGG PDS – Ewe containment project
 - > Increasing production using containment areas
 - Learn more about containment feeding:
 - > Managing breeding ewes in containment areas
 - > Optimising ewe reproductive performance in containment areas
 - > The value of supplementing minerals to pregnant ewes in containment
 - > A producers' guide to production feeding for lamb growth
 - > National procedures and guidelines for intensive sheep and lamb feeding systems
 - Watch these webinars:
 - > Where does a stock containment area fit in a farming system
 - > Stock containment area designs
 - > Nutrition, management and risks in stock containment

A contained solution to boost lambing and ground cover

After several dry years, SA sheep producer Brett Nietschke turned to containment feeding in an attempt to maintain ground cover and encourage better pasture recovery in the lead-up to lambing.

His property was part of the MLA-funded Barossa Improved Grazing Group (BIGG) Producer Demonstration Site (PDS) project (see story page 14).

“Primarily, we wanted to protect ground cover and ensure we had some feed on offer in the paddocks leading up to lambing in June or July,” Brett said. “Putting the ewes in containment gave us the best chance to do that.”

Brett runs a self-replacing Merino flock, predominantly for wool production, with 400 Merino breeding ewes and 200 ewe hoggets. As part of the PDS, 400 ewes were in containment.

Brett crops around 70% of the property, with the remaining 30% pasture. Most cereal crops are grazed early to allow some extra short-term feed for the winter feed gap.

Preparing for containment

The containment area was set up at very low cost, comprising a 4ha paddock which was temporarily divided in half to separate twin and single-bearing ewes.

Prior to containment, all ewes were pregnancy scanned and separated, then moved into containment six to eight weeks prior to lambing.

The ewes were also condition scored throughout the containment period, with twins being held close to the condition score target of 3.3–3.5 and singles at a slightly lower score.

Containment ration

For the twins, Brett used lick feeders with a ration of grain, and hay was rolled out in the pens. The single-bearing ewes were generally fed a ration of good quality hay only.

Lambing paddocks

The ewes were moved out of containment for lambing onto either regenerated

clover-based pasture or sown pasture paddocks 10 days before lambing.

The twin ewes were released onto pasture paddocks ranging from 6–15ha, with 50–80 head per mob. The singles were released onto a 15ha paddock.

“The containment period allowed the pasture to really get away for lambing, but we had late breaks and the pasture took longer to re-establish, so it wasn’t supplying adequate feed in the lead-up to lambing,” Brett said.

“As a result, twin-bearing ewes still had access to grain and the singles had additional hay.

“We recorded 116% lambing (to ewes joined), probably helped by fortunate weather conditions during lambing and the ideal condition score of the ewes.”

Ewe survival

The ewe mortality rate from the start of containment through to lamb marking was 3%. All deaths were twin-bearing ewes, which Brett said was likely as a result of pregnancy toxemia.

Ease of management

Brett found containment to be a very worthwhile management practice and saw very few disadvantages.

“We were able to more easily maintain condition scores until release from containment and we also saw an improvement in lambing percentage in that first year,” he said.

“The containment yards made hand feeding easier and more cost-effective. It also reduced the feed requirement as ewes weren’t wasting energy walking around a paddock.

“After four years, we can see the benefits of using containment to manage ewe nutrition and pasture far outweigh the costs, and we’ll be continuing to use it as part of our ongoing practice.” ■



SA sheep producer Brett Nietschke was involved in the MLA-supported Barossa Improved Grazing Group project.

SNAPSHOT

BRETT NIETSCHKE,
Koonunga, SA

AREA
300ha

ENTERPRISE
Self-replacing Merino flock, wether lambs, cropping

PASTURES
Clover-based pasture, sown annuals, cereal crops

SOILS
Red brown earth

RAINFALL
460mm

SEASONAL ACTION PLAN

As they enter containment, condition score ewes and continue to monitor scores throughout the six to eight weeks they are contained.

In early April, pregnancy scan ewes and separate them into singles, multiples and dries.

In June, release ewes back onto pasture 10 days before lambing.



Robyn Adams with her maiden heifers. Pink ear tags are used to indicate they are pregnant with their first calf.

Heifers get a dose of ‘girl power’

For many beef producers in central western Queensland, years of poorer pasture production and quality has gone hand in hand with reduced breeder performance.

A group of Desert Uplands Committee producers joined forces to find a solution to the issue of maiden heifers failing to reach critical mating weights and carry full-term pregnancies during drier years.

In 2020, they formed the ‘Girl Power’ MLA-funded Producer Demonstration Site (PDS) project to focus on improving novice breeder performance.

The goals for the four-year project were:

- 100% of maiden heifers conceiving within six weeks of joining
- calf losses reducing to <5% in maiden heifers
- >80% of heifers reconceiving at their second round of joining.

Desert Uplands Committee’s Producer Chair, Robyn Adams, said the first phase of the project focused on tracking potential future breeders from weaning to their second joining.

“The initial known challenge we faced was getting two-year-old females to critical mating weight (CMW), which is approximately 280–350kg, for their first join,” Robyn said.

“Even with those who achieved CMW, carrying calf to term, calf losses and reconception rates were all additional challenges.”

The PDS used numbered tags to identify each heifer’s stage of production.

Producers used tags to track heifers in three groups (pre first join, post first join and post second join) to collect data on:

- breeder weights
- conception rates
- foetal aging
- calving rates
- weaning rates.

Project findings

During the project, better seasons helped more than 90% of maiden heifers reach CMW and conceive within the regional standard three-month joining.

However, even during good seasons, maiden heifers still displayed poor mothering and overall reconception rates were lower than ideal. The data available showed calf losses were up to 15% and heifer reconception rates were as low as 30–40%.

When the data was matched up with the individually tagged breeder groups, producers could identify which group of heifers were having the most issues with carrying to term, bringing a weaner to the yards, weight loss and reconception.

Practical strategies

When it came to the question of ‘what works?’, supplementing was one of the answers.

“We’ve been supplementing with lick for a while on our station, but the project gave us an opportunity to trial a broadened supplementation regime,” Robyn said.

She said their cattle displayed visible symptoms such as bone chewing, peg leg and ill thrift, which indicated a phosphorus deficiency was likely.

“To combat this, we began trialling phosphorus supplementing during our wet season, as did many other producers involved in the project,” Robyn said.

“I also added phosphoric acid with urea to wet lick to ensure cattle keep performing during dry years.”

They were able to determine that calves born to mothers who had good phosphorus intake while pregnant and lactating were able to reach critical weights earlier.

“We now feed phosphorus year-round to ensure there are no deficiencies or growth hindrances,” Robyn said.

Adjusting joining

The producers involved in the PDS also trialled alternative joining periods.

They found during drier years, it was more beneficial to hold off joining until after the first seasonal break, so pregnant heifers could benefit from a more nutritional feedbase.

“While we’re ultimately aiming for a six-week joining, we’ve found shortening the joining period to a maximum of three months is also beneficial to allow pregnant heifers to make the most of what limited pastures are available,” Robyn said.

“Ultimately, we want to confidently determine what changes producers can implement into their routine production to improve outcomes for young mothers, their calves and, by default, our sales figures.”

Continued next page

Continued from previous page

The next phase

The second phase of the PDS begins in July and will focus on more specific data collection and comparison.

“During the project’s early stages, we spent a lot of time observing and evaluating the extent of the challenges we were facing. While we’ll continue to do this, we really want to focus more on what the data is telling us.

“Ultimately, we want to confidently determine what changes producers can implement into their routine production to improve outcomes for young mothers, their calves and, by default, our sales figures.” ■



Breeders and their calves at Stratford Station consuming lick with uric acid to boost their performance during drier years.

GET INVOLVED

- On 20 April 2024, Robyn will host an on-property field day to discuss Girl Power.
- To become a PDS for the next phase of Girl Power, register your interest before 20 May 2024.

For more information, contact Robyn Adams:
stratford01@bigpond.com

TOOLBOX

Read *How do I manage heifers pre-joining to improve reproductive performance?*

Want to learn more about this project? Scan this QR code:



Robyn Adams stratford01@bigpond.com
Lindsey Perry lperry@mla.com.au

The Bauman family run 1,000–1,200 Droughtmaster/Charbray/Brahman breeders on their Alpha property.

PDS powers heifer conception

For Queensland beef producer Reid Bauman, years of fluctuating seasonal patterns made strong breeder performance and consistent calving rates a continuous struggle.

“We constantly swing between years of high and low rainfall, so I was keen to find a system which ensured my breeders were remaining productive throughout our drier years,” Reid said.

The ‘Girl Power’ Producer Demonstration Site (PDS) caught his attention as an opportunity to get as many calves as he could during poorer pasture years, without having to increase breeder numbers (see story previous page).

Production cycle

According to Reid, Girl Power’s goal wasn’t to re-program his production cycle, but rather to reinforce his decision making and lock in his key production dates.

“We aim to muster twice a year, so lining up other husbandry procedures with these events was the best action for us,” Reid said.

“On 1 January, we put our bulls in with breeders and leave them in for 90 days, which often allows for a round of mustering to happen in March when we remove them.

“If it’s a dry year, we’ll often wean our previous years’ calves when we’re removing bulls after branding in February. However, if the season is looking good, then we will likely hold off on mustering until June.

“While we did attempt to include preg testing alongside weaning, it just wasn’t manageable so our preg testing now occurs in July.”

Supplementation

When it comes to his first-time breeders, Reid believes 95% maiden heifer conception should be a guarantee.

“Our breeders are at least two years old, have reached critical mating weight (CMW), and are fully vaccinated before we put them forward for their first joining,” Reid said.

“If our girls are in the best condition they can be, then there shouldn’t be any reason for them not to conceive.”

To help achieve CMW, Reid implements rotational grazing and uses supplementation as a reserve should pastures become less productive during years of low rainfall.

“Supplementing is great when the quality of your pasture has declined but you still have a good overall quantity of feed sufficient for stocking rate,” Reid said.

“If we don’t get enough rain during our annual joining period, we’ll look to bring out lick and phosphorus supplement, especially for our heifers.

“We don’t have the data to back it up yet, but in previous years we’ve noticed supplementation gives our pregnant and lactating heifers the right nutrients they need during our tougher years to increase their likelihood of carrying to term and producing higher weight weaners.”

Data collection

Reid is an advocate for accurate data collection to improve breeder performance.

“While Girl Power is heifer-focused, I felt Bull Breeding Soundness Evaluations were critical for success in understanding and acting on production challenges,” Reid said.

“Confirmation our bulls are virile, healthy and supporting good genetics has helped us rule them out as an issue when it comes to poor conception rates and calf loss.”

After he’s confirmed his bulls are in working order, Reid focuses on collecting data on his heifers.

He had already implemented a similar tagging system to the one suggested by the Girl Power facilitators, so his heifers were identifiable by year with coloured tags.

“We’ve been marking our breeders with different coloured ear tags to reflect the year they were first joined,” Reid said.

“Prior to Girl Power, we would record data on pregnancy rates and foetal aging of each age group as a whole.

“However, during the project we switched to linking the data we record to our breeders’ NLIS tags as opposed to their coloured age group tags.

“This meant instead of just seeing data reflecting the performance of the breeder age group, we were also getting data reflecting the performance of the individual heifer each year.”

Reid also decided to use data to identify which breeders delivered a live calf.

“With our first-time breeders, we elected to keep them separate until they delivered their first live calf before integrating them into our breeder mob. However, we’re also looking to more closely monitor whether or not our older breeders are continuously delivering live calves.”

Reid sells breeders who fail to fall pregnant by the end of his joining period.

Recording data based on NLIS tags will now allow him to identify why failure to conceive or carry to term may occur, especially if they’ve fallen pregnant in previous years.

“The data is very new, but we’re hoping in future years we might see trends which will help us pinpoint any common denominators within underperforming breeders, such as age or weight.” ■

Central Queensland producer, Reid Bauman.



SNAPSHOT

THE BAUMAN FAMILY,
Monklands Cattle Co –
Alpha, Queensland



AREA
17,000ha

ENTERPRISE
1,000–1,200 Droughtmaster/
Charbray/Brahman breeders

PASTURES
Buffel grass, Mitchell grass,
black speargrass and spinifex

SOILS
Brigalow scrub soils, clay and sand

RAINFALL
500mm

LESSONS LEARNT

- Separate breeders into groups based on their stage of production.
- Take your time to compare data.
- Don’t be afraid change your management plan.

Reid Bauman monklandscattleco@gmail.com Lindsey Perry lperry@mla.com.au

'Best of the best' earns MSA win

WA beef producer Graham Ayres uses Meat Standards Australia (MSA) in his commitment to quality and to give his business a competitive edge.

Graham and his daughter, Ingrid, run 250 head of Angus/Friesian F1-cross breeders joined to Charolais bulls on their 450ha Bornholm property.

He's an early adopter and has been MSA-registered since its inception in 1998.

MSA award

The Ayres won the award for WA's Most Outstanding Non-Grainfed Band 1 Producer in the 2023 MSA Excellence in Eating Quality Awards.

The cattle they consigned for processing over the two-year period of 2021–23 achieved an average MSA Index of 66.33 and MSA compliance of 99%.

Graham said being a MSA-registered producer supported his aim to deliver a quality and consistent product to his customers, and to attract premium prices for his cattle.

"Our calves are ideally sold between 10.5–11 months, with a minimum carcass weight of 220kg and an ideal target of 250kg," Graham said.

He has consistently supplied cattle to Woolworths over the past 6–7 years, with a continued focus on delivering what he describes as the 'best-we-can-do' product.

"MSA has helped us bring our best-quality product to market, setting us apart. And the financial rewards have been good."

On-farm strategies

"We maintain a clover/rye mix in the pasture, provide supplementary pasture hay, regularly top dress with fertiliser and lime, and invest in reseeded during autumn to ensure a constant supply of high-quality feed," Graham said.

"Our motto is clear: only the best of the best makes the cut. We critically evaluate each animal before they get on a truck."

"This focus on quality over time has helped us foster a good reputation and drive strong business relationships with customers over the years. They know they're getting not just a quality, but a consistent, product."

Graham said the results of this management are really starting to speak for themselves.

"Our motto is clear: only the best of the best makes the cut. We critically evaluate each animal before they get on a truck."

"Particularly over recent years, MSA has been a factor which encouraged us to further evolve our cattle management approach," Graham said.

"It helped us look closer and better assess cattle behaviour, emphasising the utmost importance of understanding and respecting our animals."

"This shift in perceptions has impacted our entire herd management strategy."

"Whether we're in the yards or the paddock, our focus is on creating and maintaining a quiet environment for our livestock through our handling techniques, which has paid dividends."

Genetic focus

The Ayres use quiet Charolais bulls who are known for their muscling and docility. They have sourced bulls from the same breeder for more than two decades because they know they will get a consistent animal, with a good temperament.

"When purchasing bulls, we look at Estimated Breeding Values (EBVs), mainly birth weight, as we like to target smaller framed bulls," Graham said.

Graham said he has learned valuable lessons over the years.

"We just want to run the best herd and deliver the best product we can," Graham said.

"MSA has been a key factor in helping us bring our best to market, where we're now consistently delivering a quality product that's grading MSA, meeting specifications for customers, and getting a premium price."

"While we might not have a silver bullet to achieving good MSA outcomes, the results are starting to speak for themselves." ■



✓ Graham Ayres with his daughter, Ingrid, and granddaughter, Caitlyn.

SNAPSHOT

GRAHAM AYRES,
Bornholm, WA



AREA
540ha

ENTERPRISE
250 Angus/Friesian F1-cross breeders, joined to Charolais bulls

PASTURES
Clover/rye mix

SOILS
Loam through to coastal sands

RAINFALL
965mm

LESSONS LEARNT

- ✓ We regularly top dress pasture with fertiliser and lime and invest in reseeded during autumn to ensure a constant supply of high-quality feed.
- ✓ Only the best of the best makes the cut. We critically evaluate each animal before they get on a truck.
- ✓ MSA has been a factor which encouraged us to further evolve our cattle management approach, to bring our best-quality product to market.

» Tim Campbell with Angus cattle in one of his limed paddocks.

Lime squeezes new life into perennial pastures

When it comes to improving his feedbase, Flinders Island beef producer Tim Campbell found top dressing old established pasture with lime not only changed its composition, but also increased its productivity.

Tim's property is in the Lackrana district of the island, off the coast of Tasmania. He produces F1 Wagyu/Angus-cross calves off Angus breeders for mainland feedlots.

"The island has undergone some major changes since soldier settlement in the 1950s, with grazing shifting away from sheep toward cattle, and with some producers consolidating into larger operations," Tim said.

Soils vary across the island, with alkaline, acidic and neutral types – Tim's property has all three.

His farm ranges from peat soils with shell fragments on the east, which measure a neutral pH (CaCl₂) of 7.7, to sandy loams on the west, which measure an acidic pH (CaCl₂) of 4.5 with high aluminium levels.

To counter this variation in soil types, Tim relies on a range of pastures to match growing conditions.

These include perennial ryegrass and phalaris across most paddocks, with:

- strawberry clover in alkaline flats
- white clover in red sandy loams
- sub-clover in lighter banks.

Understanding constraints

In 2008, Tim purchased a neighbouring property. It had declining perennial pastures, dominated by Yorkshire fog and sorrel.

"Yorkshire fog would become detrimental to our perennial crops if we didn't address it," Tim said.

"The sorrel was particularly worrying as it can cause death in livestock when eaten in large quantities."

Tim's research before buying the property revealed the 1960s soldier settlement had once had excellent clover, trefoil and ryegrass pastures. These pastures deteriorated after becoming neglected in the 1990s when commodity prices dropped.

After purchasing the property, Tim treated the pastures with superphosphate. While this increased clover content, it failed to encourage clover to nodulate.

A soil test in January 2017 showed the paddock had a pH (CaCl₂) of 4.76, which indicated acidic soils were likely to blame.

Taking action

Tim decided it was time to address all paddocks impacted by high acid soils, and joined the Southern Farming Systems (SFS) Flinders Island Healthy Soils group.

SFS had previously held several field days on Flinders Island, and in 2020 facilitated the first group learning project on the island.

"The group consisted of 20 producers and, together with the facilitators, we explored a range of locally significant soil constraints and opportunities," Tim said.

"We learnt from each other's findings and experiences with feedbase and soil management strategies."

The project focused on:

- soil salinity
- soil acidity
- soil compaction
- fertiliser types
- soil nutrition
- carbon
- trace elements and their influence on animal health.

Seeing results

In autumn, Tim applied 5t/ha of lime mixed with sand sourced from the local lime quarry, as a top dressing to his pastures in acidic soils.

A follow-up soil test in September showed pH (CaCl₂) levels improved to 5.02 – a 0.26 increase within a year.

"We saw a dramatic turnaround with an increase in clover nodulation. This resulted

SNAPSHOT



TIM CAMPBELL,
'Panorama' –
Flinders Island, Tasmania



AREA
730ha

ENTERPRISE
750 Angus breeders producing
F1 Wagyu/Angus-cross calves

PASTURES
Perennial ryegrass, strawberry
and white clover, phalaris

SOILS
Variable, including peat soils
and red sandy loams

RAINFALL
800mm

TOOLBOX



- ▶ Access soil management resources: m1a.com.au/healthy-soils
- ▶ Learn how to test your soils and interpret the results: m1a.com.au/soil-testing

in more vigorous perennial ryegrass as the clover's microbial population boosted pasture nitrogen levels," Tim said.

"In the three years since introducing liming, our pastures have become more productive and are offering higher nutritional value for our cattle."

"We're seeing them take off sooner after our autumn liming cycle and remain more productive over winter, reducing our need to supplementary feed."

Now, Tim implements annual soil testing and visual assessment annually, and limes as required. ■

Pain relief delivers multiple benefits

Implementing across-the-board pain relief to routine animal husbandry procedures has improved welfare, safety and efficiency on Herb and Sue George's Queensland Channel Country property.

Their Jundah beef breeding operation has stood the test of time under five generations of the family, through their commitment to ongoing learning, innovation and astute responsiveness to shifts in consumer expectations, including those around animal welfare.

Their strategic approach has improved wellbeing at 'Glen Valley', with flow-on benefits including:

- improved staff safety
- time savings at mustering
- better temperament and reduced stress in cattle
- calves bouncing back more quickly following dehorning, castration and branding
- more settled and placid calves at weaning.

Proactive adoption of pain relief

After attending a FutureBeef webinar on pain relief in 2020, Herb and Sue accessed product and dosing information from the FutureBeef website and, with the help of their veterinarian, rolled out pain relief across the board for routine husbandry practices.

"We took the view we wanted to turn off the best product we could," Sue said.

Anticipating a future where pain relief is standard practice in the red meat industry, Herb and Sue wanted to be on the front foot and keep up with consumer sentiment around animal welfare expectations.

"You have to be proactive in running viable, sustainable businesses. If we can do something which improves our management and also the welfare of our animals, then it's a win-win," Sue said.

Calmer calves

Herb and Sue have found the treatment best suited to their operation is the non-steroidal anti-inflammatory drug Metacam®. Its long-lasting (72 hour) effect has made a big impact on how their calves respond both during and after required husbandry procedures.

"We trialled Metacam® during branding – it required whole practice change, as you put them in the race, inject it and it takes 15 minutes to work," Sue said.

"We were very impressed with how it worked. When Herb castrates the male calves, it seems to physically settle them when they're in the cradle."

Herb and Sue have found using pain relief has a positive impact on the ease of mustering cows and calves after dehorning, castrating and branding. This has saved time as cattle display better mothering and calves are less inclined to lay around the yards and 'sulk'.

"It's cut back about a third of the time taken from mustering them out of the holding paddock and getting them to walk away," Sue said.

"I can't see us not doing it now, it will just become part of our everyday practice. It costs us \$6 per head for Metacam® and it's money well spent."

Practice change

Herb and Sue believe the yard adjustments and extra 15 minutes required to wait for pain relief to take effect are time and effort well spent, based on the improvements they've witnessed.

"We were determined to make it work and it's just natural now. We don't seem to notice it takes a little bit longer when we brand the calves," Sue said.

Wide-ranging benefits

Sue and Herb said cattle which experience less stressful husbandry practices are easier to handle both straight after the event and into the future.

This is great news for staff safety as well as the ability of their cattle to bounce back and feed well after handling.

"They seem to remember going up the branding race. If you have a calf or a weaner in the yards that's more manageable, then they're going



SNAPSHOT

HERB AND SUE GEORGE,
'Glen Valley' – Jundah,
Queensland

AREA
35,000ha

ENTERPRISE
400–500 Santa Gertrudis breeders,
800–1,000 replacement heifers

PASTURES
Variable – includes Mitchell grass,
Flinders grass, buttongrass, spinifex,
mulga grass and buffel grass

SOILS
Channel country, alluvial sandplains

RAINFALL
250mm

to go on to feed better and be a more settled animal," Sue said.

"It's got to have a positive flow-on effect throughout their lifetime. Considering their first exposure to humans is drafting and up the branding race, it's got to be a huge positive for our industry." ■

Tips for best practice

MLA's recently updated manual, *A guide to best practice husbandry in beef cattle: Branding, castrating and dehorning – 2nd edition*, contains detailed instructions, photos and advice around best practice animal husbandry. Key messages include:

- ✓ Ensure you're aware of the legal requirements of your state or territory (refer to Appendix C in the manual).
- ✓ Perform all procedures with cattle as young as possible.
- ✓ Provide pain relief in the form of local anaesthesia and pre or post operative analgesia when available.
- ✓ Use adequate numbers of well-trained and experienced staff, and good planning and process – brand, then castrate, then dehorn.
- ✓ Ensure cattle have adequate protection against tetanus.
- ✓ Provide clean working conditions.
- ✓ Inspect animals daily for 10 days after castrating or dehorning to check for complications such as infection and flystrike.
- ✓ Provide appropriate treatment if necessary, in consultation with your veterinarian.
- ✓ Minimise stress to the animal by:
 - quiet, calm mustering and handling
 - ensuring access to water before and after the procedures
 - minimising the time that cows and calves are separated
 - doing the procedures in the coolest part of the day
 - ensuring adequate restraint so the procedures can be performed efficiently and safely for both animal and operator
 - releasing cattle from yards as soon as possible, into a shaded, grassed holding paddock with access to water
 - avoiding wet, humid weather, and dusty conditions.

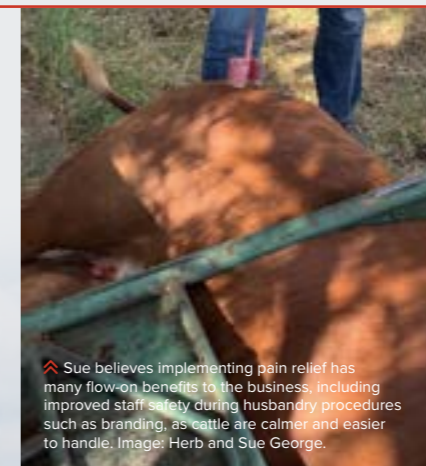


Pain relief options

Anaesthetic versus analgesic

Anaesthetics and analgesics target different areas of the pain pathway.

- Local anaesthetics provide pain relief by temporarily blocking sensory function (i.e. numbing the area).
- Analgesics (which include non-steroidal anti-inflammatory drugs) reduce physiological inflammatory pathways in the body, resulting in reduced cellular reaction to trauma and less triggers of pain.



⚡ Sue believes implementing pain relief has many flow-on benefits to the business, including improved staff safety during husbandry procedures such as branding, as cattle are calmer and easier to handle. Image: Herb and Sue George.

Anaesthetics and analgesics can be used individually or ideally together, for pain relief.

Anaesthetics have an almost immediate effect (while the procedure is being carried out), while analgesics provide longer lasting pain relief (by facilitating the healing process). Injectable anaesthetics and analgesics are primarily used under direct veterinary supervision.

Industry R&D is also underway to reduce the need for surgical procedures through management interventions such as polled genetics and chemical sterilisation.

- ➔ Visit FutureBeef's pain relief webpage – futurebeef.com.au/resources/pain-relief – for more information on the difference between anaesthetic and analgesic drugs, and to see a chart which compares commonly used pain relief products including Tri-Solfen®, Buccalgesic® and Metacam®.

SEASONAL ACTION PLAN

- ⚠ Conduct bull soundness testing in March.
- ⚠ Join for three months in late April.
- ⚠ Conduct branding and female vaccinations in March/April.
- ⚠ If the season is drier than expected, wean earlier and cull cows for age and temperament and lighter body condition score.

TOOLBOX

- ➔ Read *A guide to best practice husbandry in beef cattle: Branding, castrating and dehorning – 2nd edition*: mla.com.au/cattle-castration
- ➔ Read the *Australian Animal Welfare Standards and Guidelines for Cattle*: futurebeef.com.au/resources/pain-relief

Long-term genetic focus helps weather seasons

By staying the course and sticking firmly to their long-term genetic goals, Queensland commercial and seedstock producers Tom and Marie Copley's low-maintenance Brahman herd continues to thrive despite tough seasonal conditions.

Drafting stock early according to stringent performance and fertility standards has kept the Copleys in a good position to make prudent decisions as the conditions unfold around them.

"We're working on the assumption that it will remain dry, so even if it ends up raining, our decisions will pay off regardless," Marie said.

A measured approach

Speaking to Tom and Marie, it's clear that this well-established couple are on the same page.

"We take a team approach and believe in staying the course. We don't panic or make decisions reactively based on short-term weather forecasts," Marie said.

Despite a good autumn top-up in March 2023, it wasn't enough to make up for the extremely limited rain over the summer. Further low rainfall and frost over winter, tempered by only a limited stormy break in spring, made for sparse pastures.

"We had a cold winter and heavy impact frost, so the remaining pasture was

"We make these decisions fairly early. We sell the non-performers – we can then work out our stocking rate and grass budget more efficiently."

of poor quality. A spring storm gave us more than 100mm which at least changed things up to actually initiating some early growth," Tom said.

Targeted supplementation

In order to utilise the poor-quality frosted pastures, the Copleys used dry lick over the winter of 2023.

"We also supplemented with protein meals, palm kernel extract and some molasses and urea for targeted groups," Tom said.

They paid special attention to the early calvers who were under the most nutritional stress.

"There was virtually no grass growth over winter, so it was especially important that we targeted those animals which needed it most. We drafted the early calvers into their own groups at pregnancy testing – this means we can target our supplementation more effectively," Tom said.

Segregating the herd according to calving levels and identifying non-performers is a strategy which allows the Copleys to act quickly once conditions start to get tough.

"We make these decisions fairly early. We sell the non-performers – we can then work out our stocking rate and grass budget more efficiently," Tom said.

Responsive weaning strategy

The Copleys commenced weaning early in December despite not knowing if they would receive much-needed rain in early 2024.

The low-maintenance, tropically adapted herd doesn't require fly or tick management. Image: Marie Copley.



SNAPSHOT

TOM AND MARIE COPLEY, 'Salty' –
Anduramba, Queensland

AREA
4,000ha

ENTERPRISE
1,000 Brahman breeders

PASTURES
Forest grazing

SOILS
Granite soils

RAINFALL
640mm

This cost-effective approach meant they could direct limited resources to where they would have the most impact.

"Once they're not lactating, cows can be pretty self-reliant and we can focus our resources on the weaners," Tom said.

Deciding when to wean the more mature cows usually depends on the seasonal outlook.

"Our plan is for the herd to calve early so we have more options available to us," Marie said.

The long game

Tom and Marie have a pragmatic approach when it comes to uncertainty around future weather conditions.

"Future proofing denies the future and builds a little wall around yourself, but embracing the future involves creating an efficient herd which can thrive – come what may," Marie said.

They view the current tough conditions as a litmus test for their genetic decisions.

"Dry times can act as an opportunity – it sorts out which females are capable of reproducing despite the far from ideal conditions. We'll get a certain drop-out rate and won't keep the dry ones," Marie said.

Cows who don't wean a calf or reconceive are sold and the Copleys veer away from providing heavy hay or intensive feeding.

"It's a targeted approach where we are aiming for a herd which requires minimal assistance," Marie said.

"It can take up to three years before female calves become part of the breeding herd, so we don't make decisions reactively based on a good or bad season."

Tough love

The Copleys don't compromise when it comes to their fertility expectations, which are closely aligned to the industry's emission reduction goals.

"Cows need to produce and wean a calf for us each year on time, without assistance and minimal inputs to justify their emissions," Marie said.

"Going forward, we'll have to account for their emissions, so they've got to be productive, regardless of the season."

Bull buying

When preparing for the upcoming bull buying season, the Copleys look for fertility indicators such as days to calving. They select bulls from productive cow families who have produced a calf every year, regardless of the quality of season.

"We focus on genetic selections within the 50th to 60th percentile for growth, as moderately framed cows require less feed to maintain good condition compared to larger stock," Marie said.

"We are wary of the consequences of selecting for high growth. When we look at the cattle who perform year after year – they're usually moderately sized. Their requirements for growth and maintenance are not huge."

This approach has paid off with their robust herd able to thrive despite the challenging season.

"They're not high-maintenance females – they can provide for their calves and reconceive without special conditions. These are the efficient cows we're focused on producing," Marie said.

Matching quality bulls with a productive cow herd gives their investment the best chance of performing to its potential.

"One productive bull with all its good traits is not going to solve the problem of an unproductive cow herd. It's something you need to work on over time," Tom said. ■



Tom and Marie Copley copley.pastoral@bigpond.com Sarah Day sday@mla.com.au

SEASONAL ACTION PLAN

- ! The Copleys make early management decisions depending on pasture availability, the weather outlook and condition of their herd.
- ! The most effective management tool is to wean and then support the weaners through a suitable feeding regime, being mindful of rumen development and growth.
- ! Early drafting enables responsive decision making if the expected summer rain break doesn't eventuate and expendable stock need to be sold.
- ! Maintain a long-term approach going into bull buying season and select for genetic traits that maximise fertility and adaptability.

LESSONS LEARNT

- ✓ Keep perspective about the seasons – you're bound to have a couple of goodies, a few mediums and a handful of shockers.
- ✓ Regardless of seasonal conditions, stay the course and focus on your long-term genetic goals.
- ✓ Aim for a low-maintenance, fertile, adaptable herd which will perform even in tough conditions.
- ✓ Build a solid team of bulls rather than focusing on individuals.
- ✓ Buy bulls with traits relevant to your production system – you may find that the right bulls are reasonably priced and still within the top 10% of the breed indices that best fit your system.
- ✓ Your seedstock supplier can assist with your breeding objectives and long-term goals through consulting with you about estimated breeding values when making bull purchasing decisions.

TOOLBOX

- ▶ MLA's genetics hub: genetics.mla.com.au
- ▶ BREEDPLAN: breedplan.une.edu.au
- ▶ Scan this QR code to read *A BREEDPLAN guide to interpreting EBVs*.
- ▶ Scan this QR code to hear more about the Copleys' genetic approach.

New 'one-stop-shop' for livestock transport info

MLA will launch a new Transport hub this month to increase awareness and understanding of the industry's important role in best practice livestock transport.

Livestock transporter Athol Carter – who was a collaborating partner in the hub's development – said the new central resource will support everyone in the supply chain to better understand their responsibilities and learn about the practical measures they can take to meet industry and community expectations.

Athol has worn many hats in the livestock transport industry since he first got behind the wheel as a driver 25 years ago.

Today, he's Regional Manager for Frasers Livestock Transport in Central Queensland, as well as Vice Chair of TruckSafe and Vice President of the Australian Livestock and Rural Transporters Association.

He said continual change is a hallmark of Australia's livestock transport

industry and it's critical for producers to stay up-to-date with the latest industry trends and requirements.

"In recent years, we've seen some big shifts. Whether it's the increased focus on consumer expectations with people wanting certainty about where their meat is coming from and how it's been treated, or the rise in natural disasters that are disrupting our road networks more often and for longer periods," he said.

While the industry is already handling these changes well, Athol sees a real opportunity to bridge knowledge gaps by centralising the highest quality information and advice in one place.

"Many of the challenges in the transport industry have to be addressed



Transport hub collaborating partner, Athol Carter.

collaboratively across the supply chain. The Transport hub is going to be especially valuable in helping producers understand how they can work with transporters and the rest of the supply chain to achieve best practice," he said.

The hub includes new and existing resources to help producers identify best practice in dispatching and receiving stock, including the latest industry trends, hands-on practical advice and scientific research.

On the road together

With more than six decades' experience in livestock transport, Ross Fraser is an industry veteran. Together with his brother and nephew, he's a Director of Frasers Livestock Transport, which was started by his parents in 1944 and is now the largest privately owned livestock transport operator in Australia.

Throughout his career, Ross has seen incredible changes across the industry, citing the ability to transport livestock over much longer distances in much shorter times as the most significant.

As the distances have increased, so too has the focus on the wellbeing of both livestock and drivers.

"As an industry, we've always paid attention to the welfare of the animals, but that's been taken to a new level over the past 20 or 30 years," Ross said.

"It's improved not just through advances in technology and equipment, but also by helping producers understand the importance of good preparation for livestock transport.

"It's important to understand that good livestock transport doesn't start and end with the driver – everyone in the chain has a role to play in ensuring best practice."

Preparation is key

One of the features of the new Transport hub is guidance on preparing animals for transport.

"Producers should make sure their animals are not just market-ready, but that they are fit-to-load," Ross said.

"Plan ahead so you aren't

running animals straight from the paddock into the yard as the truck arrives – that isn't good practice for the animals, the transporter or the receiver."

If livestock are travelling long distances, it's critical they're properly prepared in advance of loading.

"This ensures the animals are 'fit and strong' for the trip and can manage the intended journey well. It also improves animal welfare, minimises environmental risks for the transporters and significantly improves food safety at processing."

He also encouraged producers to recognise drivers' experience when it comes to determining key factors, such as appropriate loading densities.

"Loading density is critical to ensuring animals reach their destination in proper condition – it has to be spot on to ensure not only the animals' welfare but the safety and stability of the vehicle," Ross said.

"There are so many variables that affect that decision – such as animal weight and condition – and this is one of the key areas where driver experience and knowledge really come to the fore." ■



The wellbeing of drivers and livestock is paramount for Frasers Livestock Transport.



Dubbo sheep producer and stockhand, Emma Nixon, updates a consignment using the eNVD app.

How to use the eNVD app offline

If you're loading livestock in a location with patchy or non-existent service, you can still use the app to complete your consignment by following a few simple steps. Please note, you'll need an internet connection to initially download the eNVD app, if you haven't already done so.

- 1 Connect to the internet and sign-in to your myMLA account to create an eNVD (on either the app or the web-based platform). You can start a new consignment up to four weeks prior to moving your stock.
- 2 If you create the eNVD using the web-based platform, make sure your phone is also connected to the internet, or in phone service, and the consignment will automatically upload to the app.

When you're ready to dispatch your livestock, you won't need an internet connection to update the consignment details using the eNVD app.

- 3 Complete your consignment forms offline and then transfer them to your transporter/receiver's mobile device using the QR code.

To ensure you can transfer the information, make sure your transporter has the eNVD app installed, so their device can read the QR code and receive the transfer offline. This is essential as the QR code can only be read by the eNVD app – generic QR code readers will not work.

- 4 Once you are back in service, the app will automatically update the consignment on the system. Ideally, this should occur before the consignment is due to reach its destination.

Easier stock movement with eNVD updates

On 1 March, Integrity Systems Company (ISC) launched a new version of the electronic National Vendor Declaration (eNVD) mobile Livestock Consignments app, featuring a range of updates to improve the ease and efficiency of digital consignments.

The eNVD web-based system was also enhanced to bring it in line with the app, so users can now enjoy the same level of functionality across both platforms.

These changes expand access and functionality for users across the red meat supply chain and include:

Expanded access to the web-based system for users beyond producers.

This includes transporters, agents, saleyards, police and authorised officers, state departments, on-plant vets and other buyers and receivers. Previously these users could only gain access through the eNVD mobile app.

Adding attachments to consignments.

Producers can now add a range of declarations as they are completing a consignment, with these forms visible to anyone with permission to view the consignment on either eNVD platform.

Leaving comments on consignments.

Producers, receivers, transporters and other authenticated viewers can now add comments to a consignment, and these will be visible to anyone with permission to view the consignment on either eNVD platform.

Daily alerts. The eNVD system now sends daily emails to consignment receivers, alerting them to any consignments arriving that day and any consigned to them during the previous 24 hours.

Splitting a single consignment between multiple buyers. The new system allows a saleyard or agent to split a consignment and allocate stock to individual buyers.

Expanded access for authenticated viewers.

Special access now enables transporters to edit the transport section by adding other drivers. ■



Upskilling the next generation

Riverina sheep producer Joe Corrigan attended a recent one-day BredWell FedWell workshop with his daughter Grace, an agricultural science student at Charles Sturt University.

They described the workshop as a useful refresher for even the most experienced producer while also helping those starting out to better understand the science behind on-farm decisions.

“A lot of what was covered was just revision for me, but it was also good to get that reassurance you’re still doing all the right things,” Joe said.

“However, Grace has just finished her second year of ag science and she loves the livestock side of things, so I wanted her to get a better understanding of why I do what I do on farm.”

Align breeding plans to profit drivers

A key element of the BredWell FedWell workshop is to help producers develop and customise a breeding plan aligned to their profit drivers.

For Joe, that’s been about trying to create a balance in his flock to respond to shifting market conditions.

“In the past few years, sheepmeat prices have gone through the roof and meat value became virtually half or more of our sheep enterprise,” he said. “I used to buy rams based on wool genetics, but the last few years I’ve changed the studs and started relying on Australian Sheep Breeding Values (ASBVs) to select rams for their higher meat values as well as their wool values.”

This approach has allowed the business to adjust now sheepmeat prices have fallen back, and wool is once again the main profit driver for their sheep enterprise.

“Genetics are a long game, so you need a balanced plan and then just try and stick to it. Understanding your profit drivers is so important – otherwise you’re just chasing your tail trying to catch up.”

Getting ram selection right

Using ASBVs to select rams has also been critical to identify robust genetics which can handle the ever-changing seasons and climate.

“Rams will make the biggest difference to your flock and ASBVs are critical to finding the right sires to deliver well-rounded animals which not only

produce the right staple length, the right micron, but also the right eye muscle depth and musculature to be a good all-round productive animal,” he said.

In recent years, Grace has worked closely with Joe’s stock agent to make ram selections based on ASBVs, so she was interested to learn more about this.

“Normally, I’d just look at the ASBVs and wouldn’t think about how they might look on the ram,” Grace said.

“Being able to take a sheet of ASBVs and then visually assess them against the physical characteristics of those rams was really interesting.”

Understanding the feed curve

BredWell FedWell’s focus on maximising the value of the feed curve gave Grace a better understanding of many of her father’s on-farm decisions.

“Dad and I graphed out our feed supply and demand together, which let us see where we had excess feed and where we needed supplement feeding,” Grace said.

“This year, I want to have a conversation about where we’re going to move the weaners because in previous years, we’ve had trouble after they’ve been weaned. I can now see how feed requirements might be playing a role, so I want to talk to Dad about how we’re going to manage it and whether we should look at containment feeding or putting them out on pasture.”

Putting on-farm decisions in context

Joe said while Grace had seen him implement many of the things discussed at the workshop, both agreed having a professional explain the reasons behind these day-to-day decisions provided a lot of valuable insight for the young producer.

“What I’m seeing on the farm now makes a lot more sense, so when I’m having conversations with Dad and helping manage the flock, I understand a lot more about what is driving those decisions,” Grace said. ■



SNAPSHOT

JOE CORRIGAN,
‘Fairview’ –
Burrumbuttock, NSW



AREA
1,200ha

ENTERPRISE
Self-replacing Merino flock
(1,400 ewes joined to Merino sires,
300 joined to terminal sires)

PASTURES
Native pastures, improved
perennial pastures

SOILS
Clay loam

RAINFALL
525mm

Image: Grace Corrigan (Fairview Photos)



Laying the foundations for best breeding

The revamped BredWell FedWell program has helped NSW cattle producer Hannah Russell to quickly implement small but significant on-farm changes to improve productivity and profitability.

The Russells have been farming in New England for five decades, establishing themselves as successful poultry producers before starting their cattle business 30 years ago. Today, ‘Grassbrook’ remains a family business, with Hannah and her siblings working alongside their father Bruce.

Enterprise objectives

On the commercial side of their business, the Russells join 2,000 Santa Gertrudis females to Charolais bulls, aiming to turn-off around 900–1,000 steers and 900 heifers annually. They selected Charolais genes to help produce fast-growing cattle and create a steady cash flow.

In their Santa Gertrudis seedstock enterprise, they join 500 females, primarily through artificial insemination (AI).

“Our ultimate goal is to breed the optimal Santa Gertrudis cow, one which can deliver three calves every couple of years and is able to feed them from day one,” Hannah said.

BredWell FedWell

With a clear vision of their breeding objectives in mind, Hannah and her brothers Josh and Hamish were keen to attend the BredWell FedWell workshop.

“We really wanted reassurance we were on the right path with our current approach, but we were also keen to learn more about genetics and what we could be doing to support our AI program and give it the best chance of success,” Hannah said.

Following the workshop, they identified changes they could make straight away.

Effective feeding

The workshop helped the Russells develop a feeding plan which reflected the needs of their cattle to help maximise the value of feed.

“We could see where we might have been overfeeding or feeding at the wrong time, which resulted in having to pull a lot of big calves out of small heifers,” Hannah said.

They have also set their sights on adjusting their weaning strategy.

“We now understand our cows need to be on pasture to regain body condition

after calving, so we’ll be removing our weaners and feeding them our wheat rough chop or corn silage,” she said.

“The workshop also prompted us to run feed tests and those results helped us see where we need to swap around our paddock and feed allocations to get the best out of the cattle.”

Individual data

The workshop emphasised the value of maintaining individual records, rather than running the cows as a mob.

“We recently bought in 500 heifers that we’ve kept separate so we can monitor and manage them as individuals,” Hannah said.

“By pregnancy scanning we identified a number of heifers that hadn’t gone in calf so we could then decide whether to re-join them or cull them. That’s going to help us increase the reproductive efficiency of our herd over the long term, but it also means we aren’t wasting available feed on animals that aren’t going to produce a calf in the short term.

“It’s still early days, but we’re already seeing positive results. Last year, we had a 73% pregnancy rate, running our cows as a mob. This year, running the new group individually, we’ve seen that jump to 85%, based on the 300 head we’ve tested so far.”

Body condition scoring

The workshop drilled in the importance of body condition scoring.

“By individually scoring each cow, we can easily see the cows which aren’t going to be profitable and pull them out,” she said. “Maybe they’re the ones not fattening up so we’re just wasting money feeding them, or maybe they’re not giving us calves, or their calves aren’t lasting.”

Hannah said it’s an important aspect to consider when facing tougher conditions, because it’s an effective way to make fast, informed decisions if they need to reduce their mob.

Getting started

While the family had already been toying with many of the ideas discussed at



NSW producer Hannah Russell has implemented changes on farm as a result of attending a BredWell FedWell workshop.

SNAPSHOT

HANNAH RUSSELL,
‘Grassbrook’ –
Manilla, NSW



AREA
6,000ha

ENTERPRISE
3,500 head (2,500 Santa Gertrudis
breeders joined annually)

PASTURES
Sub-tropical and natural grass pastures,
mixed perennials and cereal crops

SOILS
Red and brown duplex, black,
brown and grey cracking clays

RAINFALL
820mm

GET INVOLVED

BredWell FedWell workshops provide a practical, one-day introduction to good breeding and feeding over the livestock production cycle, with a focus on productivity and profitability.

Scan the QR code to register for a workshop or for more information about hosting a workshop or delivering training:
[mmla.com.au/bwfw](http://mla.com.au/bwfw)



BredWell FedWell, they had struggled to implement them effectively.

“The good thing about the workshop is you don’t have to do everything straight away,” Hannah said.

“Just start with what works for your operation and then progressively build on that over time.” ■

Emma and Angus King.

COVER STORY

Ag-tech delivers data nuggets



Taking over the reins of a new property presents a steep learning curve about the land and environment – and this is where ag-tech can help.

When Emma King arrived at 'Echo Hills' in 2021, she relied on AgriWebb's mapping tool to help navigate the property. Since then, she's been an enthusiastic adopter of ag-tech in the south-east Queensland cattle enterprise she manages with her husband Angus.

The couple work with Peter and Nikki Thompson, who have owned Echo Hills for more than 50 years. The Thompsons purchased the neighbouring property, 'Nugget Hills', 13 years ago, bringing their holdings to around 8,000ha.

Diverse business

"We run about 300 Angus/Santa-cross breeders, as well as a small grassfed trading operation with 250 head," Emma said.

"Our goal is to build a really sustainable, efficient breeding herd that's providing grassfed beef to a local market."

Last year, the business turned off rising two-year-old steers at 650kg (live weight) off grass.

The business also incorporates agistment with capacity for 2,000–2,500 head, predominantly servicing local producers who can rapidly lift or drop their numbers in response to Echo Hills' rotational grazing methods and seasonal changes.

Besides allowing flexibility in Echo Hills' stock numbers, the agistment strategy also aligns to the Thompsons' business, Soil2Soul, which is focused on promoting increased soil health and stability.

This means working with the land, not against it – a goal Emma said ag-tech can help facilitate.

"I think new technologies are enabling us to use traditional methods in a

new way by providing better data and more accurate forecasts, with a centralised system which makes it easier to share information," she said.

All data in one place

Echo Hills uses AgriWebb's all-in-one livestock management system to centralise its data.

"It brings together all our farm data into one place, so I can see our grazing management, our breeding data, our Livestock Production Assurance (LPA) requirements, making our farm audits much simpler."

She also appreciates how AgriWebb can link to the National Livestock Identification System (NLIS), which saves paperwork.

"It tracks cattle movements on the property and, when we truck them off, it links to my National Vendor Declaration (NVD) so I can see where they went and how much we made from them."

The AgriWebb mobile app has a GPS locator which lets contract and seasonal workers find their way around the property without getting lost, making their jobs safer and more efficient.

Remote monitoring of water

Another vital ag-tech in operation at Echo Hills is Farmbot, which is used to record rainfall and remotely monitor tank and trough levels. They plan to also use it to operate and monitor pumps in the future.

"Across the two properties we might get a 20mm variation in rainfall between gauges, but Farmbot's sensors have been really reliable, so we trust the data," Emma said.

SNAPSHOT



EMMA AND ANGUS KING – MANAGERS, 'Echo Hills' and 'Nugget Hills' (owned by Nikki and Peter Thompson) – Wallumbilla, Queensland



AREA
8,000ha

ENTERPRISE
Breeding (300 Angus-cross breeders, joined to Ultra Black and Angus bulls), small trading enterprise and up to 2,000 agistment cattle, season permitting

PASTURES
Buffel, Rhodes, natives and winter medics, planted subtropical mix and fodder crops, mix of annual and perennials, leucaena

SOILS
Variable, ranging from rich black soil to red soil

RAINFALL
600–660mm

"We still check tank levels regularly, but we can remotely access Farmbot data online every day and enter it into AgriWebb."

Improved forecasting

Echo Hills uses Cibo Labs' satellite imagery of fractional ground cover to inform their grazing plans.

"It lets us see from our computer how much feed is left in a paddock. We can then calculate how many weeks' feed we have left by looking at our rainfall, the predicted growth rate for the time of year, and the size of the mob in the paddock," she said.

"Using this data and what we're seeing on the ground, we can plan our cattle movements to avoid running out of feed or taking the feed too low.

"Another advantage is that it provides satellite imagery going back 30 years, so we can see the grazing history of the place and identify changes over time. That helps us ground-truth against the whole district and see if we are pushing things too hard in comparison, or whether we should be pushing a bit harder."

Emma said the technology can sometimes struggle to distinguish colours, particularly where tree cover has distorted some feed estimates. Despite these teething problems, Emma is optimistic about ag-tech's future potential.

"While the integration isn't quite there yet, the fact our vendors are open to working with us to solve these problems is a real positive," she said.

"The tech is only as good as what we put into it so the more ground-truthing producers provide, the better the algorithm will be and the more value we'll get out of it."

In-paddock weighing

Another useful innovation is an Optiweigh mobile unit (which won the 2021 MLA Producer Innovation Award), used to remotely track livestock performance.

"It's so easy, you just put it in the paddock, set up a session, place the lick inside and the cattle come through. With our agistment herds, we could run 600 head in a mob and Optiweigh will identify the 120 that are ready to go," Emma said. "It means we're handling the animals less which isn't just more efficient, it's also safer for us and less stressful for the animals." ■

LESSONS LEARNT

- ✓ Don't be afraid to trial new technologies, but be patient during the implementation phase.
- ✓ Know what you want from a product before you start researching. Make sure the technology you choose is aligned to your business goals.
- ✓ Build a good relationship with your vendors and ask for help when you need it. Implementing new technology requires a lot of input and communication.



The Kings manage a beef breeding business, with trading and agistment components.



The Kings use an Optiweigh mobile unit to remotely track livestock performance.

"I think new technologies are enabling us to use traditional methods in a new way by providing better data and more accurate forecasts, with a centralised system that makes it easier to share information."

SEASONAL ACTION PLAN

- 📌 Use water monitoring technology (the Kings rely on Farmbot) to remotely monitor flow rates and tank and trough levels on a daily basis.
- 📌 Tools such as the Australian Feedbase Monitor, AgriWebb and Farmbot are useful tools to calculate feed availability and schedule stock movement in line with your grazing plan.
- 📌 Prepare for sale by using remote weighing technology – such as Optiweigh – to assess steers for sale with minimal handling.

TOOLBOX

- ➔ Australian Feedbase Monitor: mla.com.au/afm
- ➔ AgriWebb: agriwebb.com
- ➔ Farmbot: farmbot.com.au
- ➔ Cibo Labs: cibolabs.com.au
- ➔ Optiweigh: optiweigh.com.au
- ➔ Search for other ag-tech at agtechfinder.com
- ➔ Livestock Production Assurance, National Livestock Identification System and National Vendor Declarations: integritysystems.com.au

Maternal efficiency at heart of sustainability quest

MLA-supported Nuffield Scholarship recipient, Jack Courts, has a sustainable goal in his sights.

As one of 25 recipients of the 2024 Nuffield Scholarship, he's keen to make the most of the award's global networking and research opportunities while he investigates how improved maternal efficiency in ruminant animals can reduce waste.

Jack owns Glenalbyn Santa Gertrudis Stud and is farm manager at Mumblebone Merino Stud, Wellington, NSW.

His research goals are closely aligned with the red meat and livestock industry's 2030 climate targets (CN30) – and he hopes his research will provide practical on-farm insights to drive efficiency and business resilience.

"I'm hoping to contribute towards resilience by finding ways to breed highly productive animals which will have faster growing offspring and more of them," Jack said.

"Maternal efficiency is the ratio between the kilograms of lambs or cattle weaned to the kilograms of ewe or cow.

"I want to be able to increase profit, not just production, because we have to remain profitable in this volatile market with high commodity prices and changeable climatic outlooks."

Feed efficiency

In dry times when livestock prices are down but feed prices remain stable, Jack said it's important to make the most of the feed available.

"To optimise feed efficiency and energy storage we select for fat estimated breeding values. Fat is six times more efficient at storing energy than muscle," Jack said.

Jack pays careful attention to meeting increased feed requirements of lactating ewes or those in their third trimester. He feeds out barley and lupins as well as fava beans, which are high in energy and protein.

"It's cost-effective as we're in a mixed area of production and can buy local. In 2018, we invested in 250t of on-farm storage

so we're able to buy commodities when they're cheap and store them for later."

Genetics fuel gains

Jack sees genetics as a key driver of efficiency, as a more feed-efficient animal produces less methane and carbon dioxide on high energy diets.

"There's a big variation in methane production in sheep," he said. "Without us changing a thing in our management – just changing which rams we buy – we can make genetic gains within a year."

Jack will also use his scholarship to investigate how adjusting systems on farm can improve efficiency, with a focus on changing the lambing system.

This will include:

- scanning ewes not only for wet/dry but also for twin and single-bearing sheep
- splitting ewes up into different mobs to match their nutrition requirements

- selecting smaller lambing paddocks with more shelter and sufficient water points so twin-bearing ewes don't need to travel as far.

Big picture goals

The annual Nuffield Scholarship aims to accelerate research into innovative global concepts, techniques or systems relevant to the Australian red meat industry.

Throughout 2024, Nuffield scholars will travel internationally to investigate topics spanning from drought resilience and climate change to technology, genetics and agricultural policy.

Jack is grateful for the \$35,000 bursary to fund his travel and research work. His Nuffield experience kicks off with a conference in Brazil where he'll team up with fellow scholars to visit and learn from a diverse range of successful agricultural businesses and research institutions across the globe. ■



"I want to be able to increase profit, not just production, because we have to remain profitable in this volatile market with high commodity prices and changeable climatic outlooks."



Shade is increasing in the Australian feedlot industry, to now cover 68% of cattle.

Industry drives shade and shelter initiative

More than 200,000 additional cattle have gone under shade and shelter in Australian feedlots over the past four years – a testament to the industry's willingness to embrace the benefits of shade.

The Australian Lot Feeders' Association (ALFA) launched their shade initiative in 2020. The voluntary adoption of shade has grown to cover 68% of cattle in feedlots, despite the impact of COVID-19 on the cost of building materials and installation, and the incremental increase in feedlot capacity since the initiative began.

MLA supports Australian lot feeders by investing in research and development to understand and quantify the benefits of shade and shelter systems in a wide range of environmental conditions.

MLA's Feedlot and Sustainability Project Manager, Dr Matt Van der Saag, said the projects centre on three main areas:

- providing industry stakeholders with best practice design and management when it comes to design and construction of different systems
- evaluating shade and shelter, including partial shelter, in a variety of commercial and geographical conditions
- quantifying environmental benefits potentially associated with covered housing – specifically odour and effluent.

"We're building a really nice suite of information which can provide lot feeders with the data they need to make decisions when it comes to choosing the right solution for them," Matt said.

"We're showing the benefits to productivity of animal welfare and productivity parameters with shade and shelter.

"Importantly, there is no one solution fits all, and each business needs solutions tailored to their objectives and climatic conditions."

Research insights

One of the projects – at Kylagh Feedlot in WA – tested the impact of shade on production and welfare indices. (Read more in the summer 2023 edition of *Feedback*, page 19.)

"Over the course of this trial, shaded cattle demonstrated a modest 0.13kg overall increase in average daily gain (ADG) across a 70-day feedlot period," said Matt.

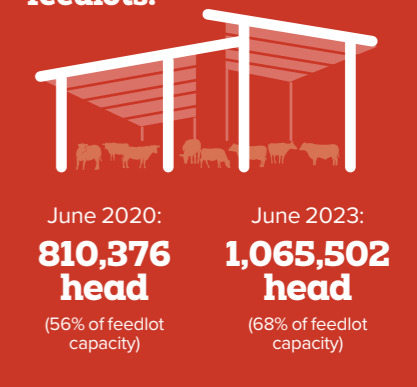
"Qualitative behavioural assessment was also used during the trial – this indicated shaded cattle displayed a more positive demeanour and were more settled and sociable than unshaded cattle."

There were also financial incentives to installing shade at Kylagh Feedlot.

"The increased ADG achieved with shade use in the summer months meant cattle were able to reach their target weights earlier.

"This reduced feeding costs and days on feed, resulting in fewer inputs per kilogram turned off to slaughter with

Cattle under shade and shelter in Australian feedlots:



an estimated return on investment period of between two and 10 years."

Another trial was at the University of New England's (UNE) 'Tullimba' research feedlot in NSW. It looked at the impacts of partially covering pens with waterproof shelter compared to shade and no shade.

Partial shelter coverage provided significant productivity benefits.

These included:

- 100g/head/day increase in carcase-adjusted ADG
- 4% increase in feed efficiency
- 7kg increase in hot standard carcase weight (HSCW) during summer
- 5kg increase in HSCW during winter.

Continued from previous page



The increase in carcase weight attributed to partial shelter was used to calculate payback time for installing the infrastructure. For the different scenarios modelled in this project, return on investment varied from 3.5 to 11 years.

“During heat events throughout the trial (heat load index ≥ 86), cattle with access to shelter or shade had lower mean panting scores than unshaded cattle,” Matt said.

Adrenal gland weight was also used as an objective measure of stress throughout this trial. Unshaded cattle had greater gland weight, which indicated greater overall stress levels.

Tools for lot feeders

Lot feeders looking to adopt or learn more about shade and shelter infrastructure can access a growing bank of resources from MLA and ALFA.

This includes MLA’s new best practice design and management manual for covered and partially covered housing systems for the Australian lot feeding industry.

“This manual is built upon the best available knowledge from around the world for covered housing and shade systems, along with knowledge gained from visits to a variety of covered housing systems operational in Australia,” Matt said.

The manual covers:

- design principles and considerations
- regulatory approvals
- bedding
- manure management
- animal health and welfare considerations
- costs. ■

TOOLBOX

Shade design and construction manual:
mla.com.au/feedlot-shade

Scan the QR code to read the *Feedlot covered housing systems – best practice design and management manual*

Scan the QR code to read the *Beef cattle feedlots: design and construction manual*



Cool cows bring many benefits

The concept of shade traditionally means protection from the sun – but as David and Katy Gillett have seen at their Jalna Feedlot in southern Victoria, the benefits and opportunities of investing in shade go far beyond a cool place to stand.

Since installing a waterproof shelter in 2017, the returns on investment to their business through economic and productivity increases have been evident.

The feedlot, located 30km north of Geelong, has a capacity of 10,000 head and operates in the domestic market space, feeding British-breed cattle predominantly for Coles.

The region’s variable climate was a key challenge the Gilletts wanted to overcome.

“If you look at our average temperatures over the past 12 months, last summer we averaged 23.7°C, with our hottest day reaching 34°C,” David said.

“In previous years, we’ve experienced temperatures reach 40°C. However, fortunately we don’t get day after day of these extremes.”

As well as summer temperatures, increased rainfall during winter meant cattle at Jalna Feedlot would be covered in mud.

“To combat both these seasonal issues we decided to invest in waterproof shelter with bedding underneath,” David said.

“This would mean our cattle could be moved inside to

either get them out of the heat or give them a chance to dry out and clean the dried mud off their bellies by rubbing against the bedding.

“For us, waterproof shelter was getting the best of both worlds. Our cattle had shade in the summer to keep themselves cool and they had a dry and clean place to keep themselves warm during our wet and cold winter months.”

Structure planning

“Our goal was to find a waterproof infrastructure which would provide dry shelter for our cattle and could be used to harvest water,” David said.

“After talking to shed builders, we landed on a design which we slightly tweaked to suit our facility and our summer months.”

The infrastructure designed by David is 224m long and 48m wide, with 8m eaves and a 21° pitch roof.

“In the top of that pitch there is a 1m x 0.5m high vent ridge, which is the whole secret to this shed working well,” David said.

“It creates air flow and lets the air circulate through the shed, without the necessity for fans or artificial ventilation.



Jalna Feedlot's waterproof shelter.

David Gillett points out the ridge vent which ensures the shelter works so well in summer.

“Even on a warm day, if it’s dead calm outside, you can walk under the shed and it’ll be 10–12°C cooler, but you’ll actually get a breeze because that vent ridge is creating air flow.”

“Even on a warm day, if it’s dead calm outside, you can walk under the shed and it’ll be 10–12°C cooler, but you’ll actually get a breeze because that vent ridge is creating air flow.”

Benefits

David said they’ve seen three key benefits since installing the shelter.

These are:

- increased average daily gain (ADG)
- ability to water harvest off the shelter roof
- ability to reuse pen bedding located under the shelter as fertiliser.

“We’ve been trialling having our cattle under shelter for their last 30 days on feed,” David said.

“During those last 30 days under shelter, our cattle are reaching a 0.2–0.3kg greater ADG than when they were in unshaded pens.”

Other benefits

While an increased ADG was enough for David to see a return on his investment, there were other benefits to implementing shelter which aided on-farm production and further reduced costs.

“The slanted waterproof roofing of the shelter design meant there was opportunity to harvest water from rainfall very easily by running gutters to water tanks,” David said.

“Given the size of our shelter, 25mm of rain results in us capturing approximately 225,000L of water.”

Over a year, this equates to around 4.5ML of what David describes as ‘free water’.

There was also a value-adding opportunity created from the straw used for bedding.

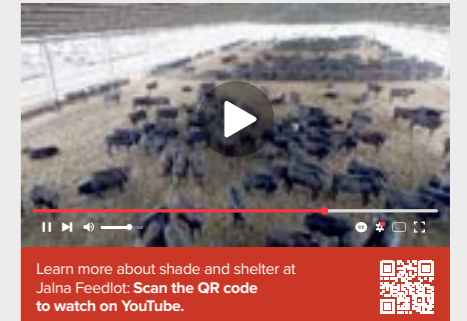
“Every couple of weeks we do a total cleanout of the shed – we use this as fertiliser on our cropping country,” David said.

“We get phenomenal results, particularly on canola where our yields have gone from an average of just under 2t/ha to just over 3.5t/ha.

“With the way fertiliser costs are heading, we’ve been able to cut our synthetic fertilisers by a third by using our natural fertilisers out of the feedlot and that’s a massive benefit to us.”

Using straw as bedding has also created an end use for the stubble from their cropping country, allowing them to move away from the practice of burning stubble.

“Environmentally, that’s a win-win for everyone if we can eliminate the necessity of having to burn stubbles.”



Learn more about shade and shelter at Jalna Feedlot: Scan the QR code to watch on YouTube.



Social licence

While shade-providing infrastructure is a big investment, David feels it’s a necessary one.

“If we want to continue to operate as we do in this industry, we’ve got to be prepared to invest in this sort of infrastructure,” he said.

“It’s important that we as an industry continue to be proactive when it comes to animal welfare, and shade and shelter are certainly helping us progress in that area.

“I definitely think shade is going to be a necessity for a social licence to keep operating going forward, but I also think the benefits to installing shade infrastructure provide a great return on investment.” ■

Animal welfare standards exported alongside cattle

Queensland cattle producer and MLA director Russell Lethbridge is a key advocate for expanding Australia's red meat market while at the same time ensuring good animal welfare practices are continued across the ocean.

Recently, one of Australia's live export markets – Vietnam – introduced animal welfare standards which are consistent with those already applying to imported Australian-bred cattle (read more about this on page 37). The Lethbridge family has run Werrington Cattle Company, a commercial beef cattle enterprise, for 124 years. Animal welfare has always played an important role in on-farm production.

Cattle from their Central and North Queensland stations, 'Rainmore' (near Alpha) and 'Werrington' (north of Hughenden) are sent through the live export market into Vietnamese and Indonesian feedlots.

"Because we export on a large scale, a lot of our on-farm practices centre around preparing our herd for live export and lot feeding," Russell said.

"This is done as a part of ensuring our animals are calm, content and in good condition even after they leave Australian shores."

Starting early

Husbandry procedures in the lead-up to transportation are pivotal to ensure the Lethbridges' cattle thrive once they leave the front gate.

"From vaccinating to mustering to drafting, everything must be done in a way which will continue to keep our herd's stress levels down and their weight up," Russell said.

He said completing husbandry practices well in advance of transportation was important to reduce stress to animals and people, and to provide cattle with sufficient time to adjust to new surroundings.

"Completing these procedures too close together can also cause extended high levels of stress for stock. This can increase the risk of them turning off feed or suffering from stress-related respiratory diseases – reducing your profit and jeopardising your reputation with importers."

Infrastructure

Russell said well-designed and well-functioning on-farm infrastructure

was also critical to maintain high animal welfare standards.

"When your infrastructure is in good condition, it's much easier to complete husbandry procedures such as vaccinating, tagging or loading in an efficient and effective manner," Russell said.

"It also means animals aren't confused or stressed, and staff aren't overwhelmed."

Weaning

Russell said weaning is a critical stage to prepare for livestock destined for live export.

"At weaning, the first thing we do is look at the temperament of our weaners and remove any animals which simply won't settle from the herd," he said.

"Temperament is a heritable trait, so we want to ensure we're selecting animals of a genetic makeup which is suited to lot feeding environments – we want cattle which are confident when feeding and moving through infrastructure, and will be calm around people.

"We immediately introduce our remaining weaners to yard feeding to get them comfortable sharing space, being around infrastructure and people, and accessing food via troughs," Russell said.

"It can feel like a reasonably intensive education process, but it's so worth it when the result is cattle which are calmer while going through the transportation process because they've seen it all before and know what to expect."

He said while improved animal welfare is an important benefit of pre-transport preparation, it has also increased the profitability of the business.

First-hand experience

Russell has visited his cattle in Vietnamese feedlots, and was pleased with what he saw.

"Vietnam has proved to be very sophisticated in how they operate with modern infrastructure which was clean and spacious for the animals," Russell said.

"It was clear my stock were being very well cared for, as they were all in prime weight and body condition and behaved calmly.



Russell Lethbridge at his Central Queensland property 'Rainmore'.

SNAPSHOT

RUSSELL LETHBRIDGE,
Werrington Cattle Co,
'Werrington', 'Amber' and
'Rainmore' – North and
Central Queensland



AREA
145,000ha

ENTERPRISE
13,000 Brahmans

PASTURES
Granite loam, Brigalow scrub soils

SOILS
Variable, ranging from rich
black soil to red soil

RAINFALL
700mm (north), 550mm (central)

"I also viewed some of Vietnam's slaughter facilities which were also very modern and compliant with Australia's animal welfare standards.

"From an Australian exporter standpoint, these improved standards in Vietnam are great for the Aussie red meat industry not only in terms of profitability but in terms of Australian producers' reputation and not letting the work we put into ensuring the welfare of these animals go to waste." ■

TOOLBOX

- MLA's export trade dashboard and monthly report: mla.com.au/export-trade-dashboard and mla.com.au/livelink
- MLA's market data and insights mla.com.au/overseas-markets
- Aussie Meat Trade Hub: aussiemeattrahub.com.au

Supply chain delivering value

New standard of animal welfare

Vietnam has introduced animal welfare standards consistent with those applying to imported Australian-bred cattle, with support from MLA and LiveCorp's jointly funded Livestock Export Program (LEP).

Australian regulations require livestock exporters to ensure animal welfare for exported livestock meets (and surpasses) the guidelines set by the World Organisation for Animal Health right through to the point of slaughter – the only country exporting live animals to have this in place.

As facilities adopt Vietnam's new standards, local cattle will benefit from improved handling and slaughter practices. It will also help to put Australian exporters on a level playing field with competitors such as Brazil and reduce the risk of non-compliance with Australia's Exporter Supply Chain Assurance System (ESCAS).

The standards were developed over three years by Vietnam's Ministry of Agriculture and Rural Development through consultation with national and provincial government officials, as well as industry. They are voluntary for now, which is common practice in Vietnam prior to consideration of making requirements mandatory.

LiveCorp CEO Wayne Collier welcomed the announcement of the standards. He said it's fantastic to see Vietnam continuing to embrace animal welfare.

"Exporters have been in-market for years, building relationships, investing in training and working with supply chain partners to help them continually improve their practices," Wayne said.

"This has provided an opportunity to start conversations which otherwise may not have happened for some time, including actively raising awareness of animal welfare and sharing the knowledge gained from decades of supporting beef operations across South-East Asia."

Background

Strong relationships with exporters and the LEP's in-market team led to requests from the Vietnamese Government for Australian assistance. The LEP team based in the region provides professional development and training for workers in feedlots and abattoirs in market, along with activities to support market access and regulatory compliance.

The development of the standards was also funded in part through a \$135,000 grant from the Australian Government.

MLA's Market Development Manager – Asia Pacific, Spencer Whitaker, said Vietnam has become a significant partner for the live export industry.

"Almost two million head of cattle have been imported by Vietnam in the past decade, and it is now Australia's second largest market for beef cattle," he said.

"People have become more aware of animal welfare, and the new standards are the latest step in the development of Vietnam's cattle industry.

"It has been a pleasure to work alongside the Vietnamese Government to share the body of knowledge gained by the Australian industry." ■

➤ See previous page for a producer's perspective on the new standards.



"Almost two million head of cattle have been imported by Vietnam in the past decade, and it is now Australia's second largest market for beef cattle."

Hub creates hive of innovation

MLA has partnered with Queensland beef processor and exporter, Kilcoy Global Foods, to develop Australia's first red meat innovation and learning hub.

Located on the Sunshine Coast, The Hub delivers more efficient domestic meat production and product development, including ready-to-eat meals, to keep pace with changing domestic and international consumer demands.

It also showcases the Queensland beef supply chain, to take chefs, retailers and international customers on an immersive journey from paddock to plate.

Over the past three years, The Hub has hosted more than 100 industry, commercial and community events.

VR innovation

Historically, on-site visits to locations such as properties, feedlots, abattoirs, packaging plants and restaurants have been used to showcase new products and encourage customers to purchase.

Now, through the innovation hub, this is achieved through virtual reality (VR).

The Hub provides a one-stop virtual tour of the Queensland red meat production

chain, to give customers insights into the paddock-to-plate journey.

In addition to VR, The Hub has showcased Australian red meat and educated consumers on its production through events such as:

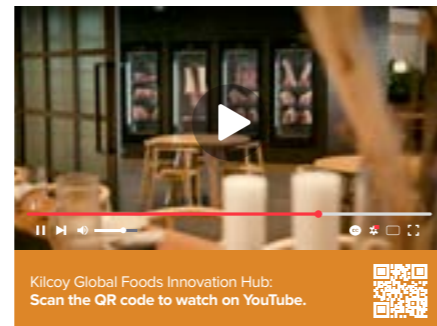
- Australian Meat Processing Corporation's Academy of Meat Engineers' new product development events and workshops
- Red Meat Co-Innovation conferences
- filming and product photography
- butcher demonstrations
- visits from national and international customers
- collaborations with TAFE, colleges and universities
- sensory testing
- involvement in a broad range of research and development projects
- food and safe handling protocols including shelf-life testing.

The Hub is an integral part of Kilcoy Global Foods' work to boost consumption and

demand for Australian red meat across the globe, through production and marketing, as well as consumer education. ■



▲ The Hub hosted a delegation of Aussie Beef Mates last year – the visit from international chefs and food influencers included demonstrations by MLA's Product and Business Development Manager/Corporate Chef, Sam Burke (above), and Kelly Payne, Retail Training Facilitator (below).



Kilcoy Global Foods Innovation Hub: Scan the QR code to watch on YouTube.

kilcoyglobalfoods.com info@kilcoyglobalfoods.com Garry McAlister gmcalister@mla.com.au

Two new market indicators

Selling sheep and cattle online has grown in popularity in recent years.

In response to this expanding online marketplace, MLA recently launched the first publicly available online indicators.

They are the:

- Online Young Cattle Indicator (OYCI)
- Online Lamb Indicator (OLI).

The National Livestock Reporting Service reports on more than 50 physical saleyard markets producing

16 price indicators that are reported on a daily, weekly and fortnightly basis.

These indicators, along with accompanying market reports, drive more than 70% of MLA website traffic and cover about one-quarter of all livestock transactions.

The OYCI and OLI follow the same structure and model of current indicators published on the MLA website, providing a useable interface

for producers and other stakeholders.

They will capture cattle and lamb sales on online platforms that match predefined specifications. ■



mla.com.au/prices-markets Stephen Bignell sbignell@mla.com.au

Automated beef cutting leaps ahead

The world's first fully-automated beef boning program is a step closer, with a major pre-production demonstration of a striploin cutting module about to kick off at JBS Australia's Brooklyn, Victoria, facility as part of the LEAP4Beef program.

LEAP4Beef follows the success of an earlier project to automate lamb cutting and seeks to apply the learnings from this work to the beef processing sector. Once fully developed and integrated, the system will unlock large-scale, high-throughput and sophisticated automation to maximise cutting accuracy and yield.

Australian Meat Processor Corporation (AMPC) CEO, Chris Taylor, said the prototype module at JBS Australia would focus on striploin-rack-chine removal.

It will use a simple sensing approach to refine the mechanical elements of the module before an advanced sensing

system is implemented to attain the full benefit of accurate automated cutting.

"This technology has the aim of improving workplace health and safety, increasing processing efficiency and enhancing profitability," Chris said.

"The prototype is an important step in making this technology accessible for the industry.

"We are also planning an industry demonstration event where we will seek feedback and assess interest from processors who might like to participate in hosting future stages of the project."

Industry collaboration

The program is a collaboration between the AMPC, MLA and Scott Automation and Robotic's in partnership with JBS Australia.

It follows the development of several pre-prototypes by Scott as part of a recent MLA Donor Company project in partnership with Teys Australia.

This project demonstrated an impressive \$29/head benefit from LEAP4Beef, delivering up to \$10 million/year return for a high-throughput beef processor, alongside significant labour savings and workplace health and safety benefits.

Prior projects and industry consultation have shown a modular deboning approach, similar to the lamb LEAP automation system, could deliver high return on investment from yield recovery, labour efficiency, safety and quality, plus benefits such as throughput efficiency, hygiene and reduced reliance on skilled labour.

Chris said processing facilities could invest in the technology in a modular way, allowing them to start with the highest return modules and add further modules sequentially.

Cost reduction

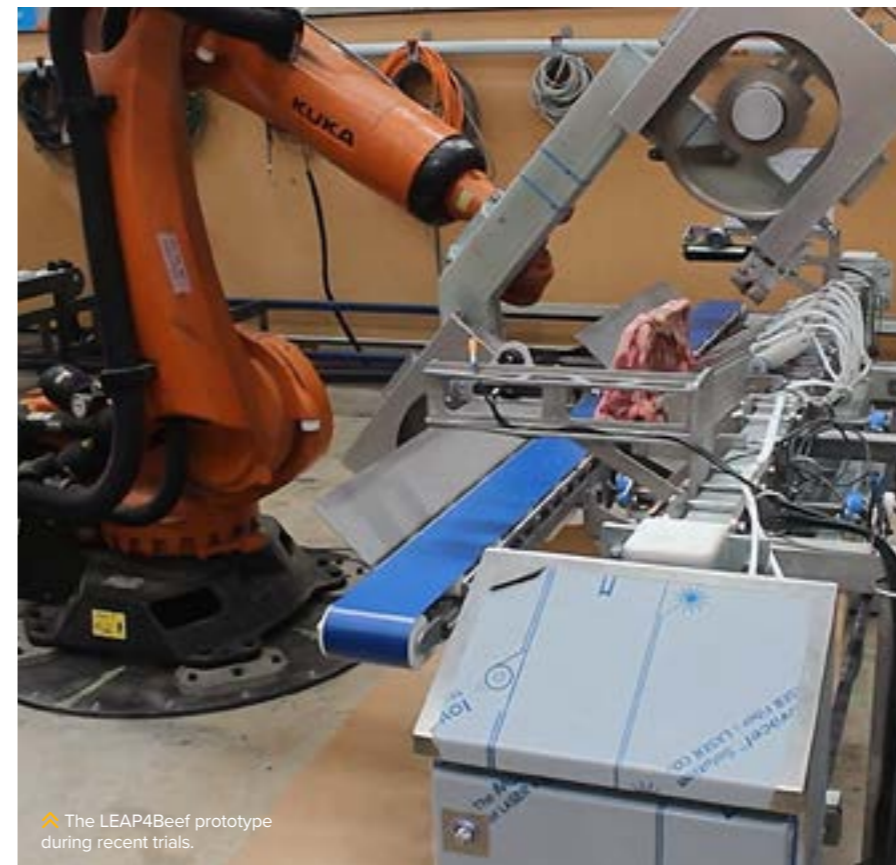
The project represents the next steps to help industry improve safety, streamline boning operations, and improve yield and profitability.

Australian processing is among the most expensive in the world, and automating the beef boning process would reduce per head operating costs and increase boning room yield efficiency, for the benefit of the entire Australian red meat supply chain.

Scott Technology CEO John Kippenberger said Australia's beef market will be the first to benefit from this new technology.

"Local processor feedback is very important at each stage of the project," John said.

"We also know there's global application and demand for this type of beef cutting automation and we're delighted to once again be part of a team bringing world-class tech to the industry." ■



▲ The LEAP4Beef prototype during recent trials.

Darryl Heidke dheidke@mla.com.au

Get to know our global markets

MLA has released the latest annual global market snapshots, providing an updated understanding of Australia's competitive advantages and growth opportunities in key markets around the world.

The snapshots, which cover 14 markets for beef and sheepmeat, provide industry stakeholders access to up-to-date insights on:

- consumer demographics, perceptions, habits and trends
- Australian export data and analysis
- foodservice and retail sector trends
- trade access and competitive landscape.

The 2024 market snapshots cover Australia, North America, Japan, Korea, Greater China, six individual South-East Asian countries (Indonesia, Vietnam, Malaysia, Thailand, Singapore and Philippines), the Middle East and North Africa (MENA) region, the UK and the EU.

"It's vital for Australian industry to have access to up-to-date market and consumer insights on key global markets in order to consolidate our competitive advantages and leverage growth opportunities," MLA's Manager of Market Insights and Adoption, Miho Kondo, said.

Red meat export

Ever since Australia's world-first technological triumph in frozen red meat exporting, which culminated in a shipment of red meat arriving in London in February 1880, Australia has been among the world's most significant exporters.

Much of Australia's success has been a result of investments made in understanding how to satisfy the varied needs of customers and end-consumers all over the world.

MLA's International Markets teams leverage market insights to build Aussie beef and lamb brand equity across global markets in ways that are locally compelling, driving demand

and enhancing preference for Australian red meat.

"Our insights shine a light to reveal potential opportunities for Australia in the medium to long-term future," Miho said.

"Understanding our target consumers and market dynamics is a key factor in understanding which products will earn the highest prices in which sectors and segments."

While the domestic market remains our single largest, MLA's cattle and sheep Industry projections anticipated Australia would export around 70% of beef and 76% of sheepmeat produced in boxed form in 2023.

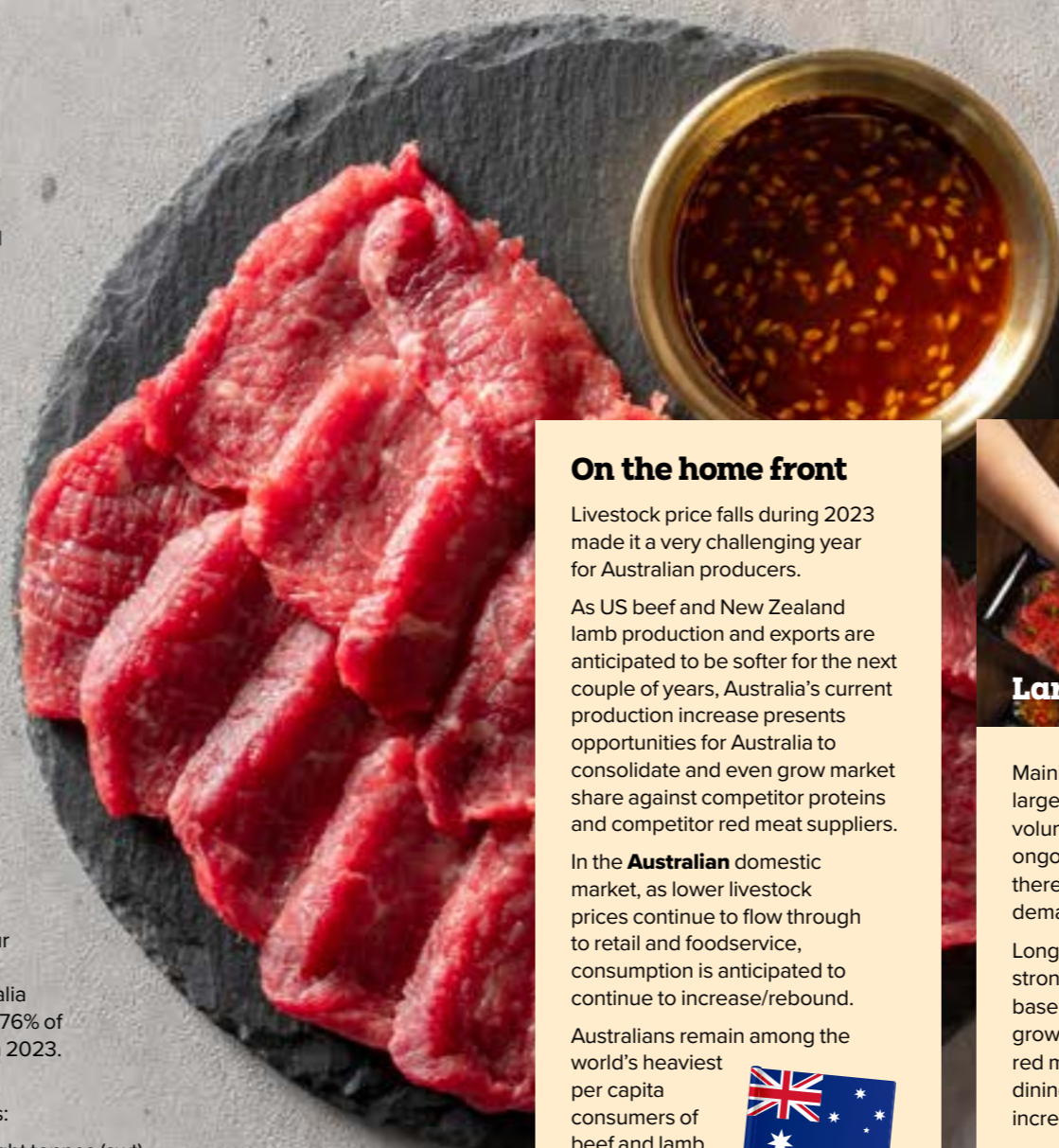
In the 12 months ending September 2023, Australian red meat volume was:

- more than 1.85 million shipped weight tonnes (swt)
- valued at an all-time record high total of more than A\$16.8 billion
- exported to more than 120 markets.

▶ Here's a look at some of these key markets:



MLA's Consulting Corporate Chef Adam Moore, North America Business Development Manager Sabina Kindler and Marketing Executive Claire Loker delivering an Aussie Meat Academy event at Marriott Hotels Corporate HQ in Washington DC.



Market highlights from around the world

On the home front

Livestock price falls during 2023 made it a very challenging year for Australian producers.

As US beef and New Zealand lamb production and exports are anticipated to be softer for the next couple of years, Australia's current production increase presents opportunities for Australia to consolidate and even grow market share against competitor proteins and competitor red meat suppliers.

In the **Australian** domestic market, as lower livestock prices continue to flow through to retail and foodservice, consumption is anticipated to continue to increase/rebound.

Australians remain among the world's heaviest per capita consumers of beef and lamb.



Large, established markets

Mainland **China** has been Australia's largest red meat export market by volume for several years, despite ongoing market access challenges, there has been a rapid increase in demand for chilled and grainfed beef.

Long-term import demand drivers are strong, as China's affluent consumer base continues to expand, along with growing appreciation for high quality red meat products, not just when dining out for special occasions but, increasingly, for every day at home.

While hot pot restaurants remain a key destination for Australian sheepmeat, there's growing demand for lamb cuts for home consumption.

The **US** has the largest pool of affluent consumers globally. As a major market for Australian grassfed beef and lamb, opportunities for Australia in the US are around increasing value via premium products such as chilled grassfed beef and lamb, rather than just growing consumption volume.

Product claims which promise to be better for health, the planet or animals are gaining traction for Australian brand owners.

Japan remains the third largest beef importer globally. With a long-established place in the market, Australian red meat is considered very well-suited to a variety of western and Japanese-style everyday meals. Japan is unique in having half of grocery retail sales occurring through convenience stores, where ready-to-eat meals are among notable users of Australian red meat.

Koreans are red meat lovers in a dynamic market, unique for its large and growing number of single and two-person households, which is driving demand for ready meals with red meat. **Korea** is among Australia's fastest growing lamb markets in recent years. Korea's e-commerce channel is among the world's largest and a key way shoppers purchase Australian red meat.



Consumer trends

A notable trend in recent years – particularly in **Australia**, the **UK** and the **US** – has been cost-of-living challenges resulting from rising inflation.

This has led shoppers, diners, retailers and foodservice operators to prioritise items which represent 'better value'.

Australian red meat is well-placed to continue to deliver strong value propositions, supported by our uniquely wide mix of products and cuts, as well as current lower prices.

Another emerging trend shaping consumer red meat choices, particularly in markets

such as Australia, **Europe** and the US, is a growing desire to consume red meat which is 'responsible'. Consumers seek products backed by claims relating to environmental sustainability and high animal welfare standards.

Australia's red meat and livestock industry goal to become carbon neutral by 2030 (CN30) is a globally-recognised initiative, driving Australian brand owners to create unique products that are finding success by addressing these concerns.



▶ Continued next page

Continued from previous page

Emerging markets

A high proportion of global growth in red meat consumption and imports is driven by the young, expanding and increasingly affluent consumer base in emerging regional markets such as **MENA** and **South-East Asia**.

In recent years, Gulf consumers in particular have increased awareness of, and appreciation for, premium red meat. This has been driven by increased interest in, and exposure to, non-local cuisine dishes. At the same time, there's growing acceptance of packaged meat products purchased from modern retail.

While the **UAE** and **Saudi Arabia** remain the largest markets, exports to a range of countries in the region are growing in volume and value. Large regional investments in the tourism sector will drive increased demand for quality red meat in hospitality and leisure foodservice. MENA markets have been among Australia's fastest growing for chilled grainfed beef exports.

In South-East Asia, **Indonesia** is Australia's largest red meat and livestock export market. The country has the biggest middle class in the region by virtue of its large population and growing incomes.

Vietnamese already enjoy beef in local dishes quite frequently by regional standards and, as disposable



Aussie Beef Mates, Chef Natt and Chef Roy, representing South-East Asia's Aussie Meat Academy at Kilcoy Global Foods' innovation hub, Queensland.

incomes increase, are spending more on premium and imported red meat products. Recent years have seen a step-change in shoppers shifting from buying meat from wet markets to more modern retail formats.

Malaysia is the region's largest imported sheepmeat market and has the highest per capita beef consumption as a result of relatively high incomes and cultural preference.

Since the Australia-Thailand Free Trade Agreement (FTA) came into force, **Thailand** has increased imports of premium Australian chilled beef, servicing both domestic retail and

international tourist consumers, particularly through foodservice.

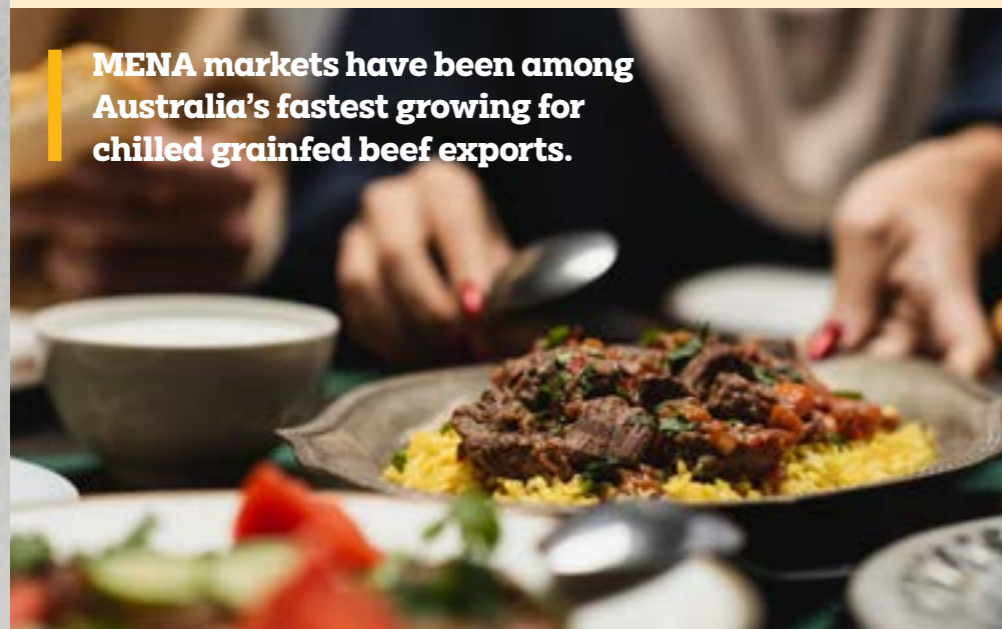
In South-East Asia, growing red meat consumption is being driven by increasing interest in dining out at not only Western-style cuisine restaurants, but also Japanese and Korean.

Australia's red meat exports to the **UK** have notably increased in the few months since the A-UK FTA entered into force in May 2023. Comparing the period of May–October in 2022 and 2023, beef volumes are up 280%, lamb up 117% and mutton up 150%.

Inflation peaked in October 2022 and has gradually eased since then, encouraging shoppers and diners to consider enjoying more premium red meat cuts more often. Australian red meat has an established foothold in foodservice. While retail has traditionally favoured local grassfed product, there are new opportunities for Australian grainfed, which offers a level of eating quality that British consumers are not used to.

Trade agreement discussions between Australia and the **EU** are continuing, with Australia determined to ensure any agreement reached will achieve a significant step-change in access for Australian red meat. ■

MENA markets have been among Australia's fastest growing for chilled grainfed beef exports.



Next gen sinks teeth into red meat

MLA is opening the gate to the next generation, giving them an insight into the red meat and livestock industry through the Australian Good Meat (AGM) Education program.

MLA's Schools and Education Manager, Susan Howe, emphasised the importance of educating young people about the industry.

"It's an indisputable fact today's youth have a disconnection with agriculture and a limited understanding of where their food comes from," she said.

"Coupled with fewer school farm-based excursions, the gap is getting wider to bridge."

Most Australians tend to agree, with results from MLA's latest community sentiment research confirming 71% believe children should be learning about the red meat industry in schools.

MLA is committed to educating Australia's young people about where their red meat comes from, its nutritional benefits and how it's produced sustainably.

An added benefit of educating young people about the industry is to highlight the diverse and dynamic career pathways it offers.

In the classroom and beyond

Teachers and students want educational content delivered in a variety of formats – but there's a shortage of up-to-date, Australian, curriculum-linked red meat and livestock teaching materials.

In response, MLA provides:

- ready-to-teach curriculum-aligned AGM teaching resources
- virtual classroom programs
- speakers at educational events
- participation in educational activities hosted by third parties such as Royal Ag Society Farm Day Excursions, Rural Discovery Days, Show-time

educational programs, National Ag Day education and teacher conferences

- collaboration with education service providers who have extensive teacher networks, such as Primary Industries Education Foundation Australia (PIEFA) and Kids Media.

Teaching resources

Last year, MLA collaborated with PIEFA to launch a suite of free, downloadable, 'ready-to-teach' cross-curricular Foundation to Year 10 school resources, aligned with the current Australian Curriculum.

More than 130 materials have been designed by teachers, for teachers. These include lesson plans, student activities, classroom posters and paddock-to-plate card games.

They cover a wide range of red meat and livestock industry-related topics, such as:

- on-farm production
- the paddock-to-plate journey
- safety
- sustainability
- the marketing and supply chain
- nutrition and healthy eating
- emerging production technologies
- animal welfare.

Virtual classrooms

A front-runner in the online learning space, MLA was the first rural research and development corporation to produce a virtual classroom which allowed students to engage with real-life producers direct from the classroom. During the extended COVID-19 lockdowns, the virtual classrooms enabled meaningful connections to continue between producers and students.

Australian Good Meat Education is an initiative of **mla** MEAT & LIVESTOCK AUSTRALIA

15,000 page views and nearly **10,000** resource downloads from the Australian Good Meat school education resources page since February 2023.

15,000 primary school students have attended the virtual classroom since 2021.

87% of teachers rate the virtual classroom program four or more out of five.

What's next?

Susan said teaching resources have been expanded for the 2024 school year to include resources for senior high school students.

"These use MLA research studies to build student capability in working with data," Susan said.

In 2024, updated 'Cattle and sheep farming today' fact sheets designed for primary and lower high school students will be released.

Red meat digital discovery desktop tours for students are also in the works.

MLA will be a sponsor partner of Beef Australia 2024 School's Program, as well as supporting the National Food & Fibre Ag Education Strategy project. ■





Summer Lamb skewers the generation gap

The hotly anticipated Summer Lamb campaign developed by Australian Lamb and MLA has targeted the ever-widening generation gap which separates Australians of all ages.

Launched in the first week of January, the viral ad kicked off the six-week campaign with some topical jokes, a good dose of satire and, of course, lots of mouth-watering lamb. It imagines a world in which the generations have been separated by the 'generation gap', an impassable chasm that keeps each age group isolated from the others.

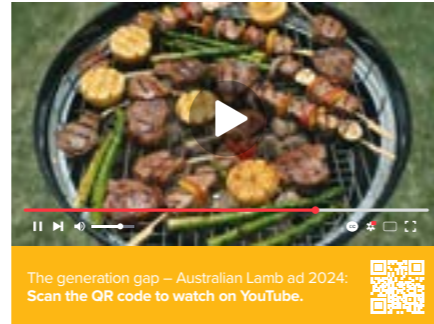
From stubborn baby boomers and delusional millennials to vain gen Zs and neglected gen Xs, each generation has become the worst version of themselves, until a lamb barbecue appears. The universal love of lamb breaks down the generational divide and brings everyone back together, proving more unites us than divides us.

Australia can't get enough of lamb

The Summer Lamb campaign followed on from the success of 'Better Together' in December 2023. Featuring Lambassador Sam Kekovich and NRL legend Sam Thaiday, the ad told Australians they didn't need to choose between beef or lamb, they could have both.

The annual Summer Lamb campaign was further bolstered by the launch of a Domino's partnership on 22 January – a culmination of the MLA Domestic and Retail marketing teams' efforts to deliver a new Domino's lamb pizza and Meltzz range.

Scenes from the 2024 Summer Lamb ad, where there was only one solution to bridge the generational gap.



shoppers are encouraged to make it their protein of choice whether they're dining out or entertaining at home.

This year's ad went nothing short of viral. In the first 10 days of the six-week campaign, the full three-minute ad had racked up more than 18 million views, far exceeding the total number of views achieved during the whole of last year's campaign. ■

Australia's seemingly insatiable appetite for lamb continues to grow, with NielsenIQ HomeScan data for the four weeks to 28 January showing a 27% rise in the volume of lamb purchased at the checkout compared to the same time last year.

Broadcast channels

The full-length ad premiered on 7 January during the evening news broadcasts on Seven and Nine. This was followed by a rollout across free-to-air and subscription TV nationally. Other media channels include online, catch-up TV, paid social and retail out-of-home.

Viral reach

Each year, the summer campaign aims to create a buzz around lamb so

The Generational Grill

Supplementing the success of the Summer Lamb ad, MLA created a piece of fun social content encouraging different generations to work together and battle other generationally diverse teams in a pub-style trivia quiz.

Teams vying for the coveted lamb meat tray were ex-AFL great Brendan Fevola and his daughter Leni (pictured right), comedian Peter Rowsthorn and his daughter Billie, and gaming influencer Vincent Ton and his uncle Paul.



Argentinian beef kebabs



Add some spice to autumn dining with chimichurri-smothered beef kebabs. Discover more ways to cook beef at australianbeef.com.au

Serves 4 Prep time 40 minutes Cooking time 20 minutes

INGREDIENTS

750g rump steak, cubed
2–3 capsicums, cut into 3cm pieces
salt and pepper

Marinade:

½ cup white vinegar
¼ cup olive oil
¼ brown onion, grated
2 cloves garlic, minced
1 tbsp dried mixed herbs
½ tsp ground cumin

Chimichurri sauce:

¼ cup olive oil
2 tbsp red wine vinegar
½ cup firmly packed parsley leaves, finely chopped
¼ brown onion, finely chopped
¼ small red capsicum, or 2 long red chillies, finely chopped
1 clove garlic, minced

Salad:

2 sweet potatoes, thickly sliced and roasted
2 ears corn, steamed or grilled
4 cups rocket or mixed greens

METHOD

- To make the chimichurri, combine all ingredients in a bowl and season to taste with salt and pepper. Set aside.
- Combine marinade ingredients in a large zip-top bag or ceramic dish. Add beef, stir to coat and marinate for 30 mins.
- Drain beef, discarding marinade. Thread meat onto skewers, alternating a piece of capsicum between each piece of beef, and season with salt and pepper. Preheat barbecue or a heavy-based pan to high. Cook skewers, turning to sear all sides, for 4–5 mins.

- Cut corn kernels off the cob. Combine corn, roasted sweet potato and rocket on a large platter. Drizzle over 1–2 tbsp chimichurri sauce and toss to coat.
- Serve beef skewers with salad and chimichurri.

TIPS

To roast sweet potatoes, toss with 1 tbsp olive oil, season with salt and pepper and bake for 25 mins at 180°C. Alternatively, cook on the barbecue, over medium-low heat, until tender.



Sustainability from paddock to plate

Meat & Livestock Australia at
Beef Australia 2024 – 5–11 May, Rockhampton

► **MLA stand**

O134 near the McKenzie Pavilion

A display of the latest programs and research showcasing solutions and technology which embrace sustainability and set beef producers up for success.

► **Tech and innovation stage**

Tech Yards and Innovation Hub – free presentations on Tuesday/Wednesday/Friday (check our website for times)

Environmental credentials for grassfed beef

► **Seminars**

Bookings essential – visit mla.com.au/beef24-seminars

Monday 6 May 3.45pm–5.15pm

Our sustainable Australian beef industry – the achievements and opportunities from paddock to plate

Thursday 9 May 10.00am–11.30am

The customer – what on earth do they want now, and will they pay a premium for it?



Keep up to date at
mla.com.au/beef24

Stand O134