



2021-22

Producer adoption outcomes report

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Welcome

I am pleased to present the annual MLA *Producer Adoption Outcomes Report*. The report outlines the breadth of extension activities and adoption projects delivered by MLA in 2021–22, and the on-farm benefits producers receive from their involvement in the program.

The 2021–22 program saw MLA deliver \$54.3 million in annual net benefits to producers involved in MLA adoption activities. This is an excellent result and an increase from the forecast \$37.6 million. Continual improvements in monitoring and evaluation processes in MLA adoption projects allows MLA to better demonstrate the complete impact these projects have on-farm.

Record livestock prices have led to great optimism in the industry, and it is pleasing to see producers investing in their own knowledge and skill development and making improvements to their businesses. Red meat producers have received the most benefit from involvement in the EDGE network workshops, Profitable Grazing Systems (PGS) and Producer Demonstration Sites (PDS) adoption programs.

Throughout the year we have observed and received feedback from producers about their support and interest in MLA's goal for industry carbon neutrality by 2030 (CN30). Producers are motivated to understand their own carbon accounts, and what action they can take on-farm to achieve carbon neutrality. In the coming year, MLA is developing training resources necessary to support producers in this area. There are a number of resources, including carbon accounting tools, available for producers about CN30 through the webpage '[Get your business CN30 ready](#)'.

Additionally, we look forward to involving producers in demonstrating suitable on-farm technologies and management practices as findings are shared from CN30 research investments.

Thank you to the 10,709 producers who got involved in MLA adoption programs in 2021–22 and the 114 service providers and MLA's adoption team.

We look forward to delivering even more adoption activities in 2022–23 and hope to see you along the way.

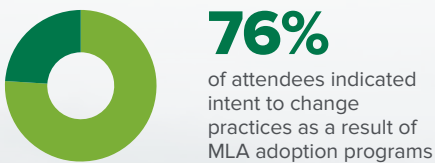
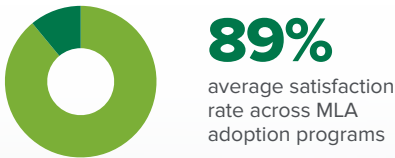
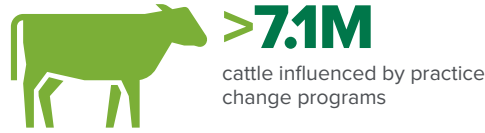


A handwritten signature in blue ink that reads "Sally Leigo".

Sally Leigo
Program Manager – Producer Adoption

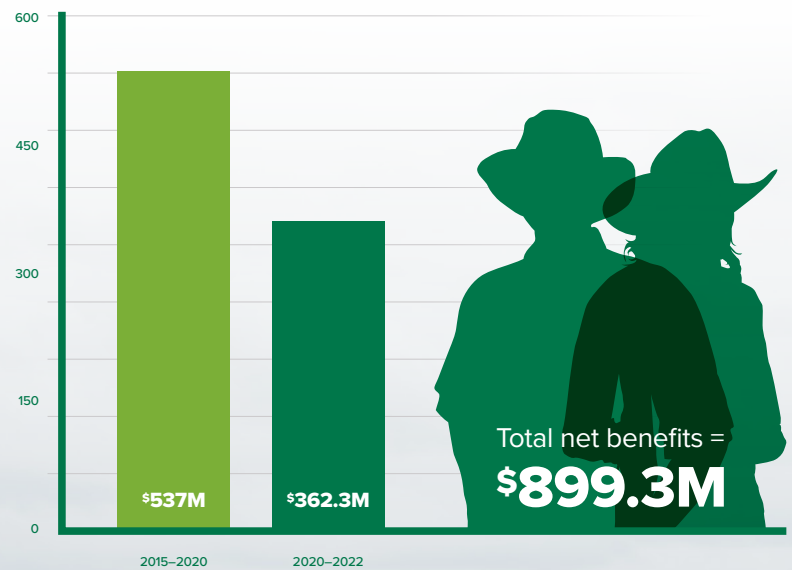


2021–22 highlights



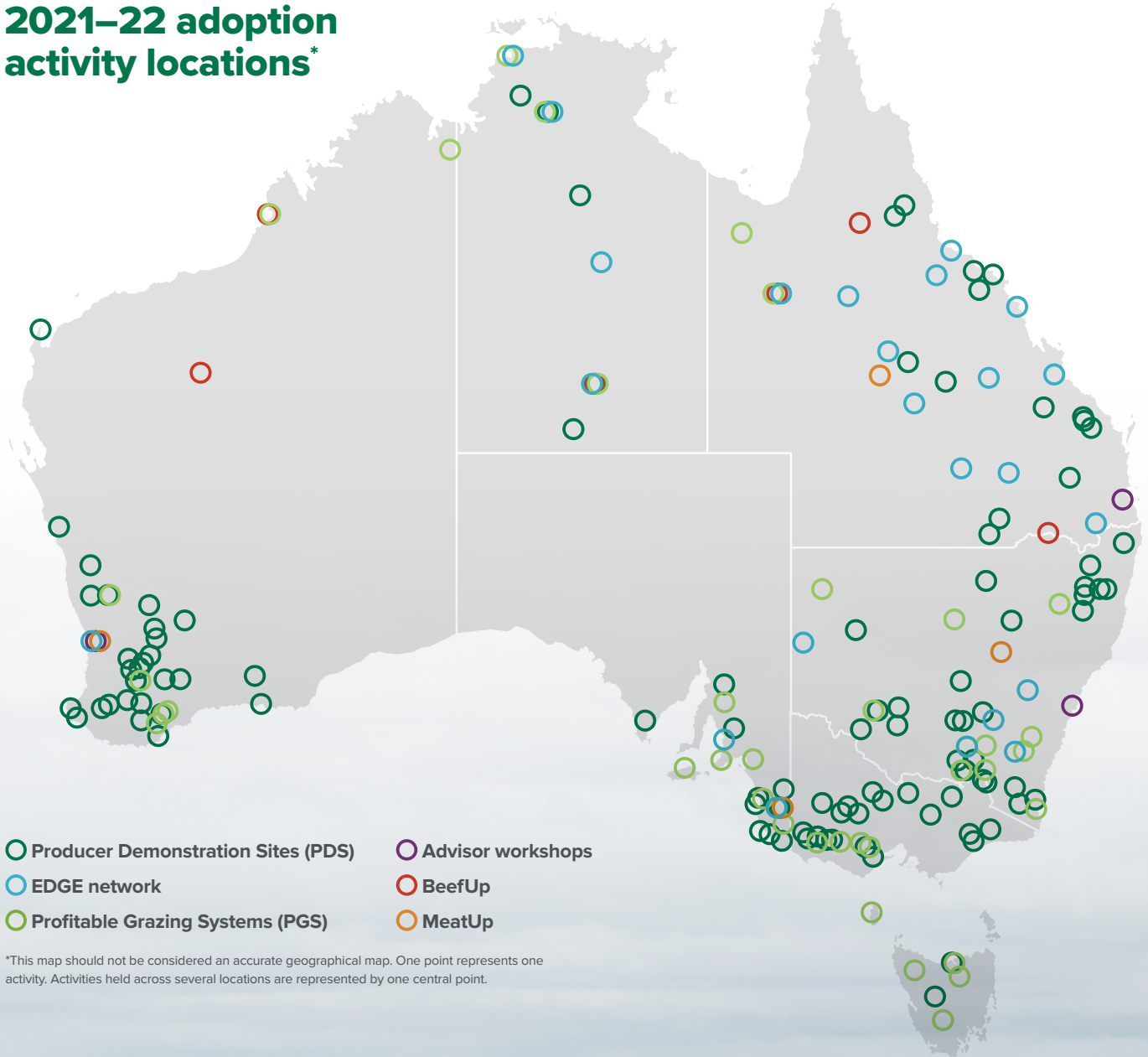
Total benefits* delivered to producers via MLA adoption programs

MLA adoption programs have delivered \$899.3M* in total net benefits to participating producers who adopted a new practice between 2015–2020. In 2021–22 this was \$54.3M in annual net benefits to participating producers.



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

2021–22 adoption activity locations*



- Producer Demonstration Sites (PDS)
- EDGE network
- Profitable Grazing Systems (PGS)
- Advisor workshops
- BeefUp
- MeatUp

*This map should not be considered an accurate geographical map. One point represents one activity. Activities held across several locations are represented by one central point.



Producer adoption strategy

MLA adoption pathway makes a journey through three key areas: awareness activities, short-term training programs and long-term practice change activities. Supporting the journey along the pathway is an area of focus dedicated to building the capacity of livestock advisors.

Producer awareness of the latest research and development (R&D) is delivered via field days, forums, webinars, newsletters, articles and podcasts.

Short-term training programs are designed to increase producer knowledge and skill around the latest livestock production practices by engaging them in training activities like workshops or online learning modules.

Long-term practice change-focused activities involve producers learning from each other under the guidance of a consultant or advisory coach. These activities involve producers implementing the best performing livestock production practices into their businesses.

Further adoption activities are designed specifically for livestock advisors to increase their knowledge of the latest R&D, professional development and networking.

Livestock advisors are anyone who provides advice or support to producers and includes veterinarians, consultants, agronomists, livestock agents, sales representatives and extension officers.

The MLA Adoption Strategy includes programs and activities which lead to an increase in the adoption of R&D. These include the implementation of initiatives and the enhancement of existing programs.

The MLA Adoption Strategy has four 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 by:

- 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 which 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 which will have the maximum impact
- 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.



Adoption pathway



Strategic framework

Awareness and short-term training programs	Long-term practice change	Capability building	Program approach to research, development and adoption
<ul style="list-style-type: none"> Whole of farm awareness activities Fill gaps across species, region, priorities Clear links between all programs 	<ul style="list-style-type: none"> 2020-25 Producer Demonstration Sites strategy Profitable Grazing Systems strategy Embed adoption into all applicable research and development projects Increase resources across involve and partner programs 	<ul style="list-style-type: none"> Pilot new and develop further programs to increase capability of advisors and involvement in research, development and adoption programs 	<ul style="list-style-type: none"> Develop and leverage partnerships to support programs to achieve research, development and adoption outcomes Increase cross-company collaboration



LONG TERM

Profitable Grazing Systems (PGS)

Profitable Grazing Systems (PGS) is a group-based training program which uses supported learning packages (SLPs) to deliver training and coaching over several months and up to a year to improve producer skills and knowledge. Through PGS, participants have the opportunity to 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.



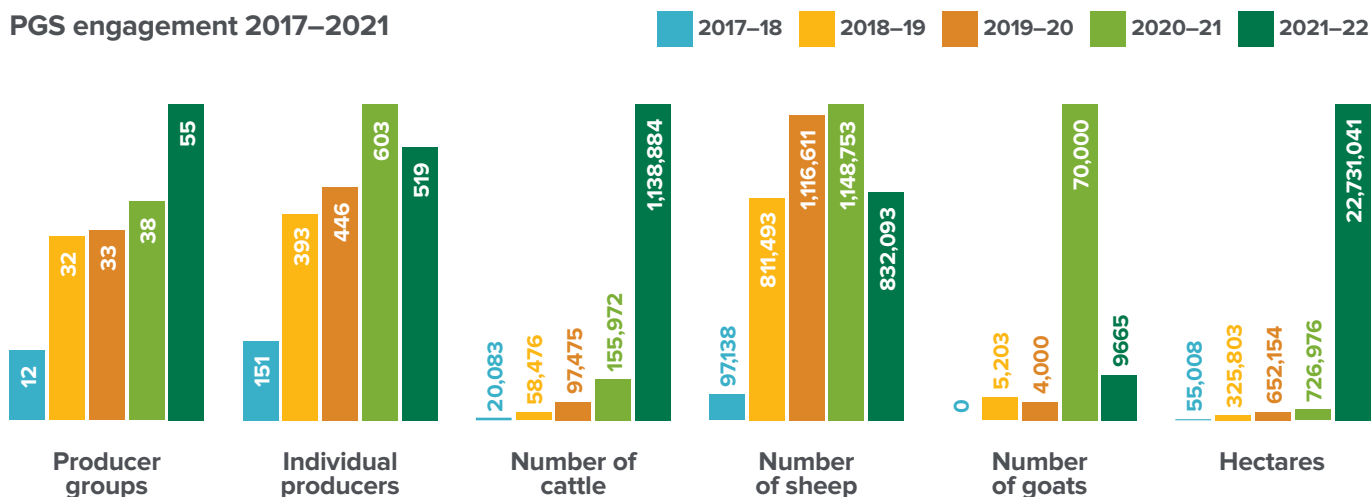
PGS saw significant growth in engagement and return on investment to producers in 2021–22. This was largely driven by the increased delivery of PGS SLPs throughout northern Australia. As a result of this, producers representing more than 18m hectares in northern regions were engaged in the program.

PGS will deliver \$243.8m* in total net benefits to participating producers between 2015-2022. This includes \$103.7m* of additional total net benefits for producers who participated in

SLPs in 2021. MLA's investment in PGS since 2015 delivered \$14.4m in annual net benefits to producers in 2021–22.

On average, northern beef producers participating in a PGS SLP can expect an additional net benefit of between \$4-\$17/km² annually. On average, southern producers participating in an PGS SLP can expect an additional net benefit of between \$2.50-\$20/ha annually.

PGS engagement 2017–2021



PGS supported learning packages include:

- **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.
 - **PayDirt North.** This package is the northern adaptation of the existing PayDirt program, tailored to helping producers in the north value-add to soil testing results and determine where they will get the most bang for their fertiliser buck.
 - **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.
 - **Gra\$\$ to Dollars.** Assists producers in assessing pastures grown across southern Australia, condition scoring livestock, managing pasture grazing and optimising pasture utilisation.
 - **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.
 - **PayDirt.** This training value-adds to soil testing results, helping producers determine how to get the most bang for their fertiliser buck.
 - **Meat the Market.** With a whole of supply chain focus, this package trains producers in improving lamb processing compliance and optimising meat-eating quality.
 - **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).
 - **Lifting Lamb Survival.** Gives producers greater control over lambing and reproduction outcomes.
 - **Pasture Principles.** Producers undertake this package for a 12-month pasture production cycle to learn a set of guiding principles to manage pastures confidently.
 - **Satellite-Assisted Forage Budgeting.** Upskills producers in utilising satellite imagery to develop grazing budgets on a large scale.
 - **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.
 - **Grazing Matcher™.** Designed to improve the productivity, profitability and resilience of producers by enabling them to better match grazing pressure, fertiliser application, animal requirements and market demands.
 - **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 and current strengths and weaknesses.
- i** For a full list of PGS packages on offer visit mla.com.au/pgs

SLPs currently 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.
- **Renovation Rescue.** Aids producers in transforming run down perennial pastures through the application of grazing, weed manipulation and improved soil conditions.
- **Sowing for Success.** Helps producers determine where to invest their pasture dollars to successfully establish a perennial pasture.

i To find out what packages are offered in your state or to make a request contact pgs@mla.com.au

Interested in becoming a PGS deliverer?



The PGS mentoring program upskills new coaches and improves the confidence of service providers to deliver SLPs and make a measurable difference to participants' businesses. In 2021–22, four new deliverers took part in the mentorship program. All have gone on to establish their own PGS groups. Additionally, 144 livestock advisors were engaged in capability building events and or participated in a PGS train-the-trainer activity.

PGS is seeking coaches 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 require building upon facilitation skills to deliver supported learning packages to small groups.

To find out more about becoming a PGS deliverer, contact pgs@mla.com.au

PGS 2021–22 highlights

832,093
sheep influenced
by the PGS program

>1.1M
cattle influenced
by the PGS program

9,665
goats influenced
by the PGS program

55
ACTIVE
GROUPS

32 COMPLETED
GROUPS

519 ACTIVE
PRODUCERS



23

active deliverers
in 2021–22

\$2–20/ha

of additional
financial net
benefit annually
for participating
southern
producers

\$4–17/km²

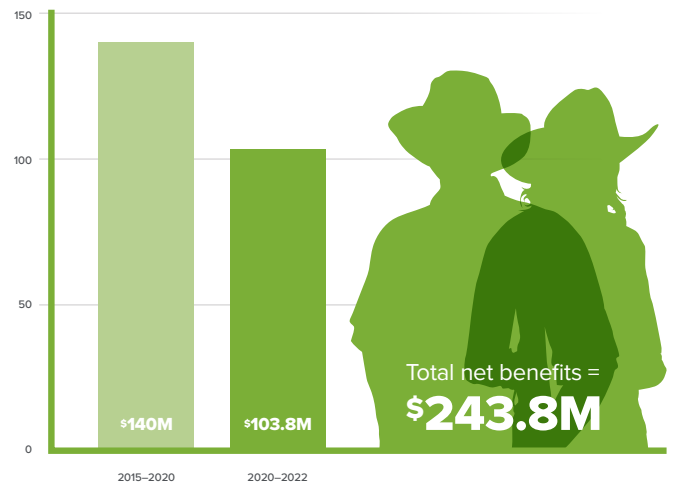
of additional
financial net
benefit annually
for participating
northern
producers



84%

of participants
intended to change
current practice

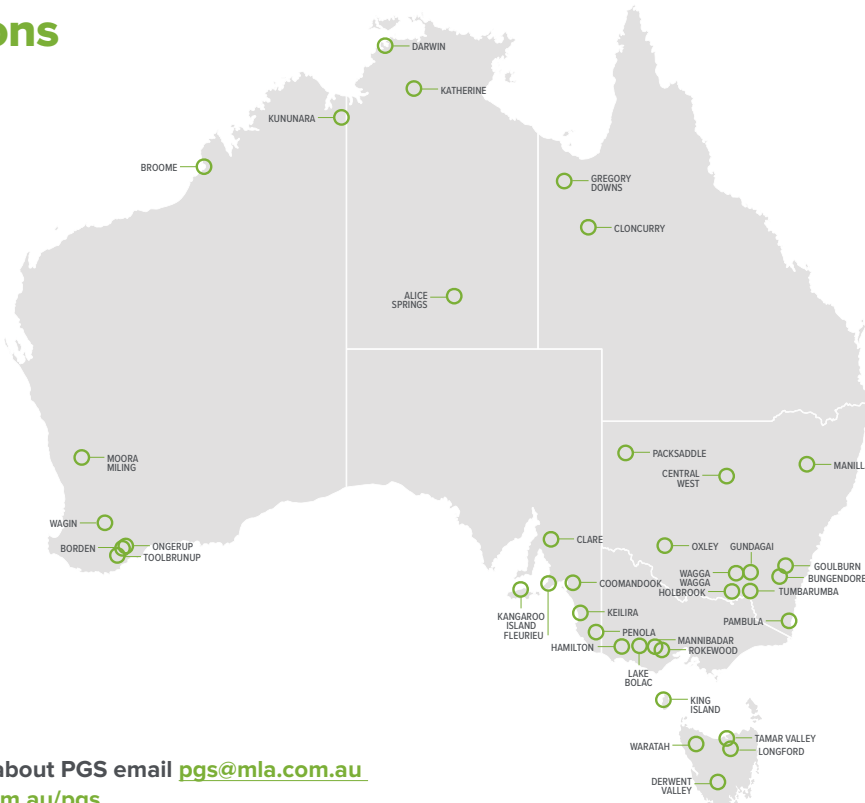
Total benefits* delivered to producers via PGS



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

22.5M
hectares of Australian
agricultural land influenced
by the PGS program

PGS locations



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

Objective information the key to optimal eating quality

Rob Lindon manages 'Aberfeldy' a 1,770ha property for T.A Field Estates and joins 7,500 composite ewes and 3,000 first cross ewes.

Rob's breeding objective is to maintain high growth while increasing eating quality and weaning rate from a moderate frame ewe that's structurally correct.

With a goal to improve lamb eating quality and find out more genetic information about his ewe and ram sources, Rob participated in the MLA Meat the Market Profitable Grazing Systems (PGS) supported learning package.

The Meat the Market PGS focuses on the whole of supply chain and was delivered in partnership with Gundagai Meat Processors (GMP) to work with producers in improving lamb processing compliance and lifting meat eating quality.

High price tag on information

"We have put a high emphasis on objective measurement to meet both our and the supply chain needs, and we seek to obtain this at a cost-effective price. The property was purchased in 2019 walk-in-walk-out, so we inherited animals with little objective information on their genetic merit," Rob said.

"I was keen to benchmark our existing animals, thirsty for market feedback and to find out how desirable our product was to the consumer, what the market signals are now and what might they be into the future – and how does this fit in with our current farming system and our ability to produce a premium product at Aberfeldy."

"We want to optimise the profitability of every kilogram produced on Aberfeldy."

Rob has a long pasture growing season and targets trade weight lambs direct to the processor as he is located near several. He is also keen to maintain market flexibility past the farmgate as seasons alternate.

"It allows for more direct communication with the supply chain and being able to use this information back in our program is great," Rob said.

Targeted approach to genetics

"The PGS provided an update of the current market signals, and we were given a deeper understanding of tools such as LAMBPLAN, MateSel, RamSelect and how to target ASBV's to our own flock and business objectives," Rob said.

"Having a clear direction on what the market wants and how we can be paid for it means I can take a more targeted approach in terms of what rams are purchased and how my management of the lambs can get the best out of those genetics."

Detailed carcass feedback

MLA and GMP have brought together a range of advanced objective measurement technologies to grade and sort lamb based on consistent eating quality, yield and health – traits which, when combined with hot carcass weight, will lead to a Meat Standards Australia (MSA) cuts-based eating quality prediction, once commercialised.

Some of the technologies include:

- DEXA (dual energy x-ray absorptiometry): an objective measurement tool to assess lean meat yield, bone and fat composition of each carcass.
- MEQ Probe: a needle probe that uses spectral imaging to measure the amount of intramuscular fat (IMF) in lamb carcasses.

"At GMP, their MEQ probe and DEXA scanning takes most of the guesswork out of lamb quality," Rob said.

"We now have a definite approach to improving the eating quality of our animals, not just the carcass weight. Whereas beforehand you would only ever get paid on weight and presentation, and there was little or no ability or incentive to produce lambs with in-demand eating quality."

The feedback reports from GMP also provide specific animal health information on carcass issues which is important feedback for Rob's animal health program.

"It's not just a condemned carcass and you don't know why, GMP tell you exactly what the problem is," Rob said.

"For example, I found out a couple of our carcasses had sheep measles and by ensuring station dogs get monthly tapeworming and not allowing them offal or meat, we will be able to stop that."

Reaping the rewards

Although it's still early days, since participating in the PGS, Rob has achieved great results on-farm. Rob has either maintained or increased main production metrics such as weaning percentages,



Rob Lindon manages T.A Field Estates' 'Aberfeldy' station.

growth rates and Terminal Carcass Production (TCP) scores whilst increasing:

- LAMBPLAN eating quality index score from 132 to 142 in a year
- LAMBPLAN lamb eating quality by eight points
- lean meat yield (LMY) at the same time as IMF.

Valuable group discussions

Rob found group discussions with other like-minded producers in the PGS very valuable.

"For example, we discussed what pasture types gave the highest average daily weight gains on lambs at different times of year. The diverse group of producers attending meant we learnt about a broad spectrum of pasture types and their capabilities," Rob said.

"We were able to compare notes and work out the best strategy to achieve a husbandry and management program to produce a quality product."

Building confidence

"The PGS enabled me to get a better understanding of what's happening past the farmgate, and how our product is meeting market demands both domestically and internationally," Rob said.

"Exposure to new technologies and allowing us to visit the GMP plant to demonstrate them, breeds confidence right from the start.

"It meant we had the transparency and confidence to spend time and money on making changes on-farm and will help us produce a more desirable product with more consistency for us and our customers."



LONG TERM

Producer Demonstration Sites (PDS)

MLA's PDS program aims to increase the rate of adoption of key management practices and technologies which 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 which directly engage core producers. Additional activities are held to engage a wider producer audience (known as 'observer producers') and share the learnings among the regional producer community. The key outcome of a PDS is adoption of the demonstrated management practices, resulting in improved business performance.

Levy and co-contributor funded, 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 Australian Livestock Research Council (WALRC). Producer priorities are identified through this process, which formulate the terms of reference for the PDS call. A producer panel is engaged to review PDS applications to ensure they address producer priorities and can deliver impact.

In 2021–22, MLA funded 17 new levy projects and one integrated R&D PDS.

PDS has delivered \$194.5m* in total net benefits to participating producers as a result of projects completed between 2015–2022. MLA's investment in PDS since 2015 has delivered \$12.7m in annual net benefits to producers in 2021–22.

On average, producers can expect an additional net benefit of \$6.68/ha annually as a result of their participation in the program.

A new online search tool allowing users to search all active and completed PDS projects was launched in 2021–22. This resource allows people to search for the relevant PDS by topic and/or state/region of relevance, making the findings of each PDS more accessible and allowing producers to incorporate the outcomes into their own production systems. Users can access a summary of the project alongside progress updates and findings. Extension materials and resources can also be accessed as well as the contact details of the PDS facilitator as a way of encouraging producers nationwide to engage with demonstrations which can benefit their operations.

To access the PDS search tool go to: mla.com.au/pds-search

Producer Demonstration Site framework

Stream	Levy PDS	Co-contributor PDS	Integrated R&D PDS
Requirements	<ul style="list-style-type: none"> 10 core producers and three sites preferred Flexibility for extensive regions and other projects (e.g. genetics) Two- to six-year projects Maximise outside producer involvement 	<ul style="list-style-type: none"> 10 core producers and three sites preferred Flexibility for extensive regions and other projects (e.g. genetics) Two- to six-year projects Maximise outside producer involvement Cash contribution from participating producers 	<ul style="list-style-type: none"> 10 core producers and three sites preferred Validating research in commercial production systems Constructed to suit the project timeline
Available budget	\$25,000/year – can be split to suit the project method	\$50,000/year – can be split to suit the project method	Funded from within project
Priorities and review	<ul style="list-style-type: none"> Regional priorities set by Research Advisory Councils 	<ul style="list-style-type: none"> Must align with industry priorities/targets Reviewed by MLA 	<ul style="list-style-type: none"> Research aligned with council/industry priorities Developed with MLA

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

Keep up-to-date

To ensure producers and stakeholders remain informed about PDS activities in their region and across the country, MLA provides updates on active projects via a quarterly email.

Sign up to the PDS mailing list to receive updates on the active PDS projects and key information on the annual PDS project call at mla.com.au/pds



Fertilising pastures boosts production

Queensland beef producer Sam Haig participated in MLA's Producer Demonstration Site (PDS) program and has reaped the benefits of fertilising his pastures. The PDS has also given him the confidence to make changes to his ongoing pasture management strategies.

Sam runs a cattle trading enterprise at 'Oakland' near Jandowae, Queensland. Both Sam and his wife work off-farm, so they became involved in the PDS as they were looking for ways to boost production without buying more land.

"We just weren't growing enough feed for ground cover, and we were also getting a lot of soil erosion," Sam said.

"During 2018 and 2019 it was pretty dry with only erratic rainfall and the country became really run down and we were spending a lot of money on buying in feed.

"Feeding your stock all the time takes an emotional toll too."

Before participating in the PDS, Sam would plant a forage crop to give the pasture a spell but because of the dry season it was hit and miss as to whether he would get it planted at the right time.

"We'd spend a lot of money on fertiliser and maintaining the forage crop so there seemed to be a lot of inputs, but we weren't seeing the return on investment," Sam said.

Increased ground cover boosts carry capacity

Through the fertiliser trial, the financial and production gains such as weight gains of 130kg per adult equivalent per year were pleasing but Sam was really impressed to see the ground cover improve.

"The water retention and ground cover has improved considerably. We used to have get three or four falls of rain to get a good growth response but now every fall over 10mm we see the pasture respond," Sam said.

"The pasture seems a lot more resilient and during cold periods it's still green.

"This pasture improvement has allowed us to almost double our carrying capacity."

"I've been here 20 years and I haven't seen it in this good of a condition than it has been in the last six months."

Solving soil erosion

"In the paddock where we did the PDS, its history was cropping with light red loam soil. It's got good contours in it, but water always ran straight through it," Sam said.

"I've been here 20 years and I haven't seen it in this good of a condition than it has been in the last six months.

"In the condition that it's in now with the density of cover, we're not losing anything with the run-off."

Soil testing is a must

According to Sam one of the key takeaways from the PDS was the importance of soil testing.

"The key thing was to get the soil testing done to know what nutrients need adding," Sam said.

"There's no point fertilising a paddock by just throwing everything at it, you need to know what specific nutrient is missing and address that.

"Soil testing is something that I am going to do every few years to pick up soil imbalances which you don't notice by looking at the paddock."

Pasture quality now in focus

Since participating in the PDS, Sam is now going to focus more on pasture quality.

"I used to let the cattle graze the paddocks a bit harder but now I just let them eat the good bits off and then move the mob onto the next paddock," Sam said.

"I now let the pasture recover for a longer period so it's more resilient. I move my cattle more often to utilise the best quality feed."

Building confidence

Sam found participating in the PDS very rewarding as he watched paddocks which once only had ankle high ground cover – now it's so high you can barely walk through it.

"Every time you get a result like that it builds your confidence," Sam said.

"Before we did the PDS there was limited information on fertilising pasture for northern producers, so after seeing the results it has really boosted my confidence."



Queensland beef producer, Sam Haig.



SHORT TERM

EDGE network

MLA's EDGE network (EDGE) gives producers the opportunity to develop the skills necessary to improve their livestock enterprises by participating in one to three-day workshops. These practical learning opportunities encourage producers to expand their current expertise and learn new skills, be motivated by other producers and access the latest R&D. Producers work in small groups receiving personalised training. EDGE workshops have been developed by industry specialists and tested by producers Australiawide to guarantee their quality and relevance.



The courses currently available are:

- **Business EDGE.** A two-day financial and business management training workshop for cattle, sheep and goat producers. The aim is to enhance producer knowledge and skills in basic financial and business management to improve business efficiency and profitability.
- **Business EDGE Young Guns.** A two-day workshop for up-and-coming cattle, sheep and goat producers who are ready to build their skills and confidence to manage a modern agricultural business.
- **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.
- **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.
- **Grazing Fundamentals EDGE.** A one-day workshop which 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.** A three-day workshop for cattle, sheep and goat producers to develop a thorough understanding of the grazing land environment in which they operate.

EDGE has delivered \$386.4m* in total net benefits to participating producers as a result of workshops attended between 2015 and 2022. This includes \$202.2m* of total net benefits identified for 2021. MLA's investment in EDGE since 2015 has delivered \$23.5m in annual net benefits to producers in 2021–22.

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 \$6-\$65/km² annually. Southern producers participating in an EDGE workshop can expect an additional net benefit of \$5.81/ha annually.

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



EDGE 2021–22 highlights

244,125
sheep influenced by the EDGE network

>1.9M
cattle influenced by the EDGE network

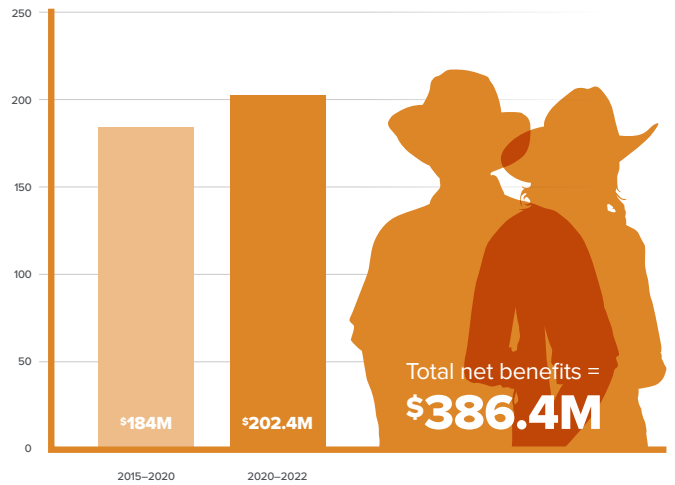
5,100
goats influenced by the EDGE network

369
PARTICIPANTS ENGAGED

30 WORKSHOPS DELIVERED
95% VALUE RATING

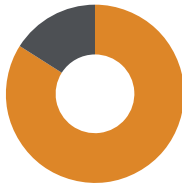
96%
knowledge and skills acquisition increased

Total benefits* delivered to producers via EDGE



\$5.81/ha
of additional net benefit annually for participating southern producers

\$6–58/km²
of additional net benefit annually for participating northern producers involved annually



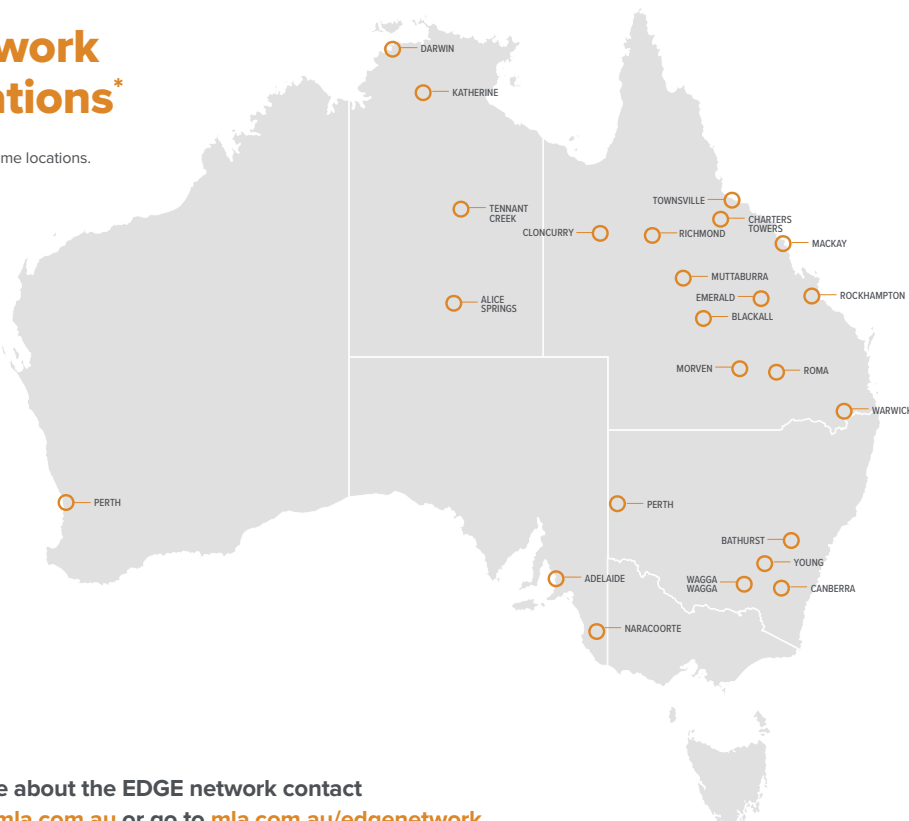
84%
of producers planned to make changes following workshops

44.8M
hectares of Australian agricultural land influenced by EDGE workshops

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

EDGE network event locations*

*Multiple events were held in some locations.



i To find out more about the EDGE network contact edgenetwork@mia.com.au or go to mia.com.au/edgenetwork

Taking herd performance to new heights

WA producers Lach McClymont and Camille Camp's focus on maximising their Droughtmaster herd's reproductive performance goes hand-in-hand with careful breeder management and a hunger for continuous improvement.

The couple recently took over the management of 'Kalyeeda Station' in WA's Kimberley region and its 4,000 head breeding herd from Camille's parents, Peter and Cheryl Camp.

Peter and Cheryl purchased Kalyeeda 27 years ago and, according to son-in-law Lach, they've taken a concerted approach to building a business which has set the breeding and backgrounding operations up for success.

"Peter and Cheryl have always placed a focus on production while being on the front foot with animal welfare," Lach said.

"The whole property's been strategically developed in terms of water, infrastructure and floods."

Constant learning

Both couples have attended Breeding EDGE workshops hosted by MLA to learn how to improve their breeding program. Most recently, Lach attended a Breeding EDGE workshop in Broome last year which renewed the family's focus on boosting production.

"We're all very open to the style of management system that Breeding EDGE workshops exposes you to," Lach said.

"When I went to the workshop last year, I was able to develop a breeder plan for our whole property, which involved working out what areas we could improve on in our production and also what were the areas we're doing really well at.

"I found it really powerful being able to bring that home and focus on what we needed to do better."

Strategic supplementation

Supplementing their young breeders to set them up for success is one of the first strategies Lach and Camille have put in place at Kalyeeda since Lach attended the EDGE workshop.

"We're putting out wet and dry season phosphorus supplement to all of our breeders, with an emphasis on our younger cattle to get them up to a critical mating weight of 340kg between 24–36 months of age," Lach said.

"When I went to the workshop last year, I was able to develop a breeder plan for our whole property, which involved working out what areas we could improve on in our production."

"Anything below that and the heifer does it tough in this environment – so we focus a lot on looking after our heifers and that just sets them up for the rest of their life here."

Divide and conquer

Heifers or cows with low body condition score are drafted off and put in dedicated paddocks. They're supplemented to ensure they can reach and maintain good condition during the next calving and beyond.

"Leading up to the wet season in October, we'll go back into some paddocks and start pulling weaners off heifers or cows that have slipped below a body condition score of 3," Lach said.

"We'll get that weaner off so that cow or heifer has recovered by those first storms and be well and truly on a rising plane of nutrition by January in order to get back in calf."

Segregating breeders is another approach Lach and Camille have implemented to reduce calf loss and boost weaning rates on Kalyeeda, as well as minimising second-round mustering when many of their breeders are calving.

"Our spring plan is to have fully segregated our breeders according to their calving window, so I don't have to go in just to get more weaners off," Lach said.

"We don't have to go into paddocks where our October–December calvers are during our second round muster; it's quite an efficient management process with rising mustering overheads."

Bulls that perform

Camille's father, Peter, has always paid particular attention to selecting high-performing bulls to maximise production on Kalyeeda – a skill Lach hopes to develop with the tools the Breeding EDGE workshop has given him.

"Peter has always chosen quality bulls and looks at the semen testing, morphology and Estimated Breeding Values (EBVs) to do this," Lach said.

"The main EBVs we're selecting for are days to calving, postpartum interval, 200-day weight gain and critical mating weight.

"At the Breeding EDGE workshop, we did a whole session on bull selection, including EBVs and semen morphology testing, which will help me with our purchases moving forward.

Stepping it up again

Into the future, Camille and Lach have their sights set on taking their herd performance to new heights.

"We want to find our real peak performers and use them to maintain our production of a high quality article," Lach said.

"A lot of it is just identifying cows that aren't performing as well as ones that are – really, it's learning to read your animals year by year and drafting based off that."



WA beef producer, Lach McClymont.



SHORT TERM

BredWell FedWell

BredWell FedWell (BFWW) is a practical one-day workshop highlighting the key benefits of superior genetics and feed management for improved reproductive performance and livestock productivity.

bredwell fedwell

The workshop is designed to help producers analyse and plan a genetics and nutrition regime suited to their environment and markets to boost profitability.

Workshops focus on:

- Increasing awareness of the impact genetics and nutrition have on flock or herd productivity and profitability.
- Assisting producers to develop their own breeding objective and a plan for selecting animals considering the profit drivers in their business.
- Improving producer knowledge of feed availability and livestock requirements to achieve greater productivity during the livestock production cycle.
- Showcasing additional adoption activities in genetics and nutrition designed to improve productivity and profitability.

During 2021–22 BFWW underwent a review and redevelopment to better align genetic and nutrition needs with the production cycle. The new program will be delivered in 2023.

BFWW has delivered \$17.2m* in total net benefits to participating producers as a result of workshops delivered between 2015-2021.

On average, sheep producers participating in a BFWW workshop can expect an annual net benefit of \$0.78/ewe. On average, producers participating in a BFWW workshop between 2015-21 can expect an annual net benefit of \$2.48/ewe and \$2.98/cow.

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



Updated BredWell FedWell workshop builds on 10 years of impact in genetics and nutrition training

On the back of a decade of success, MLA’s BredWell FedWell (BFWF) workshop will soon be relaunched to reflect evolving best practice genetics and nutrition management.

The workshop program is being reviewed by the Schuster Consulting Group, Dubbo, to ensure BFWF continues to meet the needs of producers wanting to increase the welfare, productivity, and profitability of their herds and flocks through improved genetics and nutrition.

The review also included input from a panel of industry experts, who provided advice in areas ranging from practical breeding and nutrition strategies, cattle and sheep production in northern and southern regions, as well as approaches to capability building and adult learning.

The revised program developed through the review process will be further refined during a pilot stage later this year before being rolled out nationally via a network of trained and accredited deliverers.

Here, Angela Schuster of Schuster Consulting Group, whose team is leading the review and coordination of the program explains the background of the review process.

“The extension and adoption field has changed significantly since BredWell FedWell was first launched with more information and tools such as flock profiling, heifer select and new indexes now available to help producers apply the outcomes of genetics and nutrition research,” Angela said.

“We’ve focused on integrating these tools into a new format that balances genetic and nutrition decision-making across the whole livestock production cycle with a specific focus on an individual’s profit drivers.

“The new format is designed to help producers increase their productivity and profitability through improving genetics and nutrition.”

What to expect

Building on the workshop’s first iteration, participants will come away with skills to help them develop a customised breeding objective aligned to their profit drivers,

identify sires and select and feed animals that help meet their breeding objective.

The new highly graphical, easy to follow one-day workshop will continue to be delivered on-farm, with the intent to drive practice change as well as whet participants’ appetite for further learning.

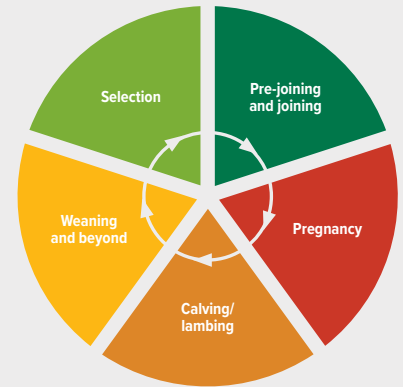
Producers will gain fresh knowledge about the latest research and management strategies in the field and will apply this knowledge through guided learning that includes practical exercises.

The structure of the workshop will utilise the BFWF 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 will focus on:

- Increasing awareness of the impact both genetics and nutrition have on a producer’s flock or herd productivity and profitability.
- Assisting producers to develop their own breeding objective and a plan for selecting animals with consideration of the profit drivers for their business.
- Improving producer knowledge of feed availability and livestock requirements to achieve greater productivity during the livestock production cycle.
- Showcasing additional adoption activities in genetics and nutrition designed to improve productivity and profitability.

More than 140 predominantly MLA-supported resources, research papers, tools and reports have informed the refreshed BFWF workshop with the focus being on delivering implementable research outcomes to participants. The updated workshops are due to be delivered in 2023.



The updated workshop is based around the Bred Well Fed Well breeding and feeding production cycle.

Delivered to date



1.9M

cattle influenced by the BFWF workshop

45
workshops

1,155
BFWF participants

\$2.98
net benefit per cow mated

639k
breeding females



19.6M

sheep influenced by the BFWF workshop

186
workshops

4,316
BFWF participants

\$2.48
net benefit per ewe joined

12.7M
breeding ewes

These statistics on the existing BFWF workshop highlight its real impact on the red meat industry.

“The new format is designed to help producers increase their productivity and profitability through improving genetics and nutrition.”



AWARENESS

BeefUp

BeefUp Forums are an opportunity for northern Australia producers to learn something new, stay up-to-date with the latest on-farm research and technologies and meet others working in the red meat industry.



At BeefUp Forums producers can:

- hear about the latest R,D and A 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 \$38.8m* in total net benefits to participating producers as a result of forums delivered between 2015–2022. This includes \$8.7m* of total net benefits identified for 2021. MLA’s investment in BeefUp since 2015 has delivered \$1.8m in annual net benefits to producers in 2021–22.

This means producers can expect an average annual benefit of \$1.30/head when implementing new tools or practices as a result of their attendance.

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



BeefUp 2021–22 highlights



812,090
CATTLE INFLUENCED

224
PRODUCERS
ENGAGED

6
FORUMS
DELIVERED

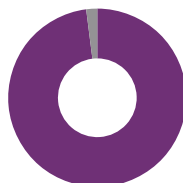
84%
value rating

86%
satisfaction rating



\$1.30
/head
average annual
net benefit
for attending
producers

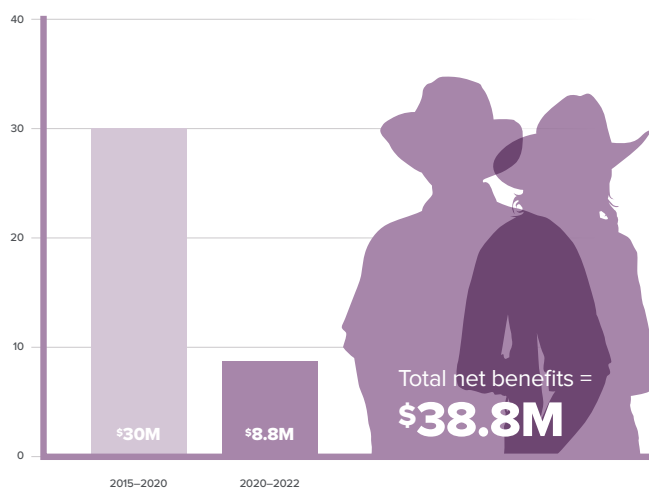
64%
of producers
planned to
make changes



23.5M
hectares of Australian
agricultural land
influenced by BeefUp

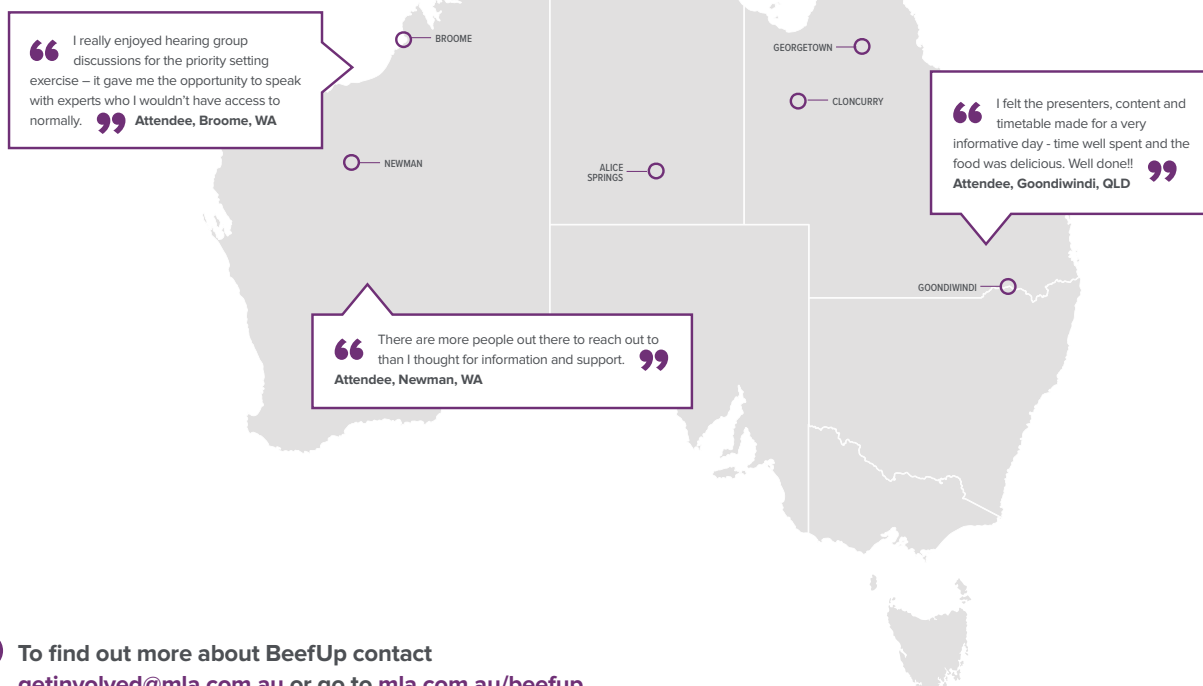
98%
of producers said
their knowledge
and skills increased

Total benefits* delivered to producers via Beefup



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

BeefUp event locations



i To find out more about BeefUp contact getinvolved@mla.com.au or go to mla.com.au/beefup



AWARENESS

MeatUp

MeatUp forums were launched in 2021 and provide beef, sheep and goat producers with the opportunity to learn something new, stay up-to-date with the latest on-farm research and technologies and meet others in the red meat industry.



Forums are designed by producer working groups from local regions to ensure content delivered is regionally relevant. MeatUp forums demonstrate the value of implementing new practices or technologies on farm. They also create awareness around MLA activities, programs and projects which producers can get involved in to enable them to further build knowledge and skills.

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

MeatUp has delivered \$2.6m* in total net benefits to participating producers as a result of forums delivered in 2021.

On average, this means producers can expect an annual return of \$2.70/head as a result of implementing new tools or practices learnt from their attendance.

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



MeatUp 2021–22 highlights



716,506
sheep influenced



125,139
cattle influenced



54,000
goats influenced

237
PRODUCERS
ENGAGED



4
FORUMS
DELIVERED

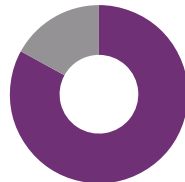
Total benefits* delivered
to producers via
MeatUp since 2021



86%
value rating

\$2.70
/head
average annual
net benefit
per producer
involved

67%
of producers
planned to
make changes
following
attendance



83%
of producers said
their knowledge
and skills increased



Total net benefits =
\$2.6M

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



87%
satisfaction rating



1.7M
hectares of Australian
agricultural land
influenced by MeatUp

MeatUp event locations*

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

“ Well-coordinated event. Very happy sessions are being recorded so can be rewatched/watch ones that were missed. ”
Attendee, Perth, WA

“ MeatUp forums gives producers the tools they need to improve, but more importantly it generates the enthusiasm and the confidence to use them. ”
Attendee, Katanning, WA

“ MeatUp Forums are a unique opportunity to deliver to red meat producers up-to-date information, insights and examples of the very best that can be achieved in producing a world-class product, through accessing relevant, timely and thought-provoking information that can be used to build a more productive and resilient business. ”
Attendee, Wagga Wagga, NSW

PERTH

LONGREACH

DUBBO

NARACOORTE

i To find out more about MeatUp contact:
getinvolved@mla.com.au or go to mla.com.au/meatup



Livestock advisor capability building

Building the capability of livestock advisors is fundamental to the successful implementation 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.

Upskilling livestock advisors including consultants, stock agents, agronomists and veterinarians provides MLA with another avenue to ensure producers can implement the latest research findings, new technologies or best practices on-farm.

The MLA Livestock Advisor Program is spearheaded by flagship

awareness events Livestock Advisor Updates (LAU) and associated webinars, and Livestock Advisor Essentials (LAE).

The quarterly eNewsletter 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 Updates (LAU)

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



i To find out more about LAU contact getinvolved@mla.com.au or go to: mla.com.au/advisor-updates

During 2021–22



Livestock Advisor Essentials (LAE)

Livestock Advisor Essentials (LAE) is a southern-focused professional development program designed for early career professionals involved in the livestock industry.

livestock
advisor
essentials

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. Four workshops are currently on offer. They are:

- **Optimising Pasture Production.** An opportunity to gain knowledge and confidence in the key aspects of feedbase management to equip participants 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.
- **Meating the Market.** This covers how to analyse customer feedback and assist clients to identify and discuss possible on-farm solutions to compliance issues.
- **Influence and Impact.** Participants will learn the fundamentals of human engagement, plus processes and frameworks for sustained influence.

i To find out more about LAE contact getinvolved@mla.com.au or go to mla.com.au/advisor-essentials

During 2021–22

20

ADVISORS
ENGAGED

3

WORKSHOPS
DELIVERED



satisfaction rating



value rating



of participants indicated they would use advice learnt at workshops

In my view this program addresses a big gap in the Livestock advisory sector and the opportunity to learn from experts and network with other advisors is invaluable. Thank you to all involved.

Attendee, LAE pilot program



Livestock Consulting Internship (LCI)

The Livestock Consulting Internship (LCI) is designed to provide participants with the industry experience and foundation 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.

During the two-year program, participants also conduct a major industry research project, giving them a real world understanding of the implementation of R&D.

Since launching in 2017, 29 consultants have graduated from the program and 97% 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/year. Of the 29 consultant roles filled since the launch of the program, 80% of these were an additional head count to their employer's business.

The fourth program intake will kick off in July 2022 with 10 new participants. These participants will graduate from the program in 2024.

The LCI program allowed me to gain valuable skills across a wide range of topics and professions, helping me to contribute to my success in the position I am currently in. It expanded my professional networks beyond belief. LCI provides you with the support to grow both personally and professionally while surrounded by other likeminded people. It's safe to say I have made some lifelong friends and had many good laughs. It's a great community to be part of!

LCI Alumni, 2020–21 cohort





AWARENESS

Webinars

Productivity and profitability webinar series

This webinar series presents new and topical information to assist red meat producers to increase the productivity and profitability of their businesses.

Some of the topics covered in the series during 2021–22 include:

- How can producers be carbon neutral?
- The importance of trace minerals for lamb growth
- Effective communication on-farm
- Livestock staggers on phalaris and ryegrass-based pastures
- The nutritive value of modern crop stubbles

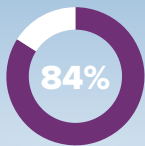
i All webinars are available on the [MLA website](#).

During 2021–22

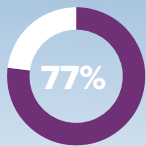
657 
registrations

23 
webinars

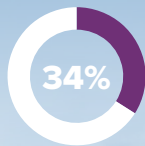
 **123** average live attendees



satisfaction rating



value rating



Intended to change/
advise clients to change
following webinar

Livestock Advisor Updates webinar series

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

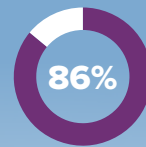
i All webinars are available on the [MLA YouTube channel](#).

During 2021–22

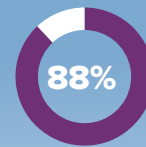
212 
registrations

3 
webinars

 **65** live attendees



satisfaction rating



value rating



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 in 2021–22 included:

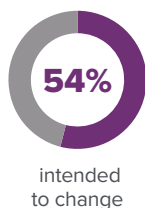
- Cattle, grass and trees – combination, pitfalls and opportunities
- A comparison of the growth of cattle under high intensity rotational grazing vs continuous grazing
- Sensible supplementation 1 – beef cattle nutrition principles
- Sensible supplementation 2 – herd management and nutrition
- Sensible supplementation 3 – choosing and managing supplements
- Pathways towards carbon neutral grazing systems

i All webinars are available on the [FutureBeef YouTube channel](#).

During 2021–22

1,862 registrations equating to **88.5m ha** and **3.8m cattle**

11 webinars **786** attendees



ParaBoss webinars

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 University of New England (UNE).

The ParaBoss webinar series was designed to complement and extend information provided through the [paraboss.com.au](#) web platform.

Some of the topics covered in webinars in 2021–22 included:

- [Controlling bush ticks and theileriosis in Australian Cattle](#)
- [Brown Stomach worm – know your enemy](#)
- [Worm control in goats](#)
- [Black scour worm – preparing your livestock this season](#)

i All webinars are available on the [ParaBoss YouTube channel](#).

During 2021–22

885 registrations

4 webinars

400 attendees





AWARENESS

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 2021–22, 13 new packages were added to 'The Toolbox' under four topics:

- Feedbase
 - » Utilising legumes in the mixed farming zone
 - » Optimising seedling recruitment to avoid resowing
 - » Using hay and silage production to remove annual grasses
- Livestock genetics
 - » How to shop for a high-performing ram
 - » How to shop for a high-performing bull
- Northern beef management
 - » Managing northern heifers pre-joining
 - » Weaner management in northern beef herds
 - » Introduction to Sheep Genetics
 - » Why do cattle need phosphorus?
- Business management
 - » Pitching to win
 - » Project management
 - » Leading from behind
 - » Innovation mindset

i Visit **The toolbox** today at elearning.mla.com.au to start exploring new resources.

Legumes hub

Incorporating legumes into Australian livestock production systems can significantly boost productivity and provide drought resilience and environmental benefits. In 2021–22 MLA launched a new 'Legumes Hub', showcasing how industry can use legumes to benefit production.

The Legumes Hub focuses on the five key ways legumes benefit the Australian red meat industry. These are:

1. More feed, less fertiliser
2. Faster weight gains and healthier animals
3. A more resilient feedbase
4. An ally against dieback
5. Towards carbon neutral 2030 (CN30)

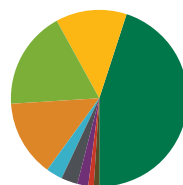
Within these five themes, the hub contains a suite of resources for both northern and southern producers to access.

i To find out more, go to the Legumes Hub at mla.com.au/legumes



During 2021–22

13 new training packages



944 users



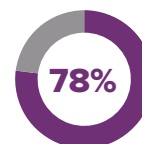
- Beef producer **45%**
- Sheep/beef and cropping producer **13%**
- Sheepmeat producer **18%**
- Other **14%**
- Livestock Advisor/Consultant **3%**
- Veterinarian **3%**
- Researcher **2%**
- Extension officer **1%**
- Livestock agent **1%**



satisfaction rating



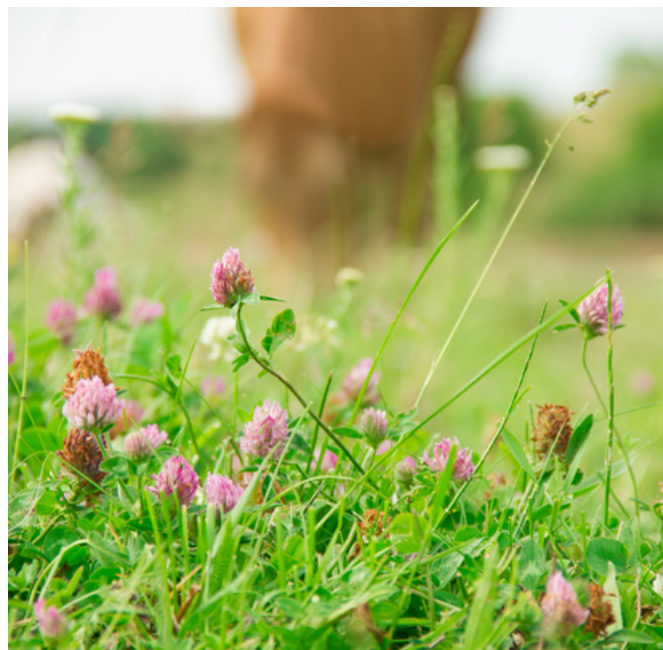
value rating



intended to change



knowledge and skills acquisition increase



Phosphorus supplementation campaign

A campaign to encourage wider adoption of phosphorus supplementation in northern Australia was run in 2021–22. It provided research-based information on the benefits of phosphorus and ways to improve herd performance with the right supplementation strategy.

In the lead up to the northern wet season a phosphorus pack was delivered. It contained an eight page guide to phosphorus and a flyer outlining the range of practical resources, tools, and programs MLA offered to help producers identify and effectively manage phosphorus deficiency. The pack was distributed to more than 10,000 producers across northern Australia in October 2021.

MLA also developed, and is continuing to develop, a suite of online resources where producers, advisors and agents can contact MLA to ‘ask an expert’ their questions about phosphorus supplementation. This was supported by targeted digital promotion, with more than 7,000 unique visitors accessing the “Phosphorus resource hub” and more than 400 resource downloads between June and December.

i For more information go to mla.com.au/phosphorus.



ParaBoss

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 of MLA, Australian Wool Innovation (AWI) and University of New England (UNE).

The products provide detailed information and regional programs designed to improve the on-farm management of worms, blowflies, lice and ticks. With the inclusion of TickBoss in July 2021, ParaBoss is now able to provide even more support for Australian cattle producers.

In the past year the ParaBoss team has focused on website management, producer communication and training and advisor communication and training.

The ParaBoss website was redeveloped in 2021–22 and allows for ease of use and is due to be launched in late 2022.

During 2021–22, producer communication and training has increased to include:

- The Boss Bulletin
- ParaBoss Sheep Certificate Management Course
- ParaBoss webinar series
- ParaBoss Facebook page

96 advisors completed the ParaBoss Sheep Parasite Management Certificate facilitated by UNE.

i For more information go to paraboss.com.au.



R&D ADOPTION

Integrated R&D and customised adoption initiatives

Investments into adoption and extension continue to increase through incorporation into on-farm R&D projects. These integrated programs were to fast-track the adoption of research outcomes while utilising or adding to the existing suite of MLA adoption products. These programs include:

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 currently demonstrating and validating rangeland management innovations designed to enhance the environmental and economic sustainability of grazing businesses. Activities are underway to investigate management practices to increase carrying capacity, pasture species composition, ground cover and soil carbon. Ongoing data collection throughout the life of the project will create an evidence-base which can be used by rangeland producers and industry stakeholders in their decision-making going forward.

Replicated trials are being established on the properties of four core producers across western NSW. Trials were 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 were established on the same four properties to assess how landscape position, groundcover variables and grazing management influences 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 more 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. This project runs until 2024.



i To be kept informed of the progress of this project and opportunities to become involved, contact luke.beange@dpi.nsw.gov.au

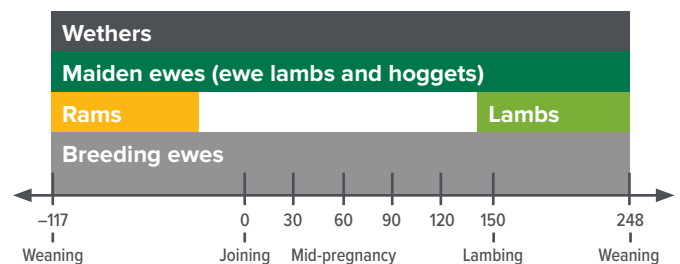
Sheep Reproduction Strategic Partnership



The Sheep Reproduction Strategic Partnership (SRSP) is a sheep industry initiative managed by MLA, which 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 developed through research.

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



Setup for success by:

- Actively managing the growth of wethers from weaning to their first shearing or when they are sold.
- Actively managing the growth of replacement ewes (ewe lambs or maidens) from weaning to their first joining.
- Selecting and preparing rams prior to joining.
- Selecting and preparing lambing paddocks early, managing ewe nutrition from mid-pregnancy and monitoring mob size at lambing for the best outcomes for lambs
- Actively managing breeding ewes from weaning to weaning to optimise their reproductive performance.

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 projects underway as part of the initiative is the Towards 90 (or T90) project, which uses 10 learning modules to aid producers to adopt sheep reproductive best practices with the aim of achieving 90%+ lamb survival across single and twin-bearing ewes in their flock.

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

i To find out more go to mla.com.au/SRSP

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 supplementation. This is due in part to perceived difficulties in implementing wet season supplementation on extensive properties.

The goal of this project is to validate and demonstrate an “Easy P” supplementation program to overcome difficulties of supplying and distributing supplements to stock during the wet season, and subsequently increase the adoption of P supplementation across the northern beef industry.

Early results from the project indicate that providing bulk P to stock at the beginning of the wet season in addition to usual supplements in the dry, a key strategy of the Easy P method, is as effective as more traditional and labour-intensive methods..

The project will involve producer demonstration sites in northern WA, Queensland and the NT to test the Easy P supplementation method within commercial systems. These sites have commenced data collection for the project, including determining their soil and nutritional phosphorus status. They will be separating their herds prior to the wet season to test out the ‘Easy P’ strategy in comparison to their usual supplementation programs. Objective information will be collected for cost benefit analyses, informing the adoption of P supplementation and methods of delivering the supplement to stock. The project will run from 2021 to 2026.

i To find out more contact getinvolved@mfa.com.au or visit MLA’s phosphorus hub at mfa.com.au/phosphorus



Image: Chelsea Riggs, Lakefield Station, NT

Northern Breeding Business (NB2)



Northern Breeding Business (NB2) is a producer-led RD&A program 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 with four pillars of focus – herd, feedbase, business and the overarching adoption pillar, ‘Pathway to Practice’. This adoption pillar is collectively delivered by state agencies, advisors and organisations across northern Australia.

There are currently 51 producers participating in the NB2 program in seven groups, representing 400,000+ breeders under management across 12m ha of the northern rangelands.

Group members have been visiting each other’s properties, whilst completing their foundational herd inventory and business and feedbase training. They will use this information to set directions for their collective activities in the next year.

i To find out more go to: mfa.com.au/nb2

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 in the past 10 years.

The project involves two producer groups in the Murchison and Goldfields regions. Twenty-four pastoral businesses will be engaged in the project, covering an estimated five million hectares. Groups will meet virtually and in-person to build skills and knowledge which can be implemented on station with the support of a group facilitator and technical expert 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 improving turnoff rate. Practices employed to achieve this include feed budgeting, livestock condition scoring, weaning protocols, well managed animal health practices and sound record keeping to inform management interventions.

i 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 contact info@srpa.org.au

BeefLinks

BeefLinks is a four-year research partnership with the University of Western Australia to drive an integrated and complementary R&D program for the movement of cattle from north to south as they advance through the value chain of WA. The program aims 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 which is more productive and more sustainable for the WA beef industry. A goal of the project is to deliver \$72 million in net benefits to producers through increased production of market compliant 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 through 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.

Current projects concentrate on defining the diet of northern grazing cattle to manage transition practices, mapping opportunities to maximise productivity under centre pivot irrigation, backgrounding and better preparation of cattle entering feedlot operations and improved understanding of producer needs to increase adoption.

i To find out more go to mla.com.au/beeflinks



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 South Australia. Treatments at these sites include varied tillage practices combined with applications of compost, clay, manure and fertiliser. Six associate producers are also 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 will also test the cost effectiveness of the treatments. This project runs until 2026.

i If you are an SA producer and would like to join a local event contact getinvolved@mla.com.au

The potential of biomineral fertilisers to increase soil carbon sequestration

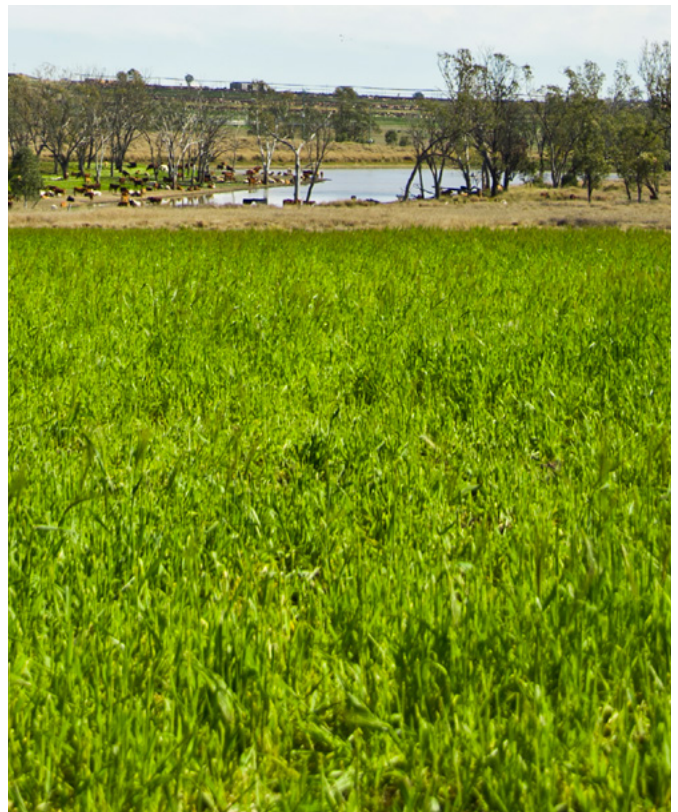
This project is an integrated R&D PDS project in southwest WA. It aims to explore the use of biomineral fertilisers as an alternative to conventional fertiliser products in grazing systems. Biomineral fertilisers are a granular mineral fertiliser product coated in micro-organisms. These products claim to increase plant nutrient uptake, slow nutrient availability in the soil 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 greater than conventional fertilisers, without a reduction in productivity.

This project will run until 2025 and is led by Pedaga Investments with support from the Future Food Network.

i To find out more about the project or express interest in getting involved contact getinvolved@mla.com.au



Supporting sheep producers' transition to non-mulesed sheep

This producer-led adoption project offers sheep producers practical support to transition to a non-mulesed flock. 'Towards non-mulesed sheep', funded by MLA, utilises the principles of a Producer Demonstration Site (PDS) to guide producers through the design of a property-specific plan using existing tools and management strategies to reduce reliance on mulesing.

This project aims to support 40 core sheep producers across seven demonstration sites in NSW and Victoria to transition to a non-mulesed flock.

The project will include discussion groups and on-farm demonstrations to allow producers to identify management changes that will see them working towards ceasing mulesing across their flocks.

Groups will meet on-farm throughout the life of the project to improve knowledge and skills, discuss seasonal issues and use a range of industry tools to develop and implement their plans.

Discussion group members also have the option to run a small trial with their sheep to evaluate their chosen strategy. There are currently 'Towards non-mulesed sheep' discussion groups in southern NSW, western Victoria, north-east Victoria and north-west Victoria.

i For more information about the program or to explore the possibility of joining a discussion group in your region contact getinvolved@mla.com.au

Red Meat and Wool Growth Program

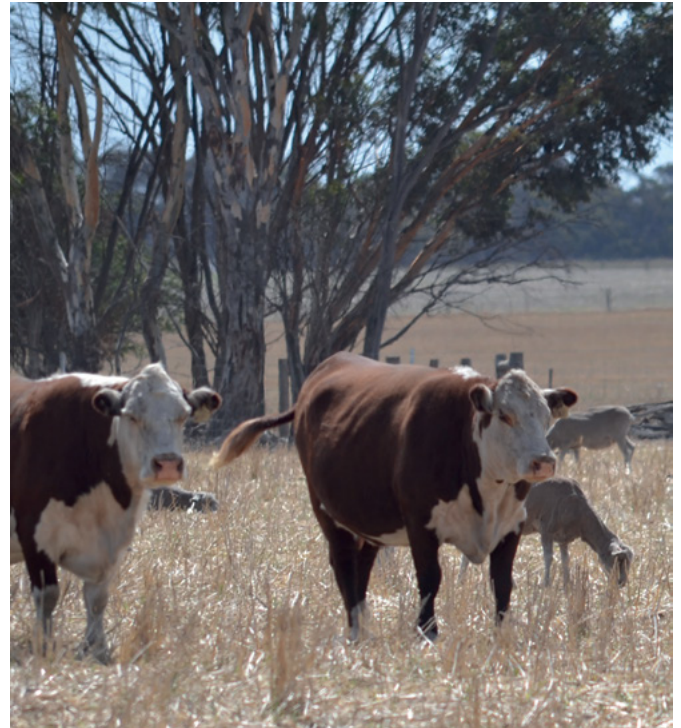
The Red Meat and Wool Growth Program has been created to support South Australian livestock producers to:

- rebuild the SA sheep flock and beef herd
- develop capacity building and farm management best practices
- increase data-based decision making
- facilitate the uptake of agricultural technology (AgTech) by livestock producers, saleyards and processors
- strengthen the culture of biosecurity.

The program is an initiative of Primary Industries and Regions SA and is supported by MLA, SA Sheep and Cattle Industry Funds and SheepConnect SA.

Since the program was launched in June 2020, 1,230 people have taken part in program extension activities. The total number of hectares currently impacted by the program is 5.3m. Extension activities include livestock enterprise planning sessions, producer technology groups, demonstration farms, field days, livestock technology expos, forums, livestock tech talks and service provider workshops.

i To get involved go to: pir.sa.gov.au/redmeatandwool



Managing welfare and production at weaning

With increasing community and consumer emphasis on animal welfare, northern beef producers are keen to explore the role and application of pain relief in commercial breeder operations.

Through demonstration sites, this project aims to improve the knowledge, awareness and skills of producers in performing best practice aseptic (hygienic) techniques and administering pain relief for animal husbandry procedures, such as castration and dehorning.

The project utilises commercial demonstration and research sites in NT and WA and is now in its second year.

The study involves objective animal wellbeing assessments, using behavioural and physiological parameters to understand the benefits of using pain relief products. Measurements taken following the administration of pain relief include weight gain, mortality, and animal behaviour such as vocalisation and movement.

Demonstration and assessment of the impacts of treatments will be complemented by training for pastoralists in undertaking animal husbandry practices. The results from this project will help inform the adoption of pain relief and animal husbandry techniques used in northern cattle enterprises.

i To find out more contact getinvolved@mla.com.au

SheepLinks

FEED365 all year livestock forage systems

MLA and the Department of Primary Industries and Regional Development (DPIRD) have established a collaborative program of work in Western Australia 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 redesigning the feedbase system to provide forage for livestock year-round, overcoming the challenges of increasing climate variability in Mediterranean environments.

The project involves research at the Katanning Research Facility, where 87 cultivars from 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 underway alongside the primary research site, with six grower groups hosting on-farm commercial trial sites.

With only a single year of production data currently available, performance of pasture species and recommendations on alternate forage systems cannot yet be made. However, early results have informed the establishment of three grower group sites in the Wagin, Dandaragan and Esperance regions which include various pasture species and mixes. Treatments at the commercial sites include perennial subtropical grasses, legumes and edible shrub species.

A further three grower group sites will be established in 2023 to increase the degree of commercial testing and further demonstrate project findings to local producers in a commercial setting.

This project will continue until 2026.

i To find out more about the project or express interest in getting involved contact Senior Research Scientist Daniel Real daniel.real@dpiird.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 40 sheepmeat businesses to better utilise objective carcass feedback in order to improve lamb processing compliance and optimise carcass value.

Throughout the project, local processors and advisors will be supported to implement and increase their understanding of objective carcass feedback. This engagement underpins further producer engagement and on-farm changes to improve lamb carcass compliance and value.

This project will continue until 2026.

i To find out more about the project or express interest in getting involved contact Research Scientist Claire Payne claire.payne@dpiird.wa.gov.au



Global adoption review project

There has been much research investigating the barriers to adoption in agriculture, this work has assisted in guiding MLA's adoption strategy. Ultimately, the strategy aims to ensure producers are supported to implement R&D on-farm and adoption is embedded within MLA R&D projects and programs.

The Producer Adoption Reference Group (PARG) provides strategic advice to MLA on the issues impacting the uptake of R&D adoption by red meat producers and includes livestock producers, consultants and researchers from across Australia. In May 2020, PARG recommended conducting a global adoption review of innovative approaches to support adoption and practice change which could be applied to the red meat sector in Australia.

The project, which started in May 2021 and was conducted by University of Melbourne, was designed to deliver recommendations to strengthen producer engagement in practice change and adoption activities. It sought to identify a range of approaches used to engage producers and the critical factors in program design and delivery that either enable or hinder adoption.

Through extensive global consultation, the project revealed designing effective programs to drive behaviour and practice change relies on comprehensive stakeholder analysis and engagement to get the 'right people in the room'. The following factors are critical:

- a sound understanding of the audience allowing specific motivating factors to be targeted
- skilled facilitators to build trust, leadership and group process within peer groups to support learning and change
- building and maintaining social networks across supply chains and professions for knowledge generation and exchange
- appropriate resourcing (financial, people and time) and program flexibility, allowing solutions to complex challenges to be identified, implemented, reviewed, and altered in a commercial setting.

Based on these insights, three design concepts were selected for development into proposed activities:

1. Understanding target audiences and contextual factors in adoption through behavioural insights (producer segmentation and tailoring of approaches).
2. Supporting producer peer-to-peer learning and producer leadership in program design (co-design/co-innovation/producer action groups).
3. Strengthening the capacity of the advisory sector (advisor mentoring and training).

The four activities proposed for implementation are:

1. engaging with 'hard to reach' producers in the Australian southern rangelands,
2. designing a collaborative program to support wide adoption of pain relief in animal management,
3. applying a 'Living Labs' approach in R&D regional consultation processes, and
4. supporting producer driven 'Farmer Action Groups' as part of strategic partnerships.

While this review identified some novel approaches to producer adoption, it also re-enforced the foundation of the existing MLA adoption framework and the programs within it. Key learnings will be integrated into existing adoption products to further increase engagement and impact. More novel approaches, such as the four proposed activities outlined above, will be pursued through the development of new products and processes and by embedding the proposed activities into MLA's adoption framework.





Contacts

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To learn more about MLA Profitable Grazing Systems contact PGS@mla.com.au

To learn more about MLA eLearning platform contact elearning@mla.com.au

For all other enquiries info@mla.com.au



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