Supporting change for
a profitable industry

MEAT & LIVESTOCK AUSTRALIA

2023–24

Producer Adoption Outcomes Report

MLA's investment in producer adoption aims to increase the uptake of on-farm research and development (R&D) by producers and ensuring they follow best practice management across all areas of on-farm management. The program also aims to increase the capacity and capability of service providers such as advisors and training deliverers to ensure the delivery of high-quality adoption programs. For more inforamation visit:

mla.com.au/producer-adoption

Contents

MEAT & LIVESTOCK AUSTRALIA

MLA acknowledges the matching funds provided by the Australian Government to support the research and development detailed in this publication.

Cover: Producers build their perennial grass and shrub knowledge for grazing management and utilisation at one of the Southern rangelands grazing fundamentals EDGE workshops – Oodnadatta, SA.

Program manager's welcome

It is with great pleasure that I present MLA's annual *Producer Adoption Outcomes Report*. The report outlines the breadth of extension activities and adoption projects MLA delivered across 2023–24, and the on-farm benefits producers received from their involvement in the program.

MLA delivered $74.3 million in annual net benefits to producers involved in its adoption activities during 2023-24. The continual improvements in monitoring, evaluation and reporting (MER) processes in our adoption projects allow us to better demonstrate the impact these projects have on-farm for producers. Increased extension activities and MER processes in MLA research projects have increased the opportunities for producers to engage with the latest research findings.

MLA's adoption programs are focused on assisting producers to increase their production, profitability and sustainability. MLA designs and funds extension programs that allow producers and service providers to explore how to improve their business skills as well as pasture and livestock management through the latest research outcomes, technology, or best management practices. This publication outlines the results achieved from producers engaging in these services during 2023–24 and the benefits they received through such involvement.

Over the past 12 months MLA has added to its adoption program offering with the piloting of two new MLA products. These training products include the six pilots of Carbon EDGE (available now) and the five pilots of the Profitable Grazing Systems (PGS) Package, 'Managing Climate for Decision Making' from the Northern Australia Climate Program (to be available in early 2025). We worked with producers to ensure these programs are fit for purpose and we are pleased to be able to offer these new training opportunities to the red meat industry.

Sally Leigo (far right) with NSW goat producers Jill and Edward Fessey at MeatUp Cunnamulla. Attendees heard from leading producers, industry representatives, advisors and researchers to gain access to tools and programs relevant to their business and identified opportunities to drive on-farm productivity and profitability.

Thank you to the 10,202 red meat producers and 110 service providers who got involved in 2023–24, as well as to our dedicated MLA team who managed the programs. We look forward to delivering more opportunities for producers to increase their production, profitability and sustainability over the next 12 months.

Sally Leigo

Program Manager – Adoption

MLA delivered $74.3 million in annual net benefits to producers involved in its adoption activities during 2023-24.

2023–24 highlights

>9.1M
sheep influenced by practice change programs

>14.6M
cattle influenced by practice change programs

647,950
goats influenced by practice change programs

>219.4M
hectares of Australian agricultural land influenced by MLA adoption programs

86%
average value rating of events across MLA adoption programs

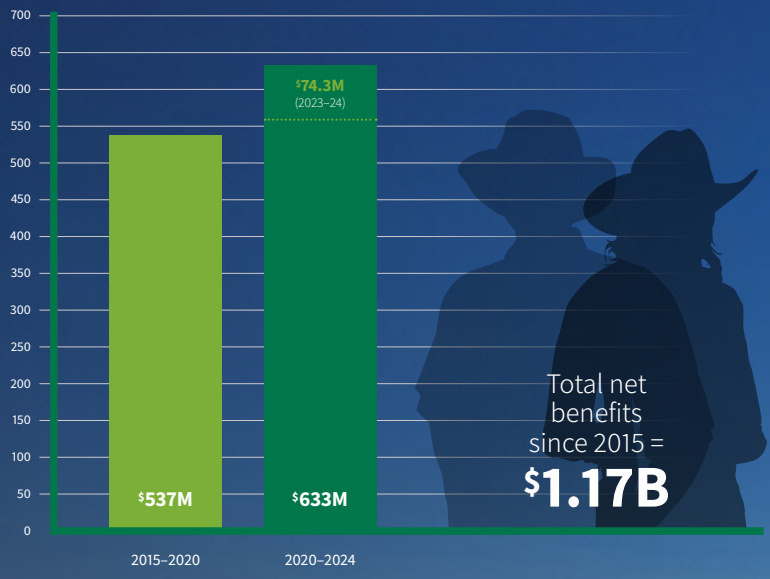
78%
of attendees indicated intent to change practices as a result of MLA adoption programs

10,202
producers engaged

514
advisors engaged in capability building programs

Total benefits* delivered to producers via MLA adoption programs

MLA adoption programs have delivered $1.17 billion* in total net benefits to participating producers who adopted a new practice between 2015–2024. In 2023–24 this was $74.3 million in annual net benefits to participating producers.

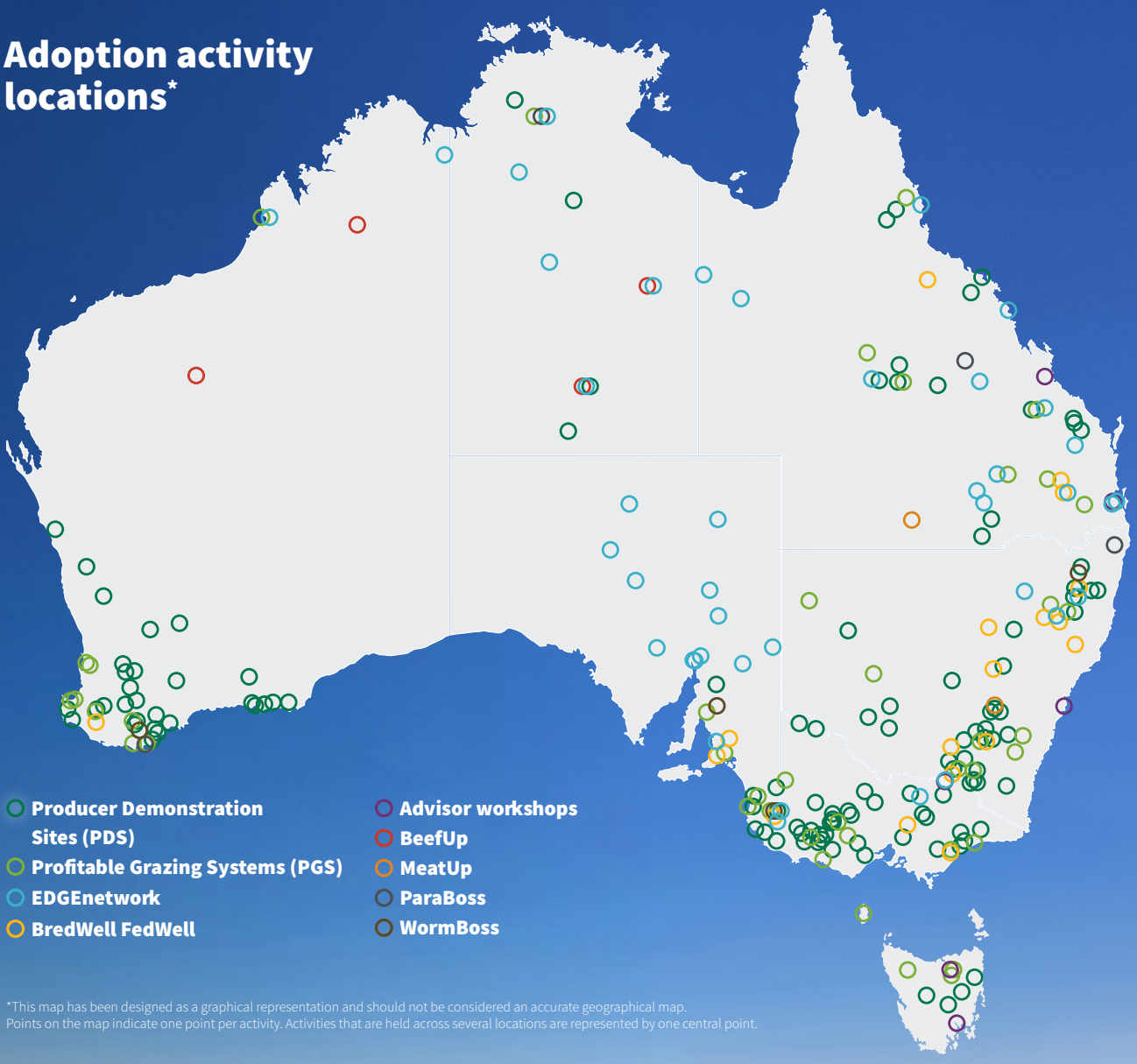


*Calculated as net present value of adoption to 2045, discounted at 5% annually.

The economic benefits of participating in MLA adoption programs are presented in this report as a range for each individual program. This range is based on the average benefits producers received during 2023–24 across varying on-farm productivity changes. These numbers are based on case studies, modelling and estimates from comparable practice changes made in similar circumstances in previous years.

The benefit that an individual producer receives is dependent on the type of practice change implemented, on-farm conditions such as soils or climate, breed and genetics, and the scale at which the change is implemented. Keep this in mind when reviewing the figures in this report and if you have any questions, please reach out to: **getinvolved@mla.com.au**

Adoption activity locations*



- Producer Demonstration Sites (PDS)
- Profitable Grazing Systems (PGS)
- EDGEnetwork
- BredWell FedWell
- Advisor workshops
- BeefUp
- MeatUp
- ParaBoss
- WormBoss

*This map has been designed as a graphical representation and should not be considered an accurate geographical map. Points on the map indicate one point per activity. Activities that are held across several locations are represented by one central point.

Producer adoption strategy

The MLA adoption strategy aims to provide programs and activities that lead to an increase in the adoption of research and development (R&D) to improve the productivity, profitability and sustainability of red meat producers.

The MLA adoption pathway is made up of three stepping stones: awareness activities, short-term training programs and long-term practice change activities. Underpinning the pathway is the upskilling and capacity building of livestock advisors to ensure delivery and uptake of change activities.

Awareness activities inform producers about the latest R&D relating to livestock production and are delivered as field days, forums, webinars, newsletters, articles and podcasts.

Short-term training programs are designed to increase the knowledge and skills of producers around the latest livestock production practices by engaging them in training activities such as workshops or online learning modules. Generally, these are one-to-three-day events.

Long-term practice change activities involve producers learning from each other under the guidance of a consultant or advisory coach. These activities involve producers implementing the latest livestock production practices into their businesses. Generally, these activities take between six months to three years to complete.

Underpinning MLA's adoption pathway are livestock advisors who often provide guidance and advice to producers implementing a change in their business. Livestock advisors are defined as anyone who provides advice to red meat producers as a core part of their role. This can include veterinarians, private consultants, agronomists, livestock agents, sales representatives, and public extension officers. To increase adoption outcomes, MLA delivers programs to advisors to increase their knowledge of the latest research and development findings and to allow for professional development opportunities and networking.

The MLA adoption strategy has four key pillars:

1. Awareness and short-term training programs
2. Long-term practice change
3. Capability building
4. Program approach to research, development and adoption (RD&A).

The MLA adoption strategy will continually evolve to deliver improved industry outcomes through the following key actions:

- ensuring all applied on-farm R&D has a pathway to adoption built into the project, or a robust mechanism to ensure adoption outcomes are achieved
- investing more resources into growing and developing programs that are based on long-term (>12 months) supported and experiential learning for producers
- working collaboratively across the company to develop and implement RD&A programs of work, which result in greater focus on the areas that will have the maximum impact for industry
- partnering with industry stakeholders across the red meat supply chain to deliver greater adoption outcomes
- encouraging participation of the advisory network in MLA adoption programs and building the capability of existing and new advisors
- expanding the methods to reach producers to raise awareness and provide training including eLearning modules, short videos, and marketing campaigns
- utilising consistent methods to monitor and evaluate impact and the success of RD&A programs.

Russell Gray – Santa Gertrudis stud classifier, shows BeefUp (Blackall) attendees how to classify heifers, as part of the discussion on breeding and genetics.

Profitable Grazing Systems

Profitable Grazing Systems (PGS) is a group-based training program that uses supported learning packages (SLPs) to deliver training and coaching over several months to improve producer skills and knowledge. Through PGS, participants can develop and practice skills with small groups of like-minded producers to improve business performance. Each SLP aligns to at least one of the following curriculums: people, business, reproduction and genetics, value chain and feedbase.

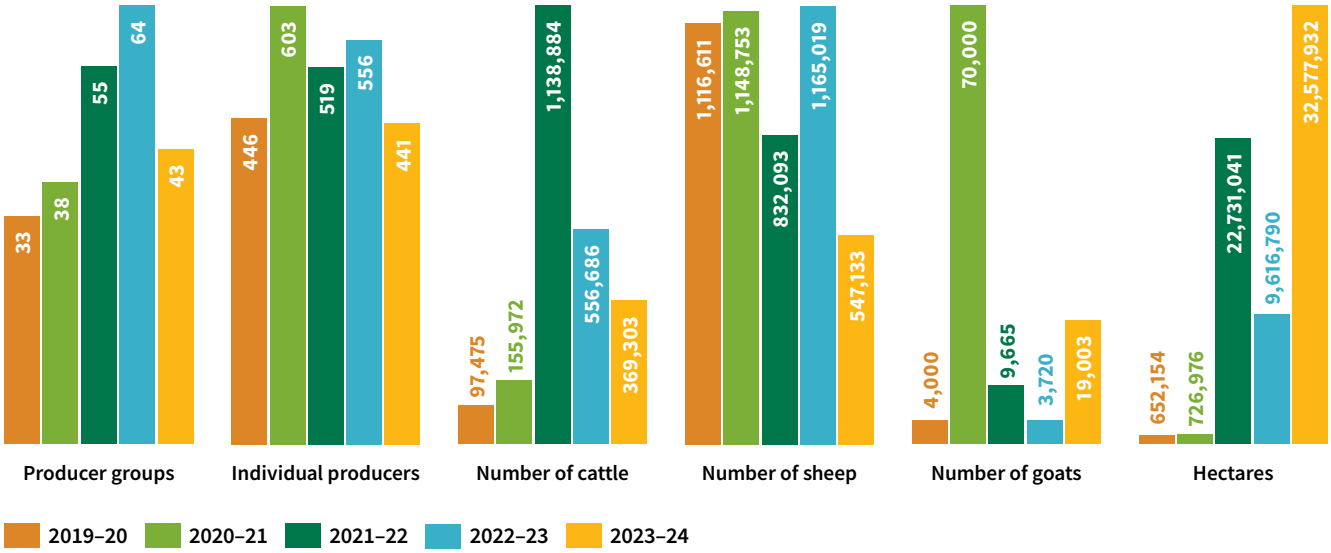
Profitable Grazing Systems
your pathway to success

PGS will deliver $327.2 million* in total net benefits to participating producers as a result of SLPs attended between 2015–2023. MLA's investment in PGS since 2015 delivered $15.6 million in annual net benefits to producers in 2023–24.

On average, and depending on the area of practice change, northern beef producers participating in a PGS SLP can expect an additional net benefit of $6–26/km^2 annually. On average, southern producers participating in an PGS SLP can expect an additional net benefit of $5.53–7.52/ha annually.

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

PGS engagement 2019–2024



Interested in becoming a PGS deliverer?

The PGS mentoring program is designed to upskill new deliverers and improve the confidence of service providers to deliver SLPs and make a measurable difference to participants' businesses. Mentees are teamed up with an experienced deliverer to assist them in building the skills and confidence to deliver the packages. All of the mentees have gone on to establish their own PGS groups after participating in the program.

PGS is seeking deliverers who can work with producers using existing supported learning packages or packages they have developed themselves. PGS coaches come from a range of backgrounds and generally have advisory skills to also deliver supported learning packages to small groups.

To find out more about becoming a PGS deliverer email: **pgs@mla.com.au**

PGS deliverers Peter Spies and Jill Alexander (pictured, centre) ran the first PayDirt North course in Queensland's Maranoa region.

PGS supported learning packages available:

- **Benchmarking for Profit and Production:** Helps producers identify and connect their business goals to benchmarking performance and to utilise comparative analysis data in identifying future goals, current strengths and weaknesses.
- **Building Better Breeders:** Covers the A–Z of beef breeding in southern and temperate production zones and provides advice on the utilisation of electronic identification (eID).
- **Business Essentials:** Developed to upskill producers in the fundamentals of managing the business side of a livestock enterprise.
- **Dollar Making Decisions:** Producers learn the skills to take a disciplined and rational approach to capital allocation on-farm.
- **Dry Times Ready:** Designed to help producers develop a drought management strategy focused on production and resource allocation.
- **Getting Goats to Market:** Builds the knowledge and skills of goatmeat producers, allowing them to effectively and efficiently grow and select goats to generate a profit. Producers develop a simple, customised production plan for their goatmeat enterprise to assist with planning and decision making.
- **Grass to Dollars:** Assists producers in assessing pastures grown across southern Australia, condition scoring livestock, managing pasture grazing and optimising pasture utilisation.
- **Grazing Matcher™:** Designed to improve the productivity, profitability and resilience of red meat producers by enabling them to better match grazing pressure, fertiliser application, animal requirements and market demands.
- **Heifers for Profit:** This package develops skills and confidence in managing heifer nutrition to improve animal welfare, increase future reproductive success, optimise stocking rates and increase whole farm profitability.
- **Improving Tactical Decision Making:** Designed to help develop grazing management programs which address feedbase productivity and resource sustainability in a southern rangelands environment.
- **Lead with Certainty:** Participants develop a better understanding of themselves and their teams, while learning more effective ways of creating a positive team culture through planning, goal setting and communication.
- NEW **LevelUp:** Designed to coach producers through how to take the family farm and turn it into the family business, covering topics of strategy, governance, investment and the road to succession.
- **Lifting Lamb Survival:** Gives producers greater control over lambing and reproduction outcomes.
- **Managing a Diverse Feedbase:** This package provides producers with the skills to manage a mixed farming feedbase to meet their livestock production goals.
- **Meat the Market:** With a whole of supply chain focus, this package trains producers in improving lamb processing compliance and optimising eating quality.
- **Pasture Principles:** Producers undertake this package for a 12-month pasture production cycle to learn a set of guiding principles to manage pastures confidently.
- **PayDirt:** Value-adds to soil testing results, helping producers determine how to get the most bang for their fertiliser buck.
- **PayDirt North:** This package is the northern adaptation of the existing PayDirt program, tailored to help producers in the north value-add to soil testing results and determine where they will get the most bang for their fertiliser buck.
- **Phosphorus for Profit:** Assists northern producers in managing and diagnosing phosphorus deficiencies in their cattle herds. Provides practical solutions for effective supplementation to improve cattle health and profitability.
- **Renovation Rescue:** Aids producers in transforming run down perennial pastures through the application of grazing, weed manipulation and improved soil conditions.
- **Satellite-Assisted Forage Budgeting:** Upskills producers in utilising satellite imagery to develop grazing budgets on a large scale.
- **Sowing for Success:** Helps producers determine where to invest their pasture dollars to successfully establish a perennial pasture.

Supporting learning packages in development include:

- **Improved Beef Market Compliance:** Designed to drive profitability by enhancing producer understanding around beef processing compliance frameworks. Producers will also learn about MSA requirements and utilising feedback platforms to increase carcase data.
- **Managing Climate for Decision Making:** Designed to establish a fundamental understanding of the key climate drivers and processes that influence the timing and quality of the wet season in northern Australia. Producers explore how this information and tools can be implemented to improve decisions in the business.

To find out what packages are offered in your state or territory or to make a request for a package near you, email: **pgs@mla.com.au**

PGS 2023–24 highlights

547,113 sheep influenced by practice change programs

369,303 cattle influenced by practice change programs

19,003 goats influenced by practice change programs

441 active producers

43 active PGS groups

35 completed groups

19 active deliverers

80% increase in knowledge and skills

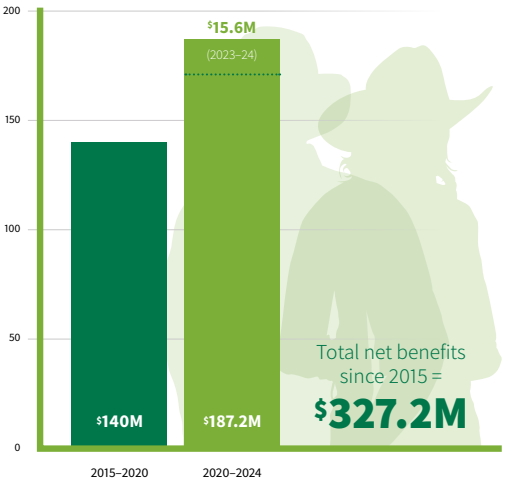
$5.53–7.52/ha average annual net benefit for participating southern producers

$6–26/km² average annual net benefit for participating northern producers

86% average value for participating producers

>32.6M hectares of Australian agricultural land influenced by the PGS program

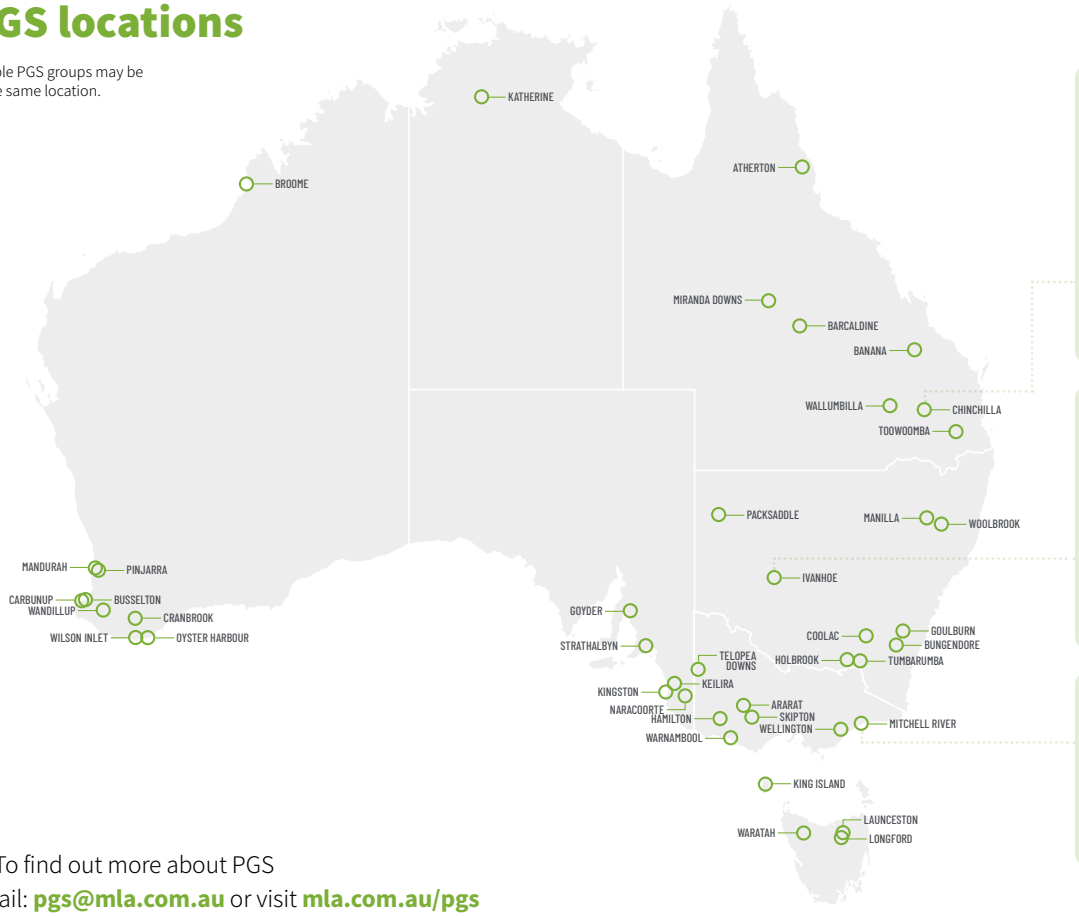
Total benefits* delivered to producers via PGS



*Calculated as net present value of adoption to 2045, discounted at 5% pa

PGS locations

Muliple PGS groups may be in the same location.



> Really great program that I think would be beneficial for a larger proportion of the population to undertake to further understand these climate drivers and make informed decisions. Vicki was fantastic delivering this course and I think the collaboration between producers has been really helpful. **Participant – Managing Climate for Decision Making – Chinchilla, Queensland**

> Very useful information for me personally. Very specific to rangelands grazing. I come from a high rainfall background. Without information like this it would be very easy to unintentionally damage this very fragile landscape. **Participant – Improving Tactical Decision Making – Ivanhoe, NSW**

> Alison is a fabulous teacher and I have learnt so much from the course. It's been very friendly and informative. I have thoroughly enjoyed this group. **Participant – Building Better Breeders – Gippsland, Victoria**

To find out more about PGS email: **pgs@mla.com.au** or visit **mla.com.au/pgs**

CASE STUDY

Climate tool knowledge aids on-farm decisions

Northern producers have a new resource for managing risks associated with extreme seasonal conditions with MLA's new *Managing climate for decision making* program.

As they manage around 9,000 cattle across more than 100,000ha in the Northern Territory, 'Cave Creek Station' owners Sally and Rowan Sullivan rely on an understanding of climate and rainfall to make informed management decisions across their enterprise.

Taking part in MLA's Managing climate for decision making Profitable Grazing Systems (PGS) program, developed through the Northern Australia Climate Program (NACP) and in collaboration with the University of Southern Queensland, helped Sally learn how to interpret climate and weather tools and apply this information in their operations.

Sally, Rowan and their daughter Margo, along with a team of staff, supply feeder steers to Indonesia and heavier cattle to southern abattoirs or export to Vietnam or Malaysia.

How much, when and where rain falls throughout the wet season impacts their entire operation, from access, to staffing, to supplementation, to the timing of musters.

"We agist steers further north over the wet, so Adelaide River needs to have rain before we can send cattle up there," Sally said.

"We need to shift the cattle before it gets too wet at home. The wet season also impacts the type of lick that we use. Usually in the dry season we use a high urea supplement, then we use a mostly phosphorus lick over the wet season.

"There is a river between us and most of the place, so we need to put out wet season lick before we lose access," Sally said.

Producers Margo and Sally Sullivan of 'Cave Creek Station' in the Northern Territory.

Understanding forecasts

Despite the vastness of their enterprise, understanding longer-term forecasts and climate drivers enables responsive and informed decision making.

For MLA Project Manager – PGS, Elizabeth Thelander, building climate literacy is a risk management strategy for poor, failed or extreme seasons, particularly relevant for the highly variable north of Australia.

Seasonal resilience

PGS deliverer Emily Hinds, from NACP said the course helps producers build business resilience by being proactive and adapting to the various climate drivers.

"The Madden-Julian Oscillation (MJO) is increasingly being looked at for those bursts of rainfall and active monsoon periods," Emily said.

"These can affect access, getting supplement and nutrition out to cattle and can be a deciding factor in moving cattle to less flood prone areas. Then in those breaks of rainfall, maybe doing some controlled burning or spraying weeds.

"Understanding that when the forecast says 0–25mm, in reality this means there is a 75% chance of a 0mm rainfall and 25% chance of a 25mm rainfall allows more accurate interpretation of forecasts," Emily said.

Value from mentoring

The PGS program's longevity, small group size, and coaching delivered alongside course content has fostered relationships and knowledge building, which have delivered better outcomes and trust.

Further NACP tools include the Drought Monitor, Drought Outlook, Cattle Thermal Stress Forecasts, Flash Drought and GreenDate Calculator available at: **nacp.org.au/drought**. Quarterly forecast videos, analysis of climate outlook and regional climate calendars for all northern regions are also provided.

When and how much rainfall 'Cave Creek Station' receives impacts every aspect of its operations.

To find out more about Managing Climate for Decision Making visit **nacp.org.au/outreaches/training_course**

Producer Demonstration Sites

MLA's Producer Demonstration Sites (PDS) program aims to increase the rate of adoption of key management practices and technologies that improve business profitability, productivity and sustainability. MLA supports livestock producers working in peer-to-peer groups to pursue new skills, knowledge and management practices applicable to their own commercial livestock production systems.

Demonstration Sites are commercial enterprises implementing new practices, monitoring the benefits and impact of the practice change and sharing their experience (known as Demonstration Sites hosts) with an engaged group of core producers. Additional activities are held to engage a wider producer audience (known as 'observer producers') and share the learnings amongst the regional producer community. The key outcome of a PDS is adoption of the demonstrated management practices, resulting in improved business performance.

Levy-funded and co-contributor PDS projects are called for annually, following consultation with research advisory councils – Southern Australia Livestock Research Council (SALRC), North Australia Beef Research Council (NABRC) and Western Australia Livestock Research Council (WALRC).

Producer priorities are identified through this process, which formulate the Terms of Reference for the levy-funded PDS call. A producer panel is engaged to review PDS project applications to ensure they address producers' priorities and will deliver impact to their region. Co-contributor projects are required to align with MLA and industry strategic frameworks, including the *MLA Strategic Plan 2025* and *Red Meat 2030*.

Producer Demonstration Site framework

<table>
<tr><th>Levy</th><th colspan="2">Co-contributor</th></tr>
<tr><td>Producer driven projects to address regional PDS priorities set by the Regional Research Advisory Councils (RACs)/ Regional Committees.</td><td colspan="2">Producer group driven projects aligned with industry priorities and targets.</td></tr>
<tr><td>Offers producer groups the opportunity to receive funding of up to $30,000/year for the life of the project.</td><td colspan="2">Offers producer groups the opportunity to receive funding of up to $60,000/year for the life of the project.</td></tr>
<tr><td rowspan="2">100% funded by producer levies.</td><td colspan="2">Funding options</td></tr>
<tr><td>■ 50% levies
■ 30% producer cash contribution
■ 20% MDC.</td><td>■ 45% levies
■ 15% producer cash contribution
■ 18% third-party/non-producer cash contribution
■ 22% MDC.
(Effectively – 45% levy, 33% external contribution, 22% MDC)</td></tr>
</table>

Following the 2023–24 PDS call for producer-led projects, MLA supported funding for six levy projects and three co-contributor projects. Three additional Integrated R&D PDS projects were contracted during 2023–24 associated with research projects.

PDS has delivered $229.7M* in total net benefits to participating producers as a result of projects completed between 2015–2023. MLA's investment in PDS since 2015 has delivered $14.2M in annual net benefits to producers in 2023–24.

On average, and depending on the area of practice change, producers can expect an additional net benefit of between $2.29 to $5.89/ha annually as a result of their participation in the program.

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

Find out about PDS activities in your region, key information on the annual PDS project call and sign up to the PDS mailing list to receive quarterly updates on the active PDS projects by visiting: **mla.com.au/pds**

Check out the PDS website, search tool and resources for producers and facilitators at: **mla.com.au/pds**

PDS 2023–24 highlights

5.1M sheep influenced by the PDS program

606,373 cattle influenced by the PDS program

>1K core producers

83 active projects

5 new PDS projects

83 facilitators engaged

372 active demonstration sites

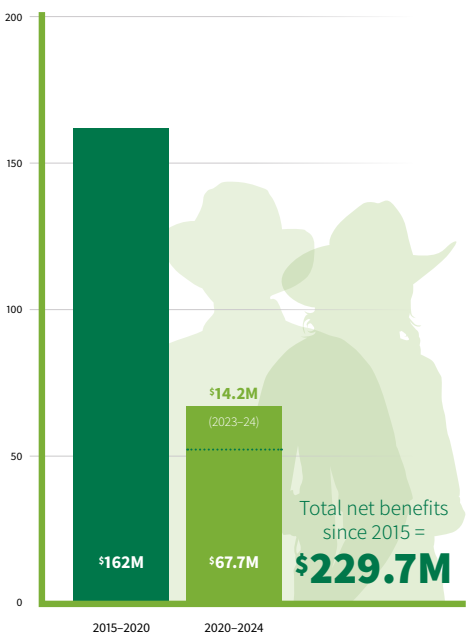
7,597 observer producers

$2.29–5.89/ha average annual net benefit per producer

72% of 2023–24 core PDS producers adopted new practices

24.9M hectares of Australian agricultural land influenced by the PDS program

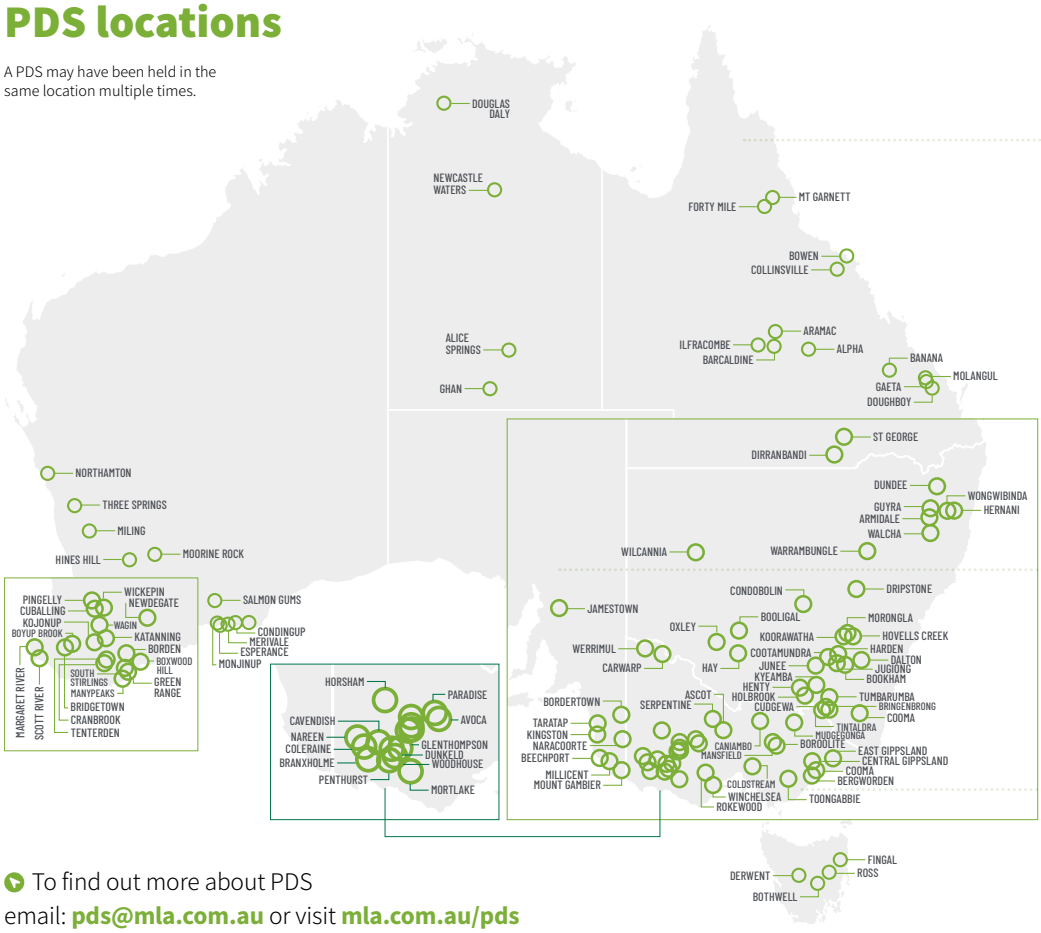
Total benefits* delivered to producers via PDS



*Calculated as net present value of adoption to 2045, discounted at 5% pa

PDS locations

A PDS may have been held in the same location multiple times.



> Peer-to-peer learning within producer discussion groups is valuable to realise you aren't the only one who makes mistakes and to see what management practices are working and what's not." **Producer – Queensland**

> The peer-to-peer learning has been invaluable – learning and hearing about other people's experiences helped to validate some of the key messages. The variation in management systems within the group was extensive with a range of calving times, different breeds, different animal health plans and different target markets. It was great to be able to pick out which things would be most suitable to adopt within your own production system." **Producer – South Australia**

> The demonstration project was a great opportunity to benchmark the trace mineral levels of our sheep and evaluate the effects of different treatments. It also allowed us to develop systems to weigh sheep and determine growth rates across the growing season. This was a worthwhile use of our time and resources and I recommend this program to other producers." **Producer – Victoria**

To find out more about PDS email: **pds@mla.com.au** or visit **mla.com.au/pds**

CASE STUDY

Confinement feeding boosts crop area and flock health

Confinement feeding is where livestock are held in a confined area and supplied feed and water. It is used to defer grazing of paddocks after the break of season rains.

The use of confinement feeding is on the rise in WA and there is strong interest surrounding the topic, with producers keen to learn more and adopt the practice. There is, however, concern about the lack of expertise in implementing the systems. Confinement feeding has many variables including:

- using set pens or small paddocks
- feeding out on the ground or in a trough
- stocking rates and pen sizes
- health management and vaccine programs
- the overall aim of confining.

A Producer Demonstration Site (PDS) project, funded by Meat & Livestock Australia and managed by AgPro Management, commenced in 2022. The PDS 'Which set up? Implementing confinement feeding' aims to address these issues and help producers identify why they want to confinement feed and when it should be implemented. This is where Mark Zadow's experience working out how and when to implement confinement feeding on his property comes in.

Confinement feeding learnings

Mark Zadow is based in Kojonup WA, where he and his family run a mixed cropping and sheep enterprise. The property has a mix of soil types, crops and sheep, with over 2,500 Merino ewes joined to Merinos, and another 1,300 Merinos joined to create cross-bred lambs. With an average annual rainfall of 550mm over the last decade, the Zadows have seen more and more late or false season breaks, more summer rain, and less rain in the growing season. This trend led them to becoming 'early adopters' of confinement feeding, compared to the rest of the state. Before adopting confinement feeding, Mark used 20% of his land for cropping, much lower than the average 55% for the district.

"We got into confinement due to pure necessity, with later breaks the last few years forcing us to do something – I guess we were prompted to do it before it was common, as we just didn't have the stubbles to carry sheep for a majority of the summer/autumn period.

"When we looked at the numbers, since starting confinement feeding, the property has increased its cropping area to 45%, while maintaining its sheep numbers. It's all due to confinement.

"Growing that early feed means we can stock paddocks well. Confinement supports a higher stocking rate, which has in-turn let us crop more."

Prior to the project, the Zadows were already using a confinement pen system they had built. They've been using it as part of their normal management for over six years. Mark began confinement feeding utilising existing infrastructure, such as pipelines and small paddocks near the sheds and yards. This consisted of setting up multiple pens of roughly 500 square metres, 10m x 50m in size, which held a maximum of 500 sheep each. Included within these were well established trees, with the whole system on a slight slope, with easy vehicle access, and free draining soil. Gravity-fed, three-metre-long troughs provide water to each pen and get cleaned once a week.

"The key is to keep it as simple as possible. Confinement doesn't have to be a complicated process – just keep feeding them," Mark said.

The key benefit to confinement is the ability to defer pastures at the break of the season.

"It's a critical time just before lambing, so the pastures need to be there. It's that simple," Mark said.

Ewes leave confinement no later than three or four weeks prior to lambing, with the aim being to achieve over 1,000kg of dry matter on offer in the paddocks, so as to support lambing ewes' needs.

"Sometimes we reach that point earlier, and the ewes go onto the paddock. Sometimes, it's right on three weeks prior to lambing, but my deadline is 1 July to get them out," Mark said.

Depending on the season break, they could spend three to eight weeks in the confinement pens.

"It varies each year. As soon as we get 20 millimetres of rain, they go in, usually in May or April, usually around condition score 3.5," Mark said.

Sheep in containment being trail fed.

This year (2023) brought early season rain, followed by a false break and poor rainfall until June. At over nine weeks, it was the longest the Zadows had kept their animals in confinement. Nevertheless, they didn't see any issues.

"The key is not to let them slip. Maintain that condition and be on the right side of nutrition. It's one of the reasons we feed oats, lupins and straw – it's a safe feed ration at high rates so we can't mess it up."

The Zadows trail feed in each pen, every second day. This is a lupin and oat mix, with 25% lupins, plus 4kg/hd/wk barley straw.

"It varies on the mob, as we have all our sheep in, but it's a full confinement ration. The barley straw, our own, gets thrown in once a week. We might as well use it as it's here and keeps their guts full," Mark said.

One of their biggest learnings in regards to feed over the last few years was to include calcium salt licks in the pens, especially in the years the sheep remained confined for over three weeks.

"The licks were a game changer in those poor seasons when they had a long time on grain. The other learning was using the autumn drench earlier, to keep worms out of the pens and create clean lambing pastures," Mark said.

Despite focusing on the way confinement has helped support a higher stocking rate and increased cropping area, Mark pointed out several other benefits they enjoyed.

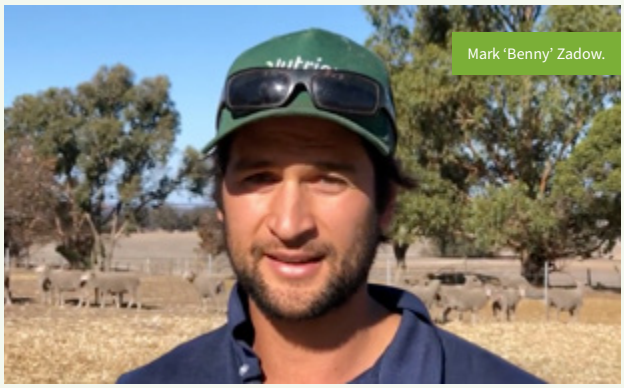
"Confinement is a great way to monitor flock health and more accurately control nutrition, better matching feed out to pregnant ewes' demands. There's huge time savings in feed out and husbandry, such as preg scanning and drenching, as the sheep are so close to the yards. If something goes wrong, you can see it and catch it fast," Mark said.

Overall, the Zadows admit they still have a lot to learn and could always do better.

"It's all about creating a reliable outcome for your system," Mark said.

They have indeed done this over the seven years they have refined their setup and have worked out how it fits into the overall sheep and crop enterprise.

"When we looked at the numbers, since starting confinement feeding, the property has increased its cropping area to 45%, while maintaining its sheep numbers. It's all due to confinement."



Mark 'Benny' Zadow.

The Zadows feed animals in confinement a combination of a lupin and oat mix as well as barley straw.

Animals in confinement are trail fed every second day and have access to calcium salt licks in the pens.

Confinement feeding – making it easy

Watch as Mark and other producers go through their confinement feeding systems and how they've been using it to defer grazing pasture during late breaks to the season. Scan the QR code to watch on Vimeo.

Access more information about this and other active and completed producer demonstrations by using the PDS search tool at **mla.com.au/pds-search**

EDGEnetwork

MLA's EDGEnetwork (EDGE) gives producers the opportunity to develop skills to improve their livestock enterprises through one- to three-day workshops.

These practical learning opportunities encourage producers to expand their current expertise through group learning and hands-on activities, applying the concepts to their own business as they go. Producers work in small groups that enable them to receive personalised training. The EDGE workshops have been developed by industry specialists and tested by producers Australia-wide to guarantee their quality and relevance.

There are eight courses currently available with two new courses launched during 2023–24.

EDGEnetwork courses:

- **Breeding EDGE:** A three-day workshop designed to help beef producers evaluate how their breeding program is currently performing and to consider opportunities for improvement.
- **Business EDGE:** A two-day financial and business management training workshop for cattle, sheep and goat producers that aims to enhance participant knowledge and skills in financial and business management.
- **Business EDGE Young Guns:** A two-day workshop for up-and-coming cattle, sheep and goat producers who are ready to build their business skills and confidence to manage a modern agricultural enterprise.
- NEW **Carbon EDGE:** A two-day workshop for red meat producers provides participants with an understanding of 'carbon' in agricultural systems and an action plan based on the opportunities for greenhouse emissions reduction and storage activities within a productive livestock grazing business.
- **Grazing Fundamentals EDGE:** A one-day workshop that gives cattle, sheep and goat producers a broad understanding of the environment in which they operate and the core principles behind successfully maintaining grazing land condition and long-term productivity.
- **Grazing Land Management EDGE:** Building on Grazing Fundamentals, a three-day workshop for cattle, sheep and goat producers to develop a thorough understanding of the grazing land environment in which they operate and the strategies they can apply to manage grazing, land condition and feedbase production.
- **Nutrition EDGE:** A three-day workshop providing a comprehensive look at ruminant nutrition to assist cattle, sheep and goat producers to better match pasture and feed options to their livestock needs.
- NEW **Southern Rangelands Grazing Fundamentals EDGE:** In partnership with the SA Arid Lands Landscape Board, Grazing Fundamentals has been adapted for the southern rangelands. This one-day workshop provides a regional perspective on grazing strategies and ruminant nutrition for beef and sheep producers. This program is supported through funding from the Australian Government's Future Drought Fund.

EDGE has delivered $511.6M* in total net benefits to participating producers as a result of workshops attended between 2015–2023. This includes $43.3M* of total net benefits identified for 2023. MLA's investment in EDGE since 2015 has delivered $35.5M in annual net benefits to producers in 2023–24.

On average, and depending on the area of practice change, northern beef producers participating in an EDGE workshop can expect an additional net benefit of between $10–$100/km^2 annually. Likewise, on average, southern producers participating in an EDGE workshop can expect an additional net benefit of between $0.14–$6.21/ha annually.

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

Producers build their perennial grass and shrub knowledge for grazing management and utilisation at one of the Southern Rangelands Grazing Fundamentals EDGE workshops – Coober Pedy, SA.

Producers gathered for the two-day Carbon EDGE workshop, providing participants with an understanding of 'carbon' in agricultural systems and an action plan based on the opportunities for greenhouse emissions reduction and storage activities within a productive livestock grazing business – Benalla, Victoria.

To find out more about the EDGEnetwork email: **edgenetwork@mla.com.au** or visit: **mla.com.au/edgenetwork**

EDGEnetwork 2023–24 highlights

655,134 sheep influenced by the EDGEnetwork

2.9M cattle influenced by the EDGEnetwork

90,580 goats influenced by the EDGEnetwork

545 producers engaged

48 workshops delivered

91% value rating

94% increased knowledge/skills

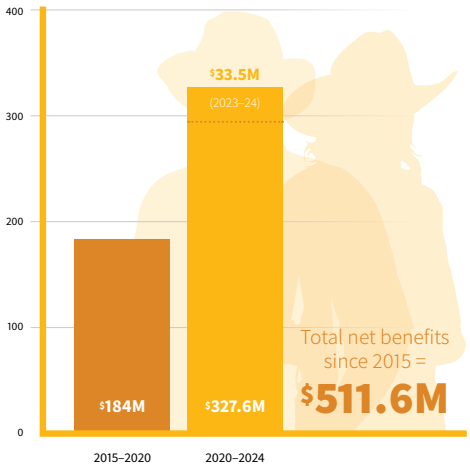
$0.14–6.21/ha average annual net benefit for participating southern producers

$10–100/km² average annual net benefit for participating northern producers

74M hectares of Australian agricultural land influenced by the EDGEnetwork

93% of producers planned to make changes following workshops

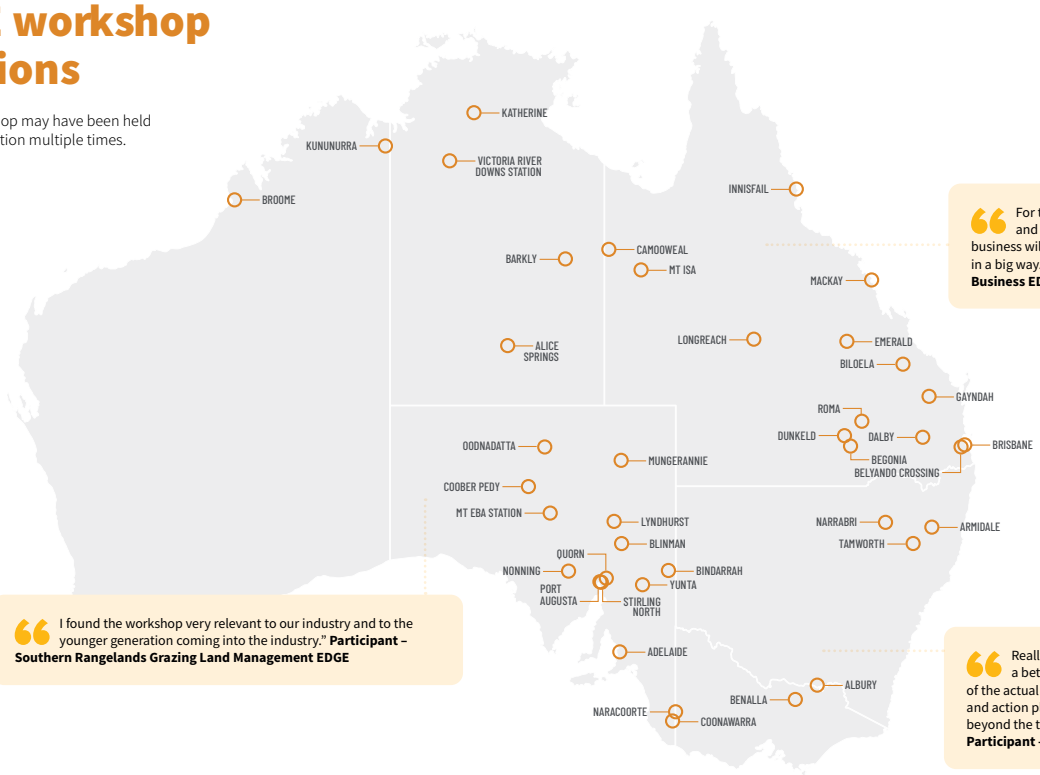
Total benefits* delivered to producers via the EDGEnetwork



*Calculated as net present value of adoption to 2045, discounted at 5% pa

EDGE workshop locations

An EDGE workshop may have been held in the same location multiple times.



"For two days of my time and money I think our business will financially benefit in a big way." **Participant – Business EDGE**

"I found the workshop very relevant to our industry and to the younger generation coming into the industry." **Participant – Southern Rangelands Grazing Land Management EDGE**

"Really helped me to gain a better understanding of the actual accounting process and action planning to move beyond the theoretical." **Participant – Carbon EDGE**

To find out more about the EDGEnetwork visit: **mla.com.au/edgenetwork**

CASE STUDY

Best practice farming goes hand in hand with reducing carbon emissions

It's been a challenging year on Nick Radford's South Australia property, but despite dry conditions keeping him busy, Nick is keeping one eye on his business' future.

Nick and Miranda Radford's Angus cattle are rotationally grazed on small paddock areas of about 30 hectares across their South Australian farm.

When it comes to ensuring his business prospers in the long term, Nick is focused on addressing emissions within his operations, and attended an MLA Carbon EDGE workshop to learn how.

"I wanted a better understanding of it all, particularly carbon credits and carbon trading," Nick said.

"I felt like I was a bit naïve to all of it, but knew it was something I wanted to be across."

At his family enterprise near Penola, SA, keeping up with industry best practice has always been an important consideration.

"As a producer, we're always trying to find the next thing to do properly and stay ahead of the curve, and this is one of the areas which is going to get a lot of traction going forward," he said.

"We wanted to get in early and find out a bit more about it all to maximise the benefit to our business."

Making a move

After months of managing the dry period, there's been little time for Nick to focus on implementing any new processes within his business.

When time allows, his priority will be working towards a new benchmark for his business – measuring the carbon emissions on his property.

"Our energy is focused on business survival at the moment, but then we'll look at getting a third party in to measure our emissions," Nick said.

Despite the delay, Nick's carbon journey isn't stagnant.

"Carbon EDGE explained a lot of misconceptions I had about what it would mean for my business," Nick said.

"What I learned is that best farming practice aligns with the practices of carbon sequestration.

"It turns out we were already doing a lot of the basics, so as far as implementation, there's probably not much we're going to change, other than measuring it."

Having worked towards best practice for a long time, a lot of strategies and processes have already been implemented.

"We have a lot of shelterbelts on our farms, a lot of scattered trees, and we lock up some more natural areas, although at the moment they're not measured for carbon sequestration."

After tying together those elements by measuring the impact they're having, Nick is hoping his efforts will work towards a bigger goal.

"In the long term, it would be great to work towards being carbon neutral. We're a cattle-only business, so methane is something we're eager to address."

"Hopefully applying what I learned at Carbon EDGE and continuing what we were already doing will help move us towards carbon neutrality."

Getting a leg up

During the two-day workshop, Nick was part of a group of producers who learned everything from the basic terminology and concepts to developing a carbon action plan tailored to each individual's enterprise.

"The workshop was filled with like-minded and open-minded producers, and to hear everyone else in a candid environment asking the questions that I had, but though might have been silly was really valuable," Nick said.

"It was a great opportunity to learn more about it amongst people who knew just as little as me."

The Carbon EDGE workshop, which launched in early 2024, was developed by people within the industry to ensure it was practical and applicable to all producers.

The workshops are aimed at providing the knowledge and skills required as the red meat industry works towards reducing emissions on-farm.

Nick said that taking the time away from his property to build his skills will be invaluable for his business.

"Like anything new, it will be a slight challenge while we build up our knowledge, but the more you do, the more of a leg up it is."

"When it comes to carbon emissions and a producer's footprint, it's something they need to measure and move forward with to ensure best practice and accountability."

To find a Carbon EDGE workshop near you visit: **mla.com.au/carbon-edge**

"The workshop was filled with like-minded and open-minded producers, and to hear everyone else in a candid environment asking the questions that I had, but though might have been silly was really valuable."

BredWell FedWell

BredWell FedWell (BWFW) is a practical, one-day introductory workshop on how productivity and profitability can be improved through good breeding and feeding over the livestock production cycle, with a specific focus on profit drivers. Producers can use the outcomes of the workshop to develop a genetics and nutrition regimen suited to their environment and markets to boost profitability.

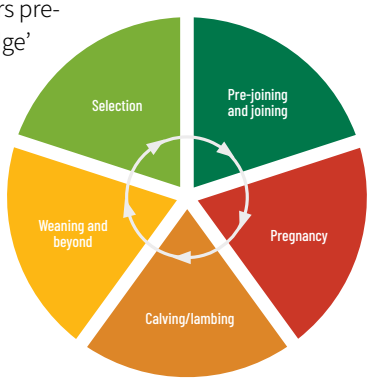
BredWell FedWell
Breeding and feeding to maximise profit

BWFW review and redevelopment

On the back of a decade of success, the BWFW workshops have been redeveloped to reflect evolving best practice genetics and nutrition management. Following review by an expert panel, and piloting of the course in three locations, workshops were nationally available for commercial delivery in the 2023–24 financial year.

Workshop structure

The structure of the workshop will utilise the breeding and feeding production cycle which covers pre-joining and joining, pregnancy, calving/lambing, weaning and beyond, and selection. Each 'wedge' in the cycle represents a major decision point in a producer's commercial enterprise, where consideration of both breeding (genetics) and feeding (nutrition) is required.



Workshops are hosted on-farm and aim to improve the knowledge and skills of producers so they can:

- develop a customised breeding plan for their livestock enterprise aligned to their profit drivers
- identify sires and select animals that help them meet their objectives
- feed animals well to achieve their objectives and maximise their genetic investment.

Delivery of workshops

The workshops are designed for a range of sheep production systems, as well as northern and southern beef. They are rolled out nationally via a network of trained and accredited deliverers.

BWFW 2023–24 highlights

134,500 sheep influenced by BredWell FedWell

220,818 cattle influenced by BredWell FedWell

347 producers engaged

35 facilitators engaged

19 workshops delivered

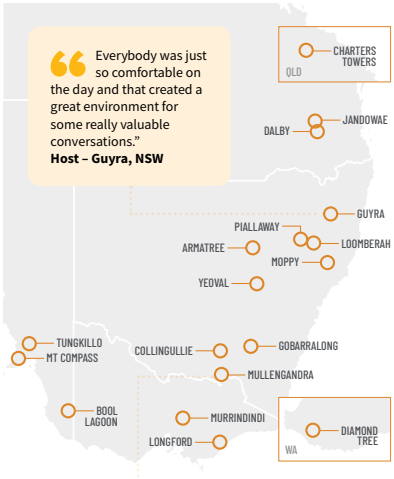
90% value rating

88% increased knowledge

969,035 hectares of Australian agricultural land influenced by BredWell FedWell

94% of producers plan to make changes after workshops

BWFW locations



> Everybody was just so comfortable on the day and that created a great environment for some really valuable conversations."
> **Host – Guyra, NSW**

> Rams will make the biggest difference to your flock and ASBVs are critical to finding the right sires to deliver well rounded animals." **Participant – Mullengandra, NSW**

Find out more about attending or hosting a workshop at: **mla.com.au/bwfw**

CASE STUDY

Business gains through BredWell FedWell

Breeding and feeding Angus cattle has been in the White family's DNA for more than a century, so it should come as no surprise their recent experience hosting a BredWell FedWell event proved to be a huge success.

NSW producers Sam and Kirsty White – together with their young sons Abbott and Arthur – are proud to continue the family tradition at 'Bald Blair', their Angus stud and commercial cattle enterprise in the New England Tablelands.

These days, the Bald Blair Angus Stud is the enterprise's main profit driver, capitalising on the strong demand for bulls across the eastern seaboard, but Sam said this hasn't always been the case.

"We're always responding to the market forces at play in our business and in 2019, the cost of feed saw us reduce our commercial herd by selling off the adult stock," Sam said.

"Our goal at the moment is to regrow our commercial herd as quickly as possible in order to rebalance the diversity of our income streams and reduce our risk exposure."

An opportunity to share and connect

Sam had attended a BredWell FedWell event previously and was impressed by the experience. The couple thought hosting their own event would be a great opportunity to get together with some of the people who had supported their business over the years.

"The BredWell FedWell program definitely takes a broad industry focus, but we also saw it as a chance to share really valuable information with some of our clients and let them see what we are doing in the business," Sam said.

A simple process

After responding to an expression of interest circulated by the Angus Society, the Whites were put in touch with Schuster Consulting who connected them with Nancy Crawshaw, a BredWell FedWell accredited deliverer and extension officer with Angus Australia.

Sam liaised with Nancy prior to the event to get an understanding of what was required to prepare their animals and their property for the on-site demonstrations which would take place during the workshop.

Enriched by lived experience

"Nancy and Sam worked so well together on the day because they really respect each other's knowledge," Kirsty said.

"If there's rapport between your presenter and your host producer, then everybody benefits because you get some realistic scenarios out there for discussion – the good, the bad and the ugly.

"Nancy would ask Sam about his experience with different things and then he'd share his perspective which added a practical aspect to the theory," she said.

"Then you'd get one of the more experienced commercial cattlemen adding their experience to the mix and it would generate a great discussion."

Expert facilitation

More than 20 producers attended the 'Bald Blair' workshop – the Whites said they were all impressed by the quality of Nancy's presentation, as well as her ability to facilitate discussions on the different topics and deliver real peer-to-peer learning.

"It ended up being quite a diverse group, ranging from experienced cattlemen to those just starting out, some were owners, some were managers, and some were being managed," Sam said.

"Everyone was at a different stage in their development, and they brought very different perspectives or experiences to the table."

Kirsty said the program was able to adapt to the different levels within the group and the diversity of experience seemed to enhance the learning opportunities thanks to Nancy's excellent facilitation of the event.

"Everybody was just so comfortable on the day and that created a great environment for some really valuable conversations."

"The BredWell FedWell program definitely takes a broad industry focus, but we also saw it as a chance to share really valuable information with some of our clients and let them see what we are doing in the business."

Sam and Kirsty White (centre) with sons Abbott (18) and Arthur (14). Image: Al Mabin.

Find out more about hosting your own BredWell FedWell workshop at: **mla.com.au/bwfw**

BeefUp

BeefUp forums are an opportunity for northern Australian beef producers to:

- hear about the latest red meat research, development and adoption programs
- interact with expert speakers including leading producers, advisors and researchers
- access tools and insights tailored to the needs and interests of producers in the local area
- identify the next steps they can take to drive profitability and productivity on-farm.

BeefUp has delivered $54.6M* in total net benefits to participating producers as a result of forums delivered between 2015–2023. MLA's investment in BeefUp since 2015 has delivered $2.9M in annual net benefits to producers in 2023–24.

On average, and depending on the area of practice change, this means producers can expect an annual benefit of between $1.16 and $2.83/hd when implementing new tools or practices as a result of their attendance.

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

BeefUp 2023–24 highlights

902,801 cattle influenced by BeefUp forums

183 forum attendees

101 producers engaged

4 forums delivered

90% value rating

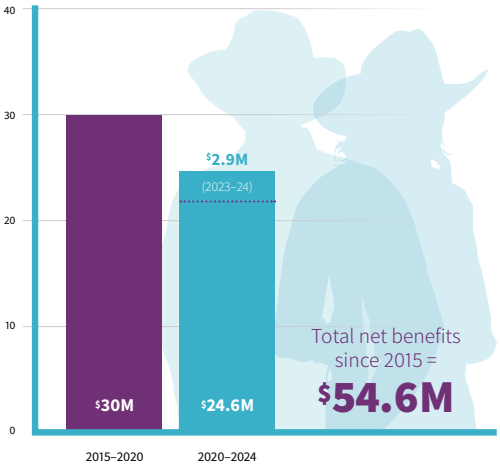
86% increased knowledge/skills

$1.16–$2.83/hd average annual net benefit for participating producers

20M hectares of Australian agricultural land influenced by BeefUp forums

87% of producers plan to make changes after a forum

Total benefits* delivered to producers via BeefUp forums



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

BeefUp forum locations

To find out more about BeefUp forums visit: **mla.com.au/beefup**

ALICE SPRINGS Desiree Jackson – livestock management consultant, conducted a rumen dissection during her weaner nutrition presentation.

FITZROY CROSSING MLA's Michael Laurence – Program Manager Animal Wellbeing, walked attendees through a bull soundness assessment.

NEWMAN MLA's Jenny Lim – Project Manager - Environmental Markets and Sustainability, unveiled the new Environmental Credentials Platform, an accessible (low to no cost), user-friendly way for producers to show how their on-farm practices result in maintained or improved environmental sustainability.

BARKLY Dan Chapman – AACo, Rangelands Team, Tim Gentle – Think Digital and Phil Tickle – CiboLabs, talk about where your technology can go next at the 'AgTech – where to next?' panel discussion.

MeatUp

MeatUp Forums are MLA's flagship awareness events for southern Australia and deliver the latest information in red meat research, development and adoption (RD&A). MeatUp Forums are individually developed with input from beef, sheep and goat producers via regional working groups.

MeatUp Forums have been delivered since 2021. 88% of attendees indicated they plan to make a practice change following attendance at MeatUp Forums and the value of attending events was scored, on average as 8.7/10.

Held predominantly throughout southern Australia, these forums introduce producers to the outcomes of MLA research and development projects and the next steps to drive profitability and productivity on-farm.

MeatUp has delivered $16.6M* in total net benefits to participating producers as a result of forums delivered since MeatUp began in 2021.

On average, this means producers can expect an annual return of between $0.14 and $14.88/hd as a result of implementing new tools or practices learnt from their attendance.

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

MeatUp 2023–24 highlights

396,265 sheep influenced by MeatUp forums

71,568 cattle influenced by MeatUp forums

225,045 goats influenced by MeatUp forums

2 forums delivered

152 producers engaged

204 forum attendees

$0.14–14.88/hd average annual net benefit for participating producers

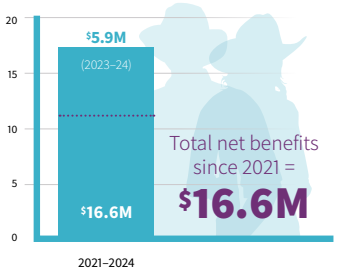
86% value rating

78% increased knowledge

1.5M hectares of Australian agricultural land influenced by MeatUp forums

64% of producers plan to make changes after a forum

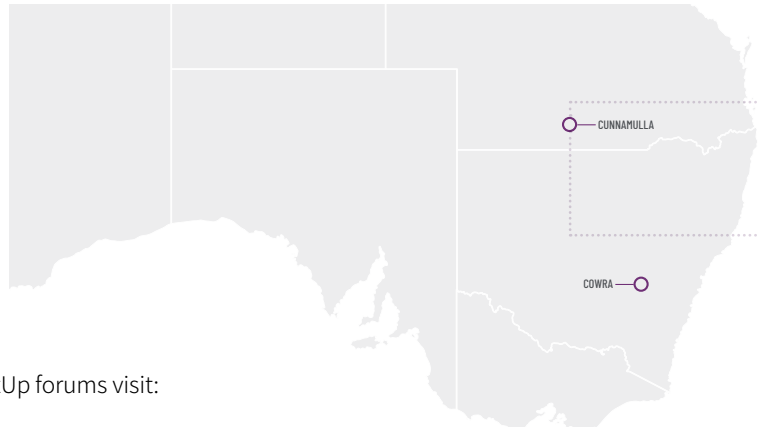
Total benefits* delivered to producers via MeatUp forums



*Calculated as net present value of adoption to 2045, discounted at 5% pa

MeatUp forum locations

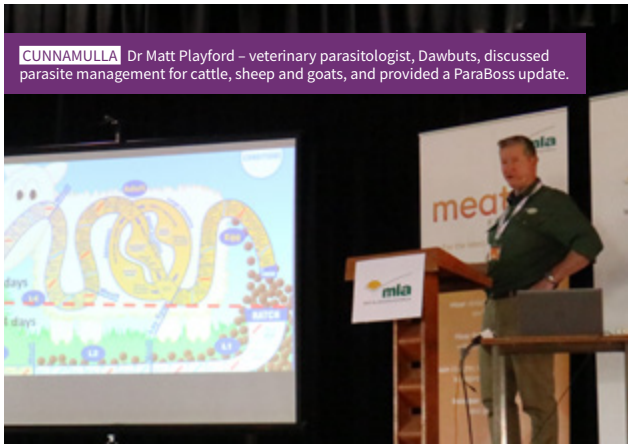
MeatUp forums have been initiated in NSW, WA and SA. MLA supports and participates in existing producer awareness programs in Tasmania and Victoria.



"Great event, great food and atmosphere." **Participant – Cunnamulla MeatUp forum**

"I thought it was excellent. No other opportunities in this area to see so many professionals come together to give advice." **Participant – Cunnamulla MeatUp forum**

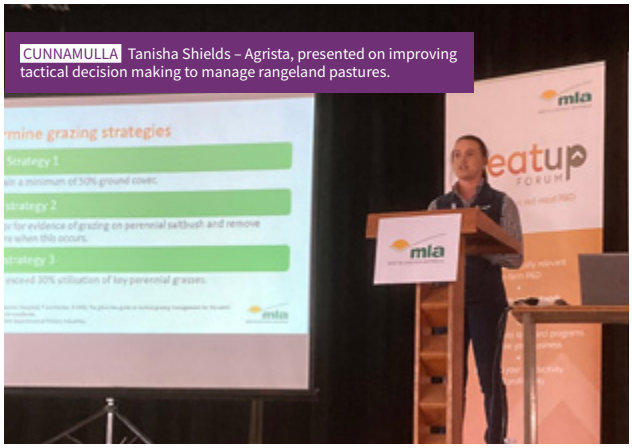
To find out more about MeatUp forums visit: **mla.com.au/meatup**



CUNNAMULLA Dr Matt Playford – veterinary parasitologist, Dawbuts, discussed parasite management for cattle, sheep and goats, and provided a ParaBoss update.

CUNNAMULLA MeatUp attendees can also find out about other MLA programs, relevant on-farm R&D and initiatives that can improve their businesses.

CUNNAMULLA The MeatUp forum presents clear and practical ideas, information, and tools that producers can take home and put into practice on-property.



CUNNAMULLA Tanisha Shields – Agrista, presented on improving tactical decision making to manage rangeland pastures.

COWRA Dr Brad Walmsley – NSW DPI, discussed improving within-breed genetic evaluation and developing multi-breed genetic evaluation with the Southern Multi Breed Project.

COWRA Dr Jillian Kelly – Animal Health Nutrition Consulting, presented on pain management in sheep and cattle.

COWRA Attendees toured the Cowra Agricultural Research and Advisory Station, seeing the pasture agronomy trial and livestock trial sites featuring current projects to develop productive and resilient livestock systems.

Digital adoption programs

Webinars and podcasts

All webinars are available on the MLA YouTube channel: youtube.com.au/meatandlivestock

Productivity and profitability media series

Following previous successful webinar series, the Productivity and Profitability media series was redesigned to incorporate podcasts and allow further accessibility for listeners. In partnership with Agrista, the new series was launched in the winter of 2023 and has continued to provide new and topical information that can assist red meat producers to increase the productivity and profitability of their businesses. Over the course of the year, 12 webinars and 12 podcasts have been delivered and continue to be available as online recordings (webinars) and podcasts.

Some of the topics covered over the year include:

- The 'so what' of carbon in agriculture
- Human agronomy in agricultural businesses
- Assessing and managing business risk
- Containment feeding of livestock.

To watch and listen or register for a webinar visit: **mla.com.au/pandp**

FutureBeef webinar series

FutureBeef is a collaborative program between MLA and the governments of Queensland, the Northern Territory and Western Australia, working together for a profitable and sustainable northern beef industry. FutureBeef webinars share the latest practical tools, scientific insights and relevant, timely advice.

Some of the topics covered in the series throughout 2023–24 include:

- Preparation for transport and setting cattle up for optimum performance and health
- Profitability of supply chain options for beef producers: a Western Australian case study
- Northern Australia Coordination Network – Enhancing preparedness for emergency animal diseases in northern Australia
- Feeding Leucaena for maximum beef profit – where can it grow, tips on establishment and what can help maximise the grazing benefits
- Pasture dieback: Outcomes from seven years of Queensland Department of Agriculture and Fisheries (QDAF) research, development and extension across Queensland
- Introducing 'Paddock Power' – a new computer tool for planning your paddock development.

Watch the FutureBeef Webinars at: **futurebeef.com.au/resource-type/webinars**

ParaBoss webinars and podcasts

ParaBoss is the national resource for sheep, goat and cattle parasite control in Australia, providing information on parasites through its suite of products; WormBoss, FlyBoss, LiceBoss and TickBoss. It is a jointly owned venture between MLA, Australian Wool Innovation (AWI) and the University of New England (UNE).

The ParaBoss webinar series was designed to complement and extend information provided through the web platform: **paraboss.com.au**

Some of the topics covered in the webinar series throughout 2023–24 include:

- Silent killer – Hydatids in Australian cattle.
- Getting a jump on ticks this spring.
- Are you ready for this year's worm season?
- Effective flystrike management in sheep.
- Management of cattle tick and tick fever.
- Seasonal worm update.
- Proactive management for sustainable parasite control.
- Liver fluke.
- Using pasture management for worm control.
- Controlling buffalo flies and fly lesions: What have we learned?

Watch and listen to the ParaBoss webinars at: **paraboss.com.au/webinars-videos-podcasts**

Livestock Advisor Updates webinar series

Designed to complement the Livestock Advisor Updates program, this webinar series covers topics from consulting tips to feed budgeting.

Scan or click the QR code to watch Livestock Advisor Update webinars.

During 2023–24:

7,008 registrations

28 webinars

1,012 attendees

85% satisfaction rating

61% intent to change

Online resources

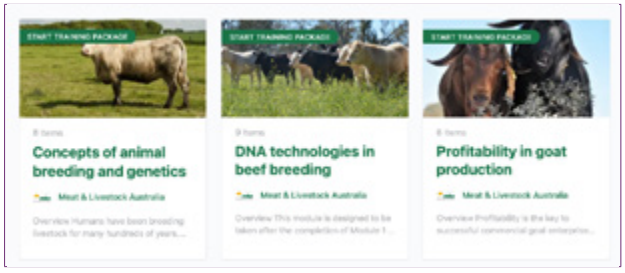
The toolbox

This online learning platform facilitates the delivery of capability building packages for red meat producers and livestock advisors. Users can work through training packages at their own pace and pick and choose the content that is suitable for their production system.

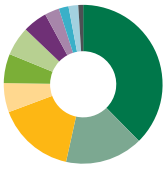
Available to use anytime and anywhere, it provides practical opportunities for knowledge and skills-building across a range of topics.

In 2023–24, 13 new packages were added to 'The toolbox' across five topics, including:

- Climate and resilience
- Sustainability and environment
- Livestock Genetics
- Goat production
- Grazing management.



During 2023–24:



8,789 toolbox users

- Beef producers **38%**
- Sheepmeat producers **16%**
- Other **16%**
- Extension officers **6%**
- Sheep/beef and cropping producers **6%**
- Livestock advisor/consultants **6%**
- Researchers **5%**
- Goat producers **3%**
- Livestock agents **2%**
- Veterinarians **2%**
- Cropping producers **1%**

13 new training packages

53% increased knowledge

83% satisfaction rating

84% value rating

70% intent to change/advise

Start exploring new resources today at The toolbox: **elearning.mla.com.au**

ParaBoss

During 2023–24 ParaBoss delivered four ParaBoss for cattle workshops in Casino NSW, Albany WA, Clermont QLD, and Katherine NT. ParaBoss also delivered and four WormBoss for sheep workshops in Glen Innes NSW, Mount Barker SA, Naracoorte SA, Mount Barker WA, and Clare SA. The workshops covered best practice management and the development of an annual management plan for staying on top of internal and external parasites.

During 2023–24, producer communication and training have been the core activities to engage with producers. These include:

- The *Boss Bulletin*
- ParaBoss webinar series
- ParaBoss Facebook page
- ParaBoss Sheep Certificate Management course.

Key achievements for this period include:

- More than 82,000 users have visited the website.
- More than 550 new email subscribers to the *Boss Bulletin*.
- The Facebook account has received a total of 178,434 impressions and 6,831 engagements on the 154 posts.
- Seven webinars were held, with 1,270 registrations and a satisfaction rating of 8.53 out of 10.

As of May 2024, 304 people have completed the ParaBoss Sheep Parasite Management Certificate facilitated by UNE, who are then listed on the ParaBoss website as an accredited ParaBoss advisor (for sheep).

Visit Paraboss at: **paraboss.com.au**

Accelerate Genetics Hub

The Accelerate Genetics hub (Genetics hub) is a one-stop-shop for commercial producers looking to boost their productivity through genetic tools. It contains a suite of practical and easy to understand videos on how breeding values can assist in sire purchasing decisions.

In 2023–24 new videos were added to the Genetics hub. These include videos on understanding flock and herd profiling and Genomic Breeding Values (GBVs). Existing videos have been updated to reflect developments in the Sheep Genetics and BREEDPLAN websites in terms of their function and how to use selection indexes.

Producer case studies also feature on the Genetics hub to share the journey of using breeding values to accelerate livestock performance.

The Genetics hub will be continuously updated with new videos and resources as more genetic tools become available.

Visit the Genetics hub at: **genetics.mla.com.au**

Livestock Advisor Network

Building the capacity of livestock advisors is a core component of MLA's adoption strategy. Livestock advisors play a critical role in exposing producers to new practices, products and technologies and supporting them to implement these practices or products into their businesses.

Livestock advisors are defined as someone who provides red meat producers with advice as a core part of their role, including private consultants, public extension officers, stock agents, agronomists and veterinarians. Upskilling livestock advisors provides MLA with another avenue to ensure that producers can implement the latest research findings, new technologies or best practices on-farm.

The Livestock Advisor Network consists of multiple programs funded through MLA to engage and upskill people providing advice to red meat producers. Australian livestock advisors work with an average of 20–50 producers each per year. As such, an investment into capability building within this cohort results in a multiplying effect.

The quarterly e-newsletter *The Advisor*, provides information on the latest news and events for livestock advisors across the country. Sign up at: **mla.com.au/enews**

Livestock Advisor Network 2023–24 highlights and locations

9 workshops delivered

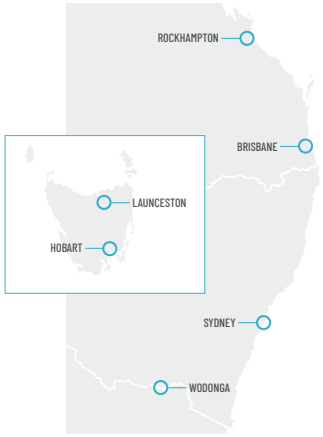
85 advisors engaged

92% value rating

80% of advisors expressed confidence in sharing advice learnt with clients

Service provider and supply chain program 2024 intake 1 at Wodonga sale yards. This national program is run in collaboration with MLA and the RMA network and is delivered through Wodonga TAFE.

Livestock Advisor Network workshops may have been held in the same location multiple times.



> "Jill's session was truly life changing; there is a life before and a life after Jill's session and I'm excited to embark on that journey." **Participant – Influence and impact, Brisbane**

> "The actual activities of assessing the market grids and determining which market specs the animals can fit into was very useful and helped with understanding!" **Participant – Meating the market, Brisbane**

> "Great workshop. Really enjoyed critical thinking and looking further than just the average overview." **Participant – Building blocks of business, Sydney**

Livestock Advisor Updates

These updates are regionally relevant, one-day technical workshops held across Australia. The workshops provide opportunities for livestock advisors, leading producers and professional extension consultants to learn about the latest red meat R&D, gain skills, tools and knowledge to increase their offerings to clients and network with their peers.

No Livestock Advisor Update (LAU) events were held during 2023–24. MLA is aiming to deliver events during the 2024–25 financial year.

To find out more about LAU visit: **mla.com.au/advisor-updates** or email: **getinvolved@mla.com.au**

Livestock Advisor Essentials

Livestock Advisor Essentials (LAE) is a nationally delivered professional development program designed for early career professionals involved in the livestock industry. The program is delivered over the course of six months via three face-to-face workshops. LAE is delivered in one Australian region per year with content altered to suit regionally relevant production systems. During the 2023–24 financial year, the northern and southern programs were delivered, with northern events delivered towards the end of 2023 and southern events delivered during June 2024.

The program is designed to teach livestock business fundamentals, develop knowledge, skills and confidence and connect participants with other livestock advisors.

LAE workshops have been developed by industry specialists. Five focus areas across three workshops are currently on offer:

- **Optimising pasture production**: Participants gain knowledge and confidence in the key aspects of feedbase management to equip them to better support their producer clients.
- **Building blocks of business**: Participants build confidence and skills in financial literacy, critical thinking and the ability to do simple cost-benefit analysis to support decision making.
- **Fundamentals of reproduction and genetics**: Participants gain knowledge in the key principles of reproduction and genetics relevant for livestock businesses and how advisors can support them through important decisions.
- **Meating the market**: Participants learn how to analyse customer feedback and assist their clients to identify and discuss possible on-farm solutions to compliance issues.
- **Influence, impact and extension**: Participants will learn the fundamentals of human engagement, processes and frameworks for sustained influence and understand what makes for effective extension in the agricultural space.

To find out more about LAE email: **livestockadvisoressentials@pinionadvisory.com** or visit: **mla.com.au/advisor-essentials**

Livestock Consulting Internship

The Livestock Consulting Internship is designed to provide participants with the industry experience, foundational skills and knowledge they need to accelerate their livestock consulting careers. This program provides valuable personal development support, practical skills and access to industry networks while the participants navigate the first few years of their consulting careers.

Over the two-year program, participants also conduct an industry research project, which gives them a real-world understanding of the implementation of R&D and how information is used to create extension and adoption materials.

Since launching in 2017, 39 consultants have graduated from the program. 95% of these graduates have remained in the red meat industry, with 83% of them pursuing a career as a livestock consultant. Each graduate consultant works with an average of 50 individual clients, leads an average of seven producer groups and impacts approximately 385 businesses per year. Of the 39 consultant roles filled since the launch of the program, 80% of these were an additional headcount to their employers' businesses.

The fourth instalment of the program finished up in June 2024, with the nine livestock advisor graduates coming from consulting and pastoral businesses across Australia. During the two-year program, interns were upskilled in technical and interpersonal areas, as well as across MLA's Carbon Neutral 2030 (CN30) and Northern Breeder Business (NB2) initiatives.

To find out more about the Livestock Consulting Internship email: **getinvolved@mla.com.au**

Service provider and supply chain training program

Livestock agents have been identified as a core source of advice for producers through the Genetics Insights Survey, Global Adoption Review and MLA Livestock Advisor Adoption Strategy, with up to 90% of producers identifying agents as a primary source of advice.

The Service provider and supply chain/Certificate IV in Agriculture – Agricultural Services and Supply Chain – Stock and Station Agent, as offered by Wodonga TAFE (RTO 3097), is now in its 13th year of delivery. Since inception, more than 300 participants have been involved in the program as have facilitators and industry representatives from across Australia.

A new three-year project has seen MLA partner with Rural Marketing Agents (RMA) to deliver the program through Wodonga TAFE with the aims of upskilling agents, increasing knowledge and uptake of MLA tools and resources, and increasing the technical value offered as part of their services. The partnership will provide development pathways for future livestock agents and ensure that they align with future industry requirements such as industry integrity systems and sustainability requirements. This will contribute to the creation of the next generation of agent and service providers and will arm them with the required tools for the job.

CASE STUDY

Professional development program packs a punch

Participating in the 12-month Livestock Advisor Essentials (LAE) professional development program gave Queensland veterinarian Dr Jo Connolly the confidence, capability and connections to take her business to the next level.

Dr Jo Connolly, Veterinarian and livestock reproduction consultant, Koumala, Queensland.

Jo Connolly graduated from a vet science degree at James Cook University in Townsville in 2016. She then spent four years in Western Australian as a young cattle vet, gaining experience in the industry and strengthening her skills, whilst at the same time studying a masters in agribusiness management through Charles Sturt University.

In 2021, Jo returned to Queensland to start her own business, Impact Veterinary Services, a mobile cattle veterinarian business with a focus on reproduction.

"I have always wanted to support progressive beef producers with adoption of best practice to improve business productivity and profitability, and in turn build industry sustainability," Jo said.

> **"In addition to delivering their content, the presenters were open about how their businesses run and the income you need to generate to run a successful business — that has been invaluable."**

For Jo, the Livestock Advisor Essentials program offered the opportunity of wholistic learning about how to support beef producers.

The program delivered content across six key focus areas:

- feedbase
- business
- genetics
- reproduction
- value chain
- people.

Drawing it all together

With most of her technical expertise in animal health and business, Jo was conscious of her lack of knowledge and experience in pastures and markets.

"I would like to build my business to the point where I can offer veterinary services as well as support clients with business decision making to improve their productivity and profitability," Jo said.

"The LAE course has helped me draw all the pillars together and understand the links between the facets of business."

Fostering connections

Jo believes the combination of high-quality content and industry connections she developed during the program will be invaluable to her growing business.

Not only does she feel she has the tools to support her clients in a more 'whole-of-business' capacity, but she also has a network of professional connections to lean on when she needs support.

"The program has certainly helped expand my professional networks in a way I would never have been able to achieve operating in isolation across Queensland," Jo said.

"There were plenty of opportunities to foster both social and professional interactions with participants and the presenters."

"In addition to delivering their content, the presenters were open about how their businesses run and the income you need to generate to run a successful business — that has been invaluable."

Power of communication

Aside from the technical knowledge Jo has developed, she feels that another area of growth was through the workshop with Jill Rigney, from The Right Mind.

"Jill has the ability to explain human behaviour in a way you have never thought of before," Jo said.

"I have taken away a range of practical techniques, which I not only use when working with my clients, but in my personal life as well."

"I know I will be able to take into interactions with clients the techniques Jill has taught us to manage difficult conversations."

Jo couldn't speak more highly of her experience with the Livestock Advisor Essentials program.

"I got so much out of the program. It was perfectly timed in my career — well delivered, engaging and the presenters were great. I highly recommend it for any other individual from any background," Jo said.

For more information email: **livestockadvisoressentials@pinionadvisory.com** or visit **mla.com.au/advisor-essentials**

Participants from LAE workshop in Toowoomba. Left to right: Erin O'Brien, Shannon Byrnes and Esmée de Looff.

Integrated R&D and customised adoption initiatives

Investments into adoption and extension continue to increase through incorporation into on-farm research and development projects. These integrated programs have been created with the intention of fast-tracking the adoption of research outcomes, as well as utilising or adding to the existing suite of MLA adoption products. Some of these programs are outlined below.

Pasture dieback management strategies for the Northern Rivers region

This project aims to engage producers in trials of novel approaches to manage pasture dieback. Through identification of appropriate pasture species and fertility management, the trials aim to maintain groundcover and sustain feed on offer on pasture dieback affected land in the North Coast region of NSW.

This project will demonstrate a network of pasture species trials on 10 properties across the 570,000ha region of the North Coast, and will help producers adopt them at commercial scale through peer-to-peer learning activities. The project will have an impact through improved producer adoption of key pasture species relevant to combat pasture dieback and pasture rundown while also supporting producers to identify and manage these species to achieve on-farm practice change.

The project will lead to the development of regionally relevant support tools for producers to drive a more data-driven approach to pasture re-establishment, species selection and seed purchases. This activity will also generate a greater understanding of the skill and knowledge levels of producers for use of farm-level measurement and monitoring in these areas.

The project will have an impact through improved producer adoption of key pasture species relevant to combat pasture dieback.

To be kept informed of the progress of this project and opportunities to become involved, register your interest via email: **helen.mcgregor@scu.edu.au**

Sorghum at the Rokewood trial site.

Innovative Mixed Farming Demonstration

Southwest Victorian mixed farming producers are looking to grow their businesses by upskilling in pasture agronomy and grazing management. This project aims to accelerate the rate of adoption of improved feedbase management by targeting these producers and their cropping agronomists and merchandise providers. The results of this project will be an increase in the profitability and resilience of farms in Southern Australia through an increase in livestock numbers and the productivity of those animals.

The project to date has focused on compiling trial results from 10 trials at the Rokewood feedbase demonstration for the purpose of extension, designing four new trials, one of which has been sown, and setting up an extension program. Four short extension events have been delivered to 30 different producers and 61 cropping agronomists, utilising results from the Rokewood trials which are designed around pasture production principles.

The project aims to enhance knowledge and understanding of productivity constraints in southern Australia through improved knowledge management practices on-farm, utilising trials, demonstrations, and skill-building activities.

To be kept informed of the progress of this project and opportunities to become involved, register your interest via email: **lmiller@sfs.org.au**

Queensland Pasture Resilience Program

In Queensland there are multiple threats to production. Land degradation from overgrazing, pasture nitrogen rundown resulting in production declines of ~50%, pasture dieback, weed incursions and woody regrowth, are interconnected issues that are collectively decreasing land condition and pasture productivity across the state.

The Queensland Pasture Resilience Program (QPRP) is a $24.4 million partnership with Queensland Department of Agriculture and Fisheries (QDAF) that began in 2023. It is designed to help grazing businesses address the issues above through a range of integrated research, development and adoption activities across Queensland.

These activities have a particular focus on:

- improving producer use of legumes, which not only provide nitrogen to address pasture rundown but are also resistant to pasture dieback
- identification and improvement of pasture dieback management practices including testing resistance of grass species to dieback
- improved grazing management practices to help restore paddocks in poor land condition
- widespread support of producers in understanding and implementing new practices through on-farm demonstration sites, field days, workshops, neighbour days, 1:1 support and loans of equipment.

In 2023–24, the QPRP saw extension activities rolled out across Queensland to improve grazing land management practices. Since July 2023, the program has engaged 697 producers managing over 1,300,000 cattle and 80,000 sheep and goats across more than 15 million hectares.

The North Queensland Pasture Resilience Program (NQ PRP) team held a combined pasture legume field day in Richmond.

For more information about the program visit:
futurebeef.com.au/resources/qprp

One of the four core producers, Julie and Glenn Humbert, 'Gurrawarra', Bourke NSW manage challenges through daily and weekly monitoring of the landscape and rain conditions, using grazing charts and monitoring the number of feed days ahead.

Rangelands Living Skin

The Rangelands Living Skin project is investigating the regeneration of the NSW rangelands to support livestock production now and into the future. It brings together producers, researchers and advisors to identify practical, cost-effective solutions to deliver benefits for soil, plants, animals and people – the living skin of the rangelands.

The project is demonstrating and validating rangeland management innovations designed to enhance the environmental and economic sustainability of grazing businesses in the rangelands. Activities are underway to investigate management practices designed to increase carrying capacity, pasture species composition, groundcover and soil carbon.

Replicated trials have been established on the properties of four core producers across western NSW. Trials have been designed to include combinations of mechanical soil disturbance, herd disturbance using livestock, the introduction of seed, the application of bio-stimulants and the application of biochar as a means of increasing pasture production and landscape function. These properties will act as demonstration sites for the region. Observational research sites have also been established on the same four properties to assess how landscape position, groundcover variables and grazing management, influence soil function and organic carbon levels. Ultimately, this information will be collated to inform natural capital metrics and measurement methodologies specific to the southern rangelands.

A total of 30 producers are engaged in the project, representing over 960,000 hectares.

Through trials, demonstrations and significant skills and knowledge building activities, the project aims to influence management practices within the producer network to increase their productivity, sustainability and profitability. Project findings will be available from late 2024.

For further information about this project email:
luke.beange@dpi.nsw.gov.au

Bullseye 2 Livestock Productivity

This project is a customised, group-based learning project being delivered in the southern rangelands of Western Australia to support pastoralists in improving livestock productivity while maintaining or increasing landscape condition. Extensive areas, a highly variable climate, non-domestic grazing pressure and increasing predation risk have created significant challenges for WA pastoralists, with many transitioning from sheep to cattle production over the past 10 years.

The project involves two producer groups, based in the Murchison and Goldfields regions respectively. Twenty pastoral businesses have been engaged, covering 4.5 million hectares. Groups meet both virtually and in-person to build skills and knowledge that can be implemented on-station with the support of a group facilitator and technical experts in pastoral production systems. The project focuses on utilising known best practice management strategies to increase livestock productivity through avenues such as increasing mustering efficiency, reducing mortality and increasing turn-off rate. At present, the focus for many project participants is to implement sound herd recording and business management accounting practices to accurately assess productivity and inform management changes.

This project will run until 2027 and is led by the Southern Rangelands Pastoral Alliance.

To find out more about the project or express interest in getting involved, email: **info@srpa.org.au**

Pasture cage in place on the main 'The potential of biomineral fertilisers to increase soil carbon sequestration' project trial site surrounded by grazing weaners to measure pasture production.

The potential of biomineral fertilisers to increase soil carbon sequestration

This project is an integrated R&D PDS project based in South-West WA. It aims to explore the use of biomineral fertilisers as an alternative to conventional fertiliser products in grazing systems. Biomineral fertilisers are a granular mineral fertiliser product coated in micro-organisms. These products claim to increase plant nutrient uptake and increase the rate of soil carbon sequestration.

This project involves a replicated trial and three demonstration sites where biomineral fertilisers and conventional fertilisers will be applied in commercial settings at recommended rates according to soil test results.

Soil carbon, pasture production and animal production measurements will subsequently be taken. A replicated trial plot is also included with biomineral and conventional fertilisers applied at equivalent nutrient rates, in order to identify the action of the biological component of biomineral fertilisers.

Ultimately, this project will assess the ability and cost efficiency of biomineral fertilisers to sequester soil carbon at a rate that is greater than conventional fertilisers, without a reduction in productivity.

The 2024 financial year incorporated the second growing season of the trial. Pasture, soil and animal liveweight measurements continue to be taken and analysed alongside fertiliser treatments.

This project will run until 2025 and is led and co-funded by Pedaga Investments with support from the FutureFood Network.

Scan or click the QR code to find out more about the project.

Maximising potential stocking rate through pasture management techniques

This project aims to increase the potential stocking rate in the mixed farming areas of southern Western Australia by improving and managing pastures during the autumn and winter seasons.

As the project enters its second year, there are four established producer groups in the great southern region, and four new producer groups lined up for both the northern/west midlands area and the great southern high rainfall area. The goal of the project is to prevent and reverse the decline in carrying capacity by implementing improved pasture and animal management strategies and extending these to producers.

The project will span five years and encompass six key areas, with four core producer groups established in each area. Over a two-year period, these groups will collaborate to improve stocking rates through the implementation of improved pasture management techniques. The areas covered by the project are as follows:

- Great southern wheatbelt – groups established in 2023
- West midlands/northern – groups established in 2024
- Great southern high rainfall – groups established in 2024
- South-West – groups established in 2025
- South-East – groups established in 2025
- Wheatbelt – groups established in 2026.

By the end of the project in July 2028, the producers and advisors will have built skills and capabilities to apply management practices that can deal with tough, variable seasons, while also promoting on-farm best practices to increase stocking rate through pasture management techniques.

Tahryn Gray's family is taking part in the 'Maximising potential stocking rate through pasture management techniques' project at their property, Tarin Rock, located 350km south-east of Perth.

For more information email: **getinvolved@mla.com.au** or contact Ed Riggall: **ed@agpromanagement.com**

Sandy soils at 'Bonderoo' – one of three Demonstration Sites that are trialling treatments to improve grazing production on non-wetting sands.

Improving production on sandy soils

Building on previous research in the grains industry, the 'Improved grazing production on non-wetting sands' project is investigating opportunities to improve feedbase and livestock productivity on sandy soils by addressing soil chemical, physical and biological constraints.

Three replicated demonstration sites have been established on grazing properties in the Coorong district of SA. Treatments at these sites include various tillage practices combined with applications of compost, clay, manure and fertiliser. A further six associate producers are closely involved in the project, with annual field days and workshops available to all. These activities give producers a chance to understand different interventions implemented under local commercial conditions to facilitate adoption in the region.

The project has been designed to give producers an opportunity to review the effectiveness of different treatments and practices to improve production on sandy soils, measuring plant growth, dry matter production and livestock carrying capacity. It also tests the cost effectiveness of the treatments on sites across the project area. With two years of growing season data available, insights from the project to date show a combination of inversion tillage and manure has provided the greatest response, with a 77% increase in dry matter production per hectare. By converting this to a potential stocking rate, gross margin analysis has been completed to provide valuable insights into the profitability of each treatment. Learnings to date outline the need to address all soil limitations in order to achieve positive production outcomes, and also highlight the importance of grazing management to utilise additional feed grown. This project runs until 2026.

Soils at Coomandook showing deep sands, prone to the development of compaction and acidity.

CASE STUDY

Tillage and compost combat soil issues

Arran Loechel is reaping the benefits of deep-tillage strategies to combat water-repellent sands at his Coomandook, SA, property. He took over the reins of 'Booderoo' after swapping his career as a fencing contractor in favour of farming when the opportunity to manage came up. He's now transitioned into a part owner of the sheep and cropping property.

"I'd been very interested in running my own farm for years, so the offer to buy into a sheep and lamb business was hard to turn down," Arran said.

In 2019, Arran volunteered to host a demonstration site as part of the 'Improved grazing production on non-wetting sands' project after experiencing several years of poor pasture growth.

"Nothing was growing, the soil was repelling water and we were willing to give anything a go," he said.

Identifying soil constraints

A 24ha paddock at Booderoo was selected as the demonstration site – the area was characterised by deep sandy soils and a heavy loam flat on the southern end, where limestone is present from 30cm.

Soil sampling in 2021 confirmed the paddock was moderately water repellent and potassium deficient.

The deep sand had high soil strength below 25cm, indicating compaction, as well as low nutrient retention throughout.

It supported Arran's observations of the declining quality of lucerne planted in the paddock.

"In the past, we used a Plozza Plow (a modified 5GP John Shearer one-way plough) on the deep sand with varied success, so I was interested in testing other strategies to treat the high soil strength."

The project team identified deep tillage as the best option to overcome compaction and reduce water repellence at Booderoo. Locally-acquired aged piggery manure and bedding straw was also used to boost fertility and lower the risk of erosion post-amelioration.

Anika and Arran Loechel with their children.

Treatment process and cost

To understand the most effective pasture production strategy on water-repellent sands, the paddock at Booderoo was divided up into 10 plots, which will be monitored until 2025.

In autumn 2022, treatments were applied on the 10 plots to:

- dilute water-repellent surface soil layers
- treat deep soil compaction
- treat nutrient deficiencies using mineral fertiliser and aged piggery manure.

Grazing

Cereal rye was chosen for its reliability as it's typically able to flourish in low-fertility, deep sandy soils. Vetch and Balansa clover were chosen as a base for their nitrogen and protein supply, and a grazing brassica was selected as an addition to increase diversity in both protein intake and root architecture underground.

Researchers used a Trimble GreenSeeker in July 2020, which indicated enhanced growth in all the manure-treated plots, but only when combined with deep tillage.

In the absence of manure, deep rip was the only deep-tillage treatment that performed well.

On 11 August 2022, 4ha of the trial site was crash grazed for 24 hours with 1,900 dry sheep equivalent (DSE).

Dry matter (DM) measured in early September 2022 also showed the three deep-tillage treatments combined with manure to be the highest yielding – adding between 1.8–2.5t/ha of additional DM to the average 1.8t/ha yielded from the plots without manure.

"After grazing in August, the pasture recovered well owing to high spring rainfall," Arran said.

The November results showed the deep rip paired with soil mixing treatments were the highest producing, with the addition of manure showing an even higher yield.

Both yielded more than 6.5t/ha of DM. This was 3t/ha greater than the average of the controlled plots that received no mechanical treatment or soil ameliorants.

This additional yield often came at the expense of dry matter digestibility, but there were no consistent trends in crude protein or metabolisable energy.

At the conclusion of the first year of this project, the results equated to additional gross income of more than $200/ha at Booderoo from a grazing perspective – however cost of amelioration has not yet been factored in.

Recent results

Following the first year of treatment, the cereal rye was harvested for seed and was grazed for the third time over the 2022–23 summer.

"We ended up having a bit of pasture for grazing in our other paddocks, so we decided to lock up the treatment site and let the pasture thicken and green up to utilise it for its seed," Arran said.

"On Anzac Day, the paddock was sown with an annual fodder crop. Dry conditions after sowing really showed the benefits of overcoming repellence last year.

"The plots where we used the Plozza Plow were all up and away early, while the other treatments were slower to get going.

"We've been fortunate in getting lots of rain over the past two years, so I'm really interested to see how the site holds up during the dryer season."

The demonstration site has since been stocked for another round of grazing and Arran plans to continue to monitor and trial different techniques to address water repellence going forward over the two years remaining in the project.

Inversion and manure month three results.

Arran's three steps to effective pasture production

1 Address nutrient deficiencies

✓ Sulphate of potash applied across whole trial site at 125kg/ha – supplying 50kg/ha of potassium and 20kg/ha of sulphur

$ $220/ha

✓ Aged piggery manure (sourced locally) and bedding surface, applied at 10t/ha – supplying 322N, 80P, 202K, 49S and 134Ca kg/ha

$ none

2 Overcome compaction

✓ John Shearer one-way plough fitted with 9 'Plozza Plow' discs used to invert the surface 30cm of sand

$ approximately $150/ha

✓ Bednar Terraland chisel plough was configured with 15 tines on 43cm spacings (6.2cm working width) and fitted with Active-Mix tines for easy soil penetration with optimised loosening to 55cm with some bottom-up and top-down mixing

✓ 'Deep rip' treatments were applied using a narrower shank tine and tip with no plates

✓ De-compaction and leveling was achieved in one pass using hydraulic spiked roller packers

$ $45/ha

3 Plant new pasture

✓ Ribbed roller was used to firm the surface of all tillage plots

✓ Mixed species pasture planted 27 May 2022 – comprised of 30kg/ha cereal rye, 2kg/ha grazing brassica, 30kg/ha vetch and 1kg/ha of Balansa clover

$ $82/ha

To find out more about the Improving production on sandy soils PDS project visit: **mla.com.au/pds-sandy-soils**

Innovative sheep and beef networks

This project aims to design and deliver a range of innovative approaches to engage beef and sheep network across Victoria to support the adoption of technologies and improved management practices, resulting in increased productivity and business performance.

The project has exceeded the target of 2,000 more members from the starting base of 3,612 in July 2021 to the current 6,483 as of June 2024. Capitalising on the current engagement of around 2,500 producers and service providers to the livestock industry, the project has extended its engagement, the scale of these networks, and its impact, by innovating in three key areas:

1. Network service offer: The program will integrate new agricultural technologies and communication models.
2. Producers: New and existing producer groups and associate members will benefit from improved planning, offering tailored programs, enhanced monitoring, and benchmarking, exposure to management tools, and a growing focus on their value chain.
3. Service providers: Service providers will receive support for training and development to improve their technical and group facilitation skills, with a stronger emphasis on their performance in meeting the project objectives.

Highlights over the last 12 months include the completion of six benchmarking workshops with a focus on estimating on-farm emissions and a survey of Victorian sheep and cattle processors which will be used to inform future communications and engagement with the red meat sector. The project is due to finish in late 2024.

For more information email: **getinvolved@mla.com.au**

Sheep Reproduction Strategic Partnership

The Sheep Reproduction Strategic Partnership (SRSP) is a sheep industry initiative managed by MLA. It seeks to profitably and sustainably increase lamb production by increasing weaning rates and decreasing mortality.

An objective of SRSP is to increase the adoption of proven management practices that have been developed through key research projects over the years.

This will be done through focusing on each of the key stages of the sheep reproduction cycle:

This partnership will provide producers with practical solutions for their businesses to enable improvements in flock reproductive performance at each stage of the reproductive cycle.

One of the key project outputs for producers is the *Fit to Join* ewe guide. This guide outlines the benefits of assessing ewes before joining and provides a step-by-step process for effectively and efficiently assessing ewes. The guide is designed as an interactive PDF, allowing you to download it to your device (computer, tablet, or smartphone) and access links to videos or additional information. If you prefer a hard copy, you can also print the PDF to use as a booklet.

A quarterly webinar series and monthly newsletter is available to sheep producers and industry representatives through the SRSP RDA initiative to share the latest research and development on sheep reproduction.

For more information about the SRSP visit: **mla.com.au/srsp**

SheepLinks

FEED365 all year livestock forage systems

In Western Australia, MLA and the Department of Primary Industries and Regional Development (DPIRD) have established a collaborative program of work known as SheepLinks, which aims to build resilience and productivity throughout the WA sheepmeat supply chain.

Within this broader program of work, the 'FEED365 all year livestock forage systems' project focuses on re-designing the feedbase system to provide forage for livestock year-round, overcoming the challenges of seasonal feed gaps and increasing climate variability in Mediterranean environments.

The project involves a significant research component hosted at the Katanning Research Facility, where a total of 64 pasture species are being evaluated in small plot trials and a subset of 24 species are being evaluated in replicated grazing trials. Integrated adoption activities are being conducted alongside the primary research site, with a total of six grower groups hosting on-farm commercial trial sites.

With three years of production data now captured, recommendations for alternate forage systems are getting closer to being available. Preliminary results indicate a number of cereal/legume mixes and winter active perennial pasture species provide opportunity to increase in-season pasture production and provide available dry-standing feed during summer and autumn. More novel summer crops such as sorghum and sunflower have also shown potential to utilise out of season rainfall.

The project will combine various production and quality measurements to undertake bioeconomic modelling of observed results in order to assess pasture system options. Producer research sites have been established through engagement with six grower groups to increase the degree of commercial testing and further demonstrate project findings to producers in local contexts. These sites are in the Wagin, Dandaragan, Esperance, Mount Barker, South Sterling, Wialki, Bakers Hill, Mandurah and Harvey regions and include various pasture species and mixes. Treatments at the commercial sites include perennial subtropical grasses, legumes and edible shrub species.

This project will continue until 2026.

To find out more about the project or express interest in getting involved, please contact Senior Research Scientist Daniel Real at: **daniel.real@dpird.wa.gov.au**

Carcase feedback for improved on-farm productivity

The 'Carcase feedback for improved on-farm productivity' project sits within the broader SheepLinks program. The project team has adapted the existing MLA Profitable Grazing Systems package known as 'Meat the Market' to assist 30 WA sheepmeat businesses to better utilise objective carcase feedback in order to improve lamb processing compliance and optimise carcase value.

Throughout the project, local processors and advisors will be supported to implement and increase their understanding of objective carcase feedback. One of three producer groups has completed this project, undertaking training, analysing carcase feedback and receiving group mentoring and support to implement on-farm strategies that address carcase feedback. The final two groups are currently being formed.

This project will continue until 2026.

To find out more about the project or express interest in getting involved, please contact Research Scientist Claire Payne at: **claire.payne@dpird.wa.gov.au**

BeefLinks

BeefLinks is a four-year research partnership with the University of Western Australia that aims to drive an integrated and complementary R&D program for the north-south value chain of WA to achieve profitable, consistent and sustainable beef yields matched to consumer expectations.

The project brings together producers, researchers, businesses and state agencies to develop a greater understanding of opportunities to enhance productivity and value along the red meat supply chain.

BeefLinks aims to develop a higher valued supply chain that is more productive and sustainable for the WA beef industry. The program aims to deliver $72 million in net benefits to producers through increased production of saleable and higher value beef, increased weaning rates and cohesive landscape management for productivity and environmental outcomes.

The program will deliver information to support increased productivity. This includes a better understanding of critical control points across the supply chain, identification of best-practice, practical strategies for the management and movement of cattle and demonstrations, training opportunities, and engagement with people and organisations across WA.

Current projects concentrate on defining the diet of northern grazing cattle to manage transition practices, mapping opportunities to maximise productivity under centre pivots, backgrounding and better preparation of cattle into feedlot operations, and interrogation of producer insights for adoption outcomes. Project outcomes are being communicated through dedicated producer groups, and field days, including Hammersley Station Field Day.

For more information about BeefLinks visit: **mla.com.au/beeflinks**

Five workshops (Hamilton, Victoria pictured) were delivered to key genetics service providers outlining the latest in breed development and strategic projects.

Enhancing technology adoption across the Angus genetic improvement pipeline

Over five years, this project worked to increase the rates of genetic improvement achieved by Angus influenced cattle. The project aligned with the National Livestock Genetic Consortium's mission to double the rate of annual genetic gain in the beef value chain by 2022. In December 2023 the project was completed, and its final report highlighted the achievements delivered, including on average:

- an annual rate of genetic improvement in net profitability of 12.3%
- 76,373 new animals with TransTasman EBVs per annum
- 33,349 genomic tests added to the TransTasman Angus Cattle Evaluation per annum
- 1.2 million animal searches completed on the Angus Database search per year.

To find out more about the outcomes from the project, please contact Jake Phillips, Angus Australia Extension Manager: **jake.phillips@angusaustralia.com.au**

Animal wellbeing extension and adoption partnership: Hoof & Horns

This project will address two of the big, complex challenges facing northern Australian livestock production systems – horned cattle and the management of reproductive diseases in extensive cattle herds.

Challenges experienced in managing large herds across large land mass require tailored solutions to ensure cost effective, efficient implementation and on-going management. These solutions must account for standard management practices, including annual or biannual mustering, the climate and existing infrastructure.

The aims of this project are to:

- Develop detailed costs, benefits and an adoption pathway for transitioning to a polled herd in different extensive commercial beef production systems.
- Develop detailed costs, benefits and an adoption vaccination pathway for managing and controlling reproductive diseases in extensive cattle herds.

The co-funded position within Australian Agricultural Company (AACo) will work closely with MLA to facilitate producer research, extension and adoption activities. This position will provide a direct interface into MLA and related industry adoption and extension programs including PDS, R&D programs and the various forums such as BeefUps, MeatUps and FutureBeef etc. Through this dedicated position, the project will develop training materials; embed the initiative in existing MLA programs, and further develop formal arrangements to support external service providers. The activities of 'transitioning a polled herd' and 'controlling and managing reproductive diseases' adoption pathways will be undertaken and delivered concurrently.

This program is due to conclude in 2026.

For more information about the program email: **getinvolved@mla.com.au**

Fred Pascoe presenting at an NB2 workshop held at 'Malbon Vale' in Mt Isa. Image: Tim Gentle – Think Digital Studios.

Northern Breeding Business

Northern Breeding Business (NB2) is a producer-led RD&A program that aims to address calf loss in northern breeding herds, low profitability of many northern beef enterprises and low adoption of proven management practices and technologies relevant to breeding operations.

The program is creating a business focused culture throughout the north Australian beef industry. At the heart of NB2 is a network of beef producer groups, supported by experienced facilitators and experts, working together to better understand and improve their businesses.

Producers set directions for their business based on evidence from their data, whilst working alongside others to exchange ideas and learn from a broad industry network.

NB2 takes a whole-of-enterprise approach, incorporating four pillars of focus – herd, feedbase, business, and the overarching adoption pillar, named 'Pathway to Practice'. This adoption pillar is collectively delivered by state agencies, advisors and organisations across northern Australia.

There are currently 73 producers participating in the NB2 program across 10 groups, representing 500,000+ breeders under management across 15+ million hectares of northern Australia.

Group members have been working to understand their individual herd, feedbase and business performance and have been using those results to learn from one another and discuss where opportunities for improvement might lie. These conversations are beginning to inform group decisions around what learning and development activities they should focus on together, for example nutrition training and carbon opportunities.

To find out more about NB2 visit: **mla.com.au/nb2**

Increasing adoption of phosphorus supplementation in northern Australia

The benefits of phosphorus (P) supplementation for breeding herds in northern Australia are well researched and widely known, with P being essential for livestock growth, fertility and milk production.

However, across northern Australia only a portion of cattle grazing on P deficient pastures are being managed with phosphorous supplementation. This is due in part to perceived difficulties in implementing wet season phosphorus supplementation on extensive properties.

This project is working with producers to test for, identify and analyse phosphorus deficiencies in northern beef businesses, implementing appropriate supplementation strategies within each enterprise.

It also includes some trials to validate and demonstrate an 'Easy P' phosphorous supplementation program to overcome difficulties of supplying and distributing supplements to stock during the wet season.

The project involves producer demonstration sites across northern WA, Queensland and the NT where different supplementation strategies are being tested within commercial systems. Objective information is being collected to conduct cost benefit analyses, and is informing the adoption of P supplementation and methods of delivering the supplement to stock. The aim of this project is to increase the adoption of P supplementation across the northern beef industry by delivering new information, peer-to-peer learning and demonstrations.

Cows and calves consuming dry season supplement with phosphorus at 'Amber Station'. Image: Emily Corbett, QDAF.

Visit MLA's phosphorus hub at: **mla.com.au/phosphorus**

Queensland beef producer and Climate Mate, Vicki Mayne.

Northern Australia Climate Program

In collaboration with the University of Southern Queensland, the Northern Australia Climate Program (NACP) delivers innovative research, development and extension outcomes to improve the capacity of the red meat industry in managing drought and climate risk across northern Australia.

During 2023–24 the program has delivered a series of new products including Green Date, Heat Load Index, Chill Index, Cattle Comfort Index, Drought Outlook and Flash Drought, all available now on the NACP website: **nacp.org.au/drought**

NACP is supported by regional Climate Mates to deliver a climate service to the red meat supply chain. This is focused on building awareness, knowledge and skills, and providing the support and confidence for clients to use weather and climate information in decision making.

During 2023–24, the NACP team and MLA also successfully piloted a new course for managing risks associated with extreme seasonal conditions – Managing Climate for Decision Making. This course will be delivered as part of MLA's Profitable Grazing Systems program, and will be delivered in small groups and with mentoring components to ensure producers are getting the most out of the program. This course will be rolled out across northern Australia in FY25.

It has been designed to build the knowledge and skills of producers in understanding different climate drivers which are relevant at different times of the year, and encourages participants to consider these drivers when making decisions on-farm.

The program also provides quarterly forecast videos for Western Australia, the Northern Territory and Queensland with an analysis of the climate outlook, and regional climate calendars for all northern regions.

These activities will continue in 2024–25.

For more information about Climate Mate and NACP visit: **nacp.org.au**

2023–24 service providers

With thanks to:

Accioly Livestock Industry Services
Adelaide University
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Agridome Consultancy
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The Derwent Catchment Project Inc
University of Adelaide
University of Melbourne
University of New England
University of Southern Queensland
Upper North Farming Systems
Upriver
Western Australian Agriculture Authority

Contacts

To find out more about MLA adoption programs, to attend an event during 2024–25 or to deliver MLA adoption workshops, email: **getinvolved@mla.com.au**

- Producer Demonstration Sites: **pds@mla.com.au**
- Profitable Grazing Systems: **pgs@mla.com.au**
- EDGEnetwork: **edgenetwork@mla.com.au**
- eLearning/The toolbox: **elearning@mla.com.au**
- BredWell FedWell: **getinvolved@mla.com.au**
- BeefUp: **getinvolved@mla.com.au**
- MeatUp: **getinvolved@mla.com.au**
- Livestock Advisor Essentials: **livestockadvisoressentials@pinion.com**
- Livestock Advisor Updates: **getinvolved@mla.com.au**

For all other enquiries email: **info@mla.com.au**

MEAT & LIVESTOCK AUSTRALIA

Meat & Livestock Australia Limited

ABN 39 081 678 364

Level 1, 40 Mount Street
North Sydney NSW 2060

PO Box 1961
North Sydney NSW 2059

Phone: 02 9463 9333
Fax: 02 9463 9393

mla.com.au

MLA's *Producer Adoption Outcomes Report 2023–24*
is available online at **mla.com.au/adoption-report**