mla Your levies at work // August 2013

Feedback

Setting the standard

A note from the MD...

Producers across the north continue to endure severe drought conditions, with the wet season still several months away. However, the recent good rainfall across most of the south eastern states has lifted confidence and slowed turnoff, easing the pressure on livestock prices.

The 2012-13 financial year ended with the highest recorded export volumes - over one million tonnes of beef and 200,000 tonnes of lamb. The high volumes were largely driven by increased production due to the dry conditions; however, also reflect the growing demand for Australian red meat across the globe.

A feature in this edition covers one of our key focus areas - growing global demand for Australian lamb. Our highest lamb export volumes went to the US, with China and the Middle East close behind. The feature highlights the opportunities in the US - our key lamb market - as well as the growing economies of China and the Middle East (see pages 6-7).

A serious issue impacting the lamb industry in Australia is wild dogs. Featured in this edition of *Feedback* are some examples of how your levy funds are invested into co-operative research centres (CRCs) - specifically the Invasive Animals CRC to reduce the impact of wild dogs. It is the collective investment of funds that make it possible to undertake these large-scale research projects for the benefit of the whole industry.

Your comments are welcome
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Contents

Cover: MSA cattle producers Don and Alison Cameron of Walcha. Image by Sophie Frazer of Vivid Imagination.

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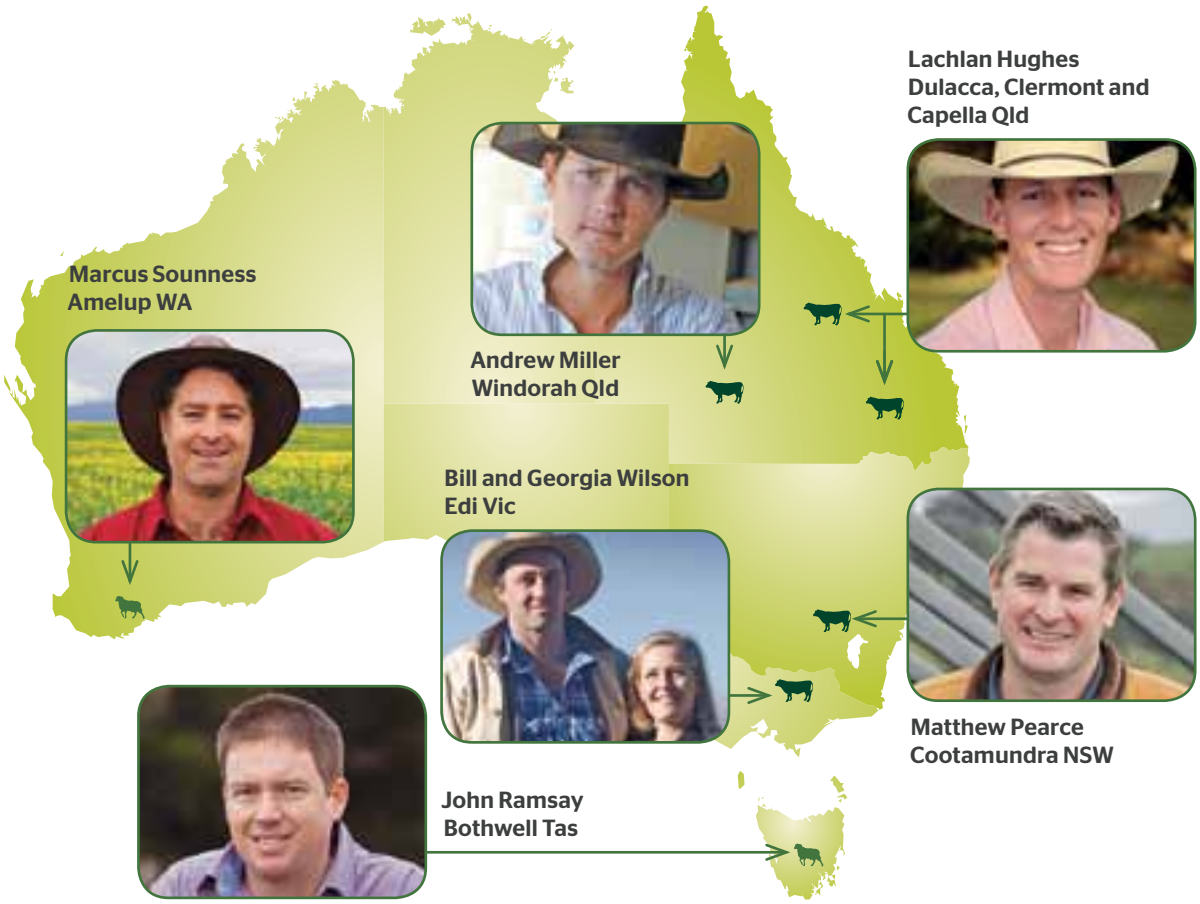
Rising to the challenge

Six Australian cattle and sheep producers are taking up the challenge to improve the productivity and profitability of their businesses in an initiative launched last month – the MLA Challenge.



The six Challengers, selected from more than 40 applicants, are cattle producers Andrew Miller from Windorah and Lachlan Hughes from Dulacca, Clermont and Capella in Queensland; Matthew Pearce from Cootamundra, NSW and Bill and Georgia Wilson from Edi, Victoria; and sheep producers, John Ramsay from Bothwell, Tasmania and Marcus Sounness from Amelup, Western Australia.

"Each Challenger is being supported with a business coach, producer mentor and a wealth of the latest MLA research and industry resources to hone their operations," said Peter Vaughan, MLA's General Manager Livestock Production Innovation.

"While the focus will be on the six Challengers taking their own path to success, a key component of the program is challenging other Australian beef and lamb producers to consider how they could use these same resources and tools to improve their own businesses."

During the year-long challenge, the Challengers will document their progress and share their experiences through both traditional and social media which will allow anyone to track and compare their progress.

Their journeys can be followed at **www.mla.com.au/challenge** where you will find the latest information, tools and resources underpinning the MLA Challenge.

"MLA invests industry levies into research that aims to find new ways to improve the profitability and productivity of Australian cattle and sheep enterprises. This levy-funded research can have proven benefits and we want more producers to access it - whether that is directly with us or via their local industry experts - and we are confident the MLA Challenge will inspire them to do this," Peter said.

Individual goals and improvements on current business performance set with each Challenger will be measured during the program to determine the eventual winner. The winner will receive a bursary to support ongoing professional development and additional agribusiness services.

MLA acknowledges and thanks the support of sponsors - Woolworths, Westpac Agribusiness, QantasLink and offical media partner, Fairfax Agricultural Media.

www.mla.com.au/challenge

World Environment Day award

MLA's Target 100 program has continued with win accolades, taking out the United Nations in the Australia World Environment Day Award for Sustainability Education.

The awards are held each year in support of World Environment Day on 5 June to recognise Australian achievements in the environment, social justice and media.

The awards play an important role in raising awareness about environmental issues and challenges, and inspiring and motivating individuals and organisations to take positive steps towards sustainability and environmental excellence.

Target 100 is an initiative to deliver sustainable cattle and sheep farming by 2020. It is driven by Australian cattle and sheep producers through MLA, Cattle Council of Australia, Sheepmeat Council of Australia, Australian Meat Industry Council, Australian Lot Feeders' Association and Australian Meat Processor Corporation.

Share your story on sustainability and join producers all around Australia by signing up to Target 100. Go to **www.target100.com.au**

www.unaavictoria.org.au/awards-programs/world-environment-day-awards/winners-finalists/

MLA General Manager Industry Communications and Engagement Karen Hellwig receives the Sustainability Education award for the Target 100 program from Sally Barnes, NSW Office of Environment Chief Executive.

Lodge your Levies Notice

MLA members are encouraged to obtain their full voting rights for this year's AGM by submitting their Levies Notice by post or online.

All MLA members will receive a Levies Notice by mail in the next few weeks. By returning this notice or lodging online, members inform MLA of the amount of levies paid last financial year.

This is voluntary, but it is important that members lodge their levies to receive their full voting entitlement for all meetings and polls held in 2013-14, in particular this year's AGM.

To ensure you receive your full voting entitlements, return your Levies Notice or lodge online by 3 October 2013.

To find out more, go to **www.mla.com.au/voting** call 1800 675 717 or email membership@mla.com.au

New sheep husbandry guide

Sheep producers can now access a handy guide on sheep husbandry practices.

Developed by the Sheepmeat Council of Australia in conjunction with MLA, *A producer's guide to sheep husbandry practices* features best-practice techniques for well-known husbandry practices.

The guide aims to help producers provide good health, welfare and management outcomes for their livestock by drawing together information from a range of research projects and on-farm experiences.

Sheepmeat Council of Australia president Ian McColl said the guide provides up-to-date information on best known practices.

"Animal welfare and management on-farm can affect the long-term success of farming enterprises and the sheep industry," he said.

"Sheepmeat Council of Australia recommends this booklet as a practical, easy-to-follow guide on animal health and welfare practices for anyone involved in the sheep industry."

The guide details practices to help producers achieve a high standard of animal welfare, workplace health and safety, productivity and labour efficiency.

The guide is available in hard copy and online.

Download the guide at **www.mla.com.au/sheephusbandryguide** or to obtain a hard copy of *A producer's guide to sheep husbandry practices* // T: 1800 675 717

Snapshot

Brett and Ruth Hall, Lemont, Tas

Property:
'Montlea' – 900ha, Southern Midlands,
'Bronte' – 600ha, Central Highlands

Enterprise:
Angus cattle breeding for the autumn steer vealer market and a self-replacing Merino flock with 50% joined to prime lamb sires

Livestock:
500 Angus cows and 1,500 Merino sheep

Pasture:
Mostly improved pastures (ryegrass and legumes) complemented by some native grass species

Soil:
Sandy loams to heavy black clays

Rainfall:
600mm (Montlea) and 800mm (Bronte)

In profile | Building capability

Brett Hall // *Rural leader*

Tasmanian producer Brett Hall recently took part in the Australian Rural Leadership Program (ARLP). The course is designed to extend the capabilities and effectiveness of the nation's rural and agribusiness leaders. Here, the MLA-sponsored rural leader shares his thoughts about the program and the leadership tips he learned along the way.

What was your best day on the ARLP program?
There were so many! The cultural exposure in the Kimberley with the local Aboriginal people, and also during our visit to India, provided a great opportunity to see the bigger picture.

From a personal development perspective, the training in the 'Myers-Briggs Type Indicator' for identifying personality types was most beneficial. I now have a much better understanding of who I am, my values and how to interact with different personalities.

What did you learn about yourself during the course?
Even though the course is designed to take participants out of their comfort zone, I was a lot more relaxed, patient and calm on the program than I am dealing with the daily stresses and frustrations of running a farm business.

Why does the general public need to support Australia's livestock producers?
People all over the world have the same basic requirements in regard to their food supply. It needs to be safe, nutritious, sustainably produced and raised in an ethical manner. Australia's livestock producers are the best in the world at meeting all these requirements; all they ask in return is a fair price for their efforts.

Three words to sum up the ARLP experience?
Friendship, awareness and understanding.

What's next?
I have just completed a Graduate Certificate in Management at the University of Tasmania to qualify to study for a Master of Business Administration, specialising in agricultural innovation.

The top five things you learnt from the ARLP experience?
1. Don't make assumptions.
2. A group of people working together will achieve much more than an individual working alone.
3. Education creates opportunity.
4. Being judgemental without understanding the circumstances will only escalate conflict and make reconciliation more difficult.
5. Rather than focus on the differences, look for the things we have in common to find a way forward.

Brett Hall (pictured) at the Taj Mahal in Agra during his ARLP trip to India.

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Growing lamb demand

Finger lickin' lamb

Although the US was the single largest export market for Australian lamb in 2012, taking 36,667 tonnes, most Americans don't consume it. Those who do, love it – but the majority of consumers are time poor, unsure how to cook it and gravitate to cheaper proteins.

In 2012, lamb consumption in Australia was

9.7kg/person cwt

In the US it was

0.5kg/person cwt

MLA's Business Manager for Global Marketing, Stephen Edwards, has 26 years' experience as a chef, so he knows what he is talking about when he calls Australian lamb "the best in the world".

"Aussie lamb is recognised around the world as a high-quality product," Stephen said.

"The product is well-sized, well-trimmed and has a great mild flavour, which sits well with the American palate. Chilled Aussie lamb that is exported to the US has the added benefit of 40 days ageing while on the water, which adds amazing tenderness to an already tender product."

After five years in MLA's North American office, Stephen has a handle on why some US consumers are not as keen as Australians to put lamb on their weekly shopping list.

A barrier for Australian lamb in the US is competition from very cheap proteins such as chicken, turkey and pork. When on special, chicken breast could cost as little as US$1.99/pound, while whole fresh pork loins at US$2.60/pound are less than half the price of lamb legs.

The global financial crisis also produced a spike in cheaper 'comfort foods' such as meatloaf, fried chicken, meatballs and stews. The US market for red meat has picked up since 2009, but American consumers still tend to only 'trial' lamb at restaurants.

"Fortunately for the lamb industry, US consumers are developing more 'worldly' tastes and are exploring new cuisines such as Middle Eastern, North African and Indian – which feature lamb.

"American chefs are also increasingly diversifying away from traditional racks, to use shoulder and loin cuts in on-trend dishes such as Moroccan tagines and Indian tandoori."

And what do Americans think of our Lambassador, Sam Kekovich?

"Let's just say that Sam is uniquely Aussie and does a great job of promoting Australian lamb in Australia, but the Americans just didn't get it," Stephen said, having used the Sam advertisements at various US conferences and marketing events.

Growth markets

Markets such as the Middle East, South-East Asia, China and India are also developing a taste for Aussie lamb, lured by its healthy and safety benefits, and predominately Halal status.

In 2012, lamb exports to Middle East/North Africa were 55,076 tonnes swt (up 55% on 2011) while the China market grew 39% to 29,521 tonnes swt.

"These are proving fantastic markets for Australian sheepmeat," Stephen said.

"Middle classes are booming and consumers want to spend their disposable incomes on eating better proteins, which they couldn't previously afford, and lamb fits the bill.

"I am very positive about the opportunities for Aussie lamb globally. It is widely recognised as high quality and safe, and MLA will continue to drive it into exciting new markets.

"Australian lamb producers and processors need to continue producing a great product, exploring innovative ways to drive efficiencies in production and processing, while remaining sustainable to meet this global demand."

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MLA's Aussie lamb marketing strategy in the US involves:

- concentrating on regions which already have a taste for lamb, eg the north-east, south-east and west coast
- positioning Aussie lamb as sustainable, natural and raised without added hormones, which resonates well with Americans' growing interest in the origin of their food
- promoting lamb as a family meal option that isn't daunting to cook
- working with retailers and chefs to develop a range of cuts such as shoulders, loin chops (mini T-bones), rump and knuckle
- developing recipes to suit these cuts and position lamb as cost competitive and nutritious
- aligning lamb with food trends as well as American classics like the burger
- engaging consumers through trade networks, point-of-sale and education material in retail stores, and social media

In profile

Brad Farmerie // *Executive Chef, PUBLIC, New York*

At a Lower Manhattan restaurant in New York City, Australian lamb is holding its own against other delicacies harvested around the world: Ora King salmon, roasted Chatham cod, Szechuan crusted tenderloin and roasted belly of Berkshire pork.

Brad Farmerie, Executive Chef of PUBLIC, said his core mission is to give people something unexpected, something to talk about and make them think.

His ability to source hard-to-find ingredients, especially from New Zealand and Australia, and his fondness for wild game, including kangaroo, venison, and wild boar, has earned PUBLIC much respect for being one of the very few, if not only, restaurants in New York to feature such uncommon items.

With five consecutive Michelin stars under his belt and several other restaurant ventures – including a new one due to open in Moscow later this year serving Australian beef – Brad's first venture at PUBLIC is still going strong.

What's your cooking philosophy?
Staying true to the ingredients and celebrating the product, while challenging diners to incorporate new and exciting flavours and ingredients into their culinary vocabulary. The latter can be a challenge. If you're going to make them try it, it better be good!

Where does Australian lamb fit into this philosophy?
PUBLIC's menu presents many of the rare-for-the-US Australian and New Zealand ingredients that have caught my eye, particularly while I was living in the UK and on my travels around the globe.

Among a handful of proteins that have stayed on PUBLIC's menu since opening in 2003, I consider Australian lamb to be one of the most successful offerings.

What Australian lamb dish can US consumers order off the menu today?
Australian lamb loin with black baba ghanoush (a seasoned eggplant dip), za'atar (a Middle Eastern spice blend) roasted cippolini onion, goat's milk feta and pistachio vinaigrette.

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PUBLIC
http://public-nyc.com

Aussie lamb's spring fling

Once Australian lamb is included on menus and shelves in a particular US city, MLA carries out integrated consumer awareness activities, often during key consumption periods.

In 2013, MLA's activities coincided with Easter, traditionally the peak consumption period for lamb in the US. The focus was New York City (NYC), home to more than eight million people, many of whom have a cultural predisposition towards eating lamb.

MLA's 'Aussie lamb spring fling' campaign included advertisements on the back of the omnipresent yellow NYC cabs, spring lamb dishes at city restaurants, product ranges and recipe booklets at two retailers and targeted social media posts encouraging NYC residents to "have a fling with Aussie lamb this spring". The sales results at retail and restaurant levels were positive, building momentum for ongoing promotional activities in NYC.

Market compliance

The science behind the steak

Jamie Frost started his processing sector career when he was 16 and knows a good steak when he sees one. With industry training along the way, he can now identify that quality right back in the paddock.

Now aged 30, Jamie has worked at abattoirs in Toowoomba, Pittsworth and now Oakey. Along the way, he has done a Certificate II in Meat Processing and MSA Grading, Chiller Assessment and Meat Science courses.

Jamie attributes his promotion to Assistant MSA Coordinator (and more recently also took on the role of Chiller Manager) at Oakey Abattoir to the MSA Meat Science Course he undertook in 2012.

"It gave me a hands-on understanding of the scientific elements affecting eating quality of red meat, from production through to consumer," he said.

During the five-day course, Jamie learned about biochemistry and muscle structure, pre-slaughter nutrition, marbling effects on eating quality, the MSA grading system and the impact of chilling, ageing, packaging and cooking methods.

"One of the messages that really hit home was the 'paddock to plate' aspect. It opened my eyes to how on-farm management can impact eating quality of beef. I have owned cattle in the past, and if I ever have cattle again I will incorporate methods to ensure MSA compliance," he said.

MSA Meat Science Course graduate Jamie Frost grades carcases at Oakey Abattoirs.

"I would recommend the Meat Science Course to anyone in the red meat processing sector, as I believe MSA is the future of the industry and meat processors play an important role between producers and consumers."

MSA licensed processors are required to have a trained MSA coordinator, so the qualification has given Jamie career opportunities.

Oakey Abattoir processes about 1,000 MSA animals each week. As Assistant MSA Coordinator, Jamie is responsible for assessing the ossification, eye muscle area, hump height, marbling, meat colour and fat colour of carcases, and entering the measurements into a data capture unit to identify the MSA grade.

Jamie plays a key role in developing MSA compliance by explaining the grading system to local producers at the abattoir's regular producer information days.

"My role is rewarding because it enables me to utilise all I have learnt over the years and provides me with new challenges and the opportunity to promote the beef industry," he said.

In addition to the Meat Science Course, MSA workshops include targeted training for producers, saleyards and agents, processors, graders and end users.

MSA training is available to people in every step of the sheep and cattle supply chain. So if you are a producer, an agent, a processor, a butcher or a chef you can find out about a course to enhance your MSA knowledge by checking out:
www.mla.com.au/msatraining

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A new MSA index will help producers understand the direct impact of genetic traits, breed composition and management on eating quality.

The index is the most accurate predictor of eating quality the industry has seen so far, and allows producers to do their own modelling.

MLA's Manager Eating Quality R&D, Dr Alex Ball, said it offered scope for more producers to consistently meet market specifications and increase their returns.

"A practical example of how a northern producer might use it is to see how they can improve their index scores while maintaining their tropical breed content," he said.

"Another example from our initial work has shown that for northern production systems, marbling as a trait has considerable influence on the index, while for southern producers both marbling and ossification are important factors."

Alex said the index calculator scores carcases using science from the MSA model.

"Producers can change scenarios and examine – by manipulating certain traits such as breed content, marbling or

Calculating MSA impact

Building on the success of MSA, the next stage of the program will give more power to producers to optimise their production to achieve consistent quality.

ossification – how the index changes, and how to best meet processor specifications," he said.

"It also means producers can benchmark their performance against other regions and states."

Producers can access their MSA carcase feedback, including index values, through the MSA online feedback system at **www.mla.com.au/msa**

The MSA Index will be rolled out in the next 18 months as MSA processors Australia-wide take up the new industry-endorsed carcase-sorting tool – MSA Optimisation.

Alex said the new optimisation tool would improve international competitiveness by allowing processors to potentially extract more value from an animal by harvesting more MSA four and five-star cuts and by reducing ageing requirements.

The roll-out will be accompanied by the introduction to consumers of enhanced descriptions of beef quality – MSA three, four and five star – through MSA supply chains.

Taking action

Northern beef producers Ian and Kate McCamley are excited about the new eating quality prediction tool, the MSA Index.

The couple were involved in the index's data verification process and have already seen how the tool identifies which of their animals' traits lead to better eating quality and higher returns.

"We turn off about 4,000 grass-finished MSA and EU-accredited steers each year and we're always analysing feedback data," Ian said.

"A simple numerical value, which is a weighted average of eating quality scores, will give producers something to benchmark themselves with across their region or across the continent. By using the index calculator, it will be a lot easier to see where changes can potentially take you."

Ian and Kate run 26,000ha north of Rolleston in central Queensland. They believe they have already gained valuable feedback and insight from their historical index analysis and, as a result, have implemented management changes.

"It showed the massive difference in eating quality of our animals when we moved out of using HGPs – the improvement was clearly visible," Ian said.

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Read more about the McCamleys and their involvement in carcase quality research through the MSA-funded fat depth PDS on page 20 of this issue of *Feedback*.

www.mla.com.au/msa

Read about the new MSA optimisation model: **www.mla.com.au/msa-optimisation-model**

Environment

Turning hot air into dollars

Methane produced by ruminant animals during digestion contributes to about 10% of Australia's total greenhouse emissions and two-thirds of agricultural emissions. MLA R&D aims to turn this hot air into farm income.

MLA Climate Change R&D Manager, Dr Tom Davison, said MLA was managing the National Livestock Methane Program (NLMP), a Federal Government research initiative aimed at developing reliable and practical science to reduce emissions, improve animal performance and redirect the energy used to produce methane.

"Methane is wasted energy that could be used to produce more saleable product," Tom said. "Decreasing methane emissions also gives consumers confidence our industry is reducing its environmental impact."

The NLMP, launched in June 2012, is supported by funding from the Australian Government Department of Agriculture, Fisheries and Forestry as part of its Carbon Farming Futures, Filling the Research Gap program (Round 1). It is managed by MLA with co-investment from eight leading research organisations. MLA has also committed $3.84 million.

On the NLMP's first birthday, Tom said the program was delivering a range of strategic and applied research.

"There is not one solution, so NLMP research investigates a range of options to mitigate emissions and increase animal productivity through weight gains, reproduction, lowered input costs, or income through the Carbon Farming Initiative," Tom said.

"This multi-industry research has already demonstrated methane emissions from cattle in northern Australia are lower than initial estimates, and this will reflect in the national greenhouse accounts."

He said environmental stewardship could improve Australia's market share.

"Some European supply chains already demand carbon footprints and transparency around emission reduction, while some US restaurant chains suggest Australian beef and lamb is not as environmentally friendly as local product," Tom said.

MLA's commitment to carbon emission research extends beyond the NLMP to include the potential development of a vaccine to reduce methane emissions in a practical way for extensive properties. Another potential opportunity for producers to access carbon credits through the Carbon Farming Initiative has come from NLMP research to replace urea with nitrates in lick blocks or feedlot rations. MLA is also scoping research opportunities for the role of controlled fire management in northern Australia to reduce carbon emissions, improve grass – tree balance and increase valuable perennial pasture species.

The NLMP builds on the Reducing Emissions from Livestock Research Program from 2009 to 2012, which gave the livestock industry better understanding of how genetic selection, nutrition, management and biochemical processes can be manipulated to reduce methane production.

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To read the full range of NLMP projects go to: **www.daff.gov.au/climatechange/carbonfarmingfutures/ftrg/national-livestock-emissions-program**

To learn more on the CFI go to: **www.cleanenergyfuture.gov.au** or **www.climatechange.gov.au/cfi**

For more information on NLMP visit: **www.mla.com.au/nlmp**

Download a *Carbon farming initiative fact sheet* at **www.mla.com.au/carbon-farming-initiative**

NEWS FLASH:

Six new projects started in July, following MLA's successful submission to the second round of the federal Filling the Research Gap funding. MLA will contribute a further $1.69 million towards abating methane and nitrous oxide and identifying innovative livestock systems which are adaptable to climate change. The projects complement the existing National Livestock Methane Program suite of research.

Read the full list of the Filling the Research Gap research projects – round two at: **www.daff.gov.au/climatechange/carbonfarmingfutures/ftrg/round-2-project-list**

MLA has also recently received news that its submission to the Department of Agriculture, Fisheries and Forestry's Extension and Outreach program was successful. This has resulted in funding of nearly $950,000 being granted to MLA for extension and communication activities to cattle and sheep producers to increase their productivity through mitigation of greenhouse gas emissions.

Research spotlight

MLA oversees the delivery of 16 NLMP (Round 1) projects that measure emissions, assess the impact of genetics, additives and forages on emissions, and manipulate rumen microbiology. Here, we put the spotlight on two areas of research:

Underbelly: CSIRO is leading two NLMP projects that delve into rumen microbiology. Researchers are using new approaches and international data to better identify rumen bugs, and understand what they do and how to manipulate them. This paves the way to develop practical methods to promote a 'low methane phenotype' in animals, such as through animal selection. This strategic research uses advanced genome sequencing techniques to identify ways to improve feed conversion and nutrient retention, and reduce emissions.

Food for thought: The University of New England (UNE) is leading an international initiative to evaluate and optimise the capability of GreenFeed Emission Monitoring units to measure daily methane emissions of sheep and cattle, without affecting their natural behaviours. The practical outcome will be a research tool to quantify emissions from grazing sheep and cattle, to validate claims of mitigation. UNE is also leading an investigation of nitrate supplementation and rumen defaunation (elimination of rumen protozoa) of livestock – technologies expected to deliver productivity gains and emissions mitigation in Australia's northern cattle herd.

Climate-clever clover

Dr Parwinder Kaur, MLA's nomination for the 2013 Science and Innovation Awards for young scientists in agriculture, is on a mission. She aims to reposition meat production in the environmental debate by identifying subterranean clover species that, when eaten by livestock, produce significantly less methane gas emissions.

Parwinder and her team at the University of Western Australia's Centre for Legumes in Mediterranean Agriculture hope their work will result in Australian producers having new, environmentally friendly sub-clover species available within five years. These species are expected to convert to energy more efficiently in an animal's gut, as well as produce lower emissions.

With sub-clover covering about 29 million hectares nationwide, this project has huge potential to reduce agriculture's contribution to Australia's total greenhouse gases, which is estimated to be about 10%.

Here, Dr Kaur talks more fully about this research.

Why is this project important?
If we can select species that convert more efficiently to energy that means increased production. Also, methane has 21 times more heating capacity than carbon dioxide so, if we can reduce emissions, Australian agriculture will be more environmentally sustainable.

How will you and your team achieve this?
We need to complete the genome sequencing for subterranean clover. We have a core collection of more than 10,000 expressions of sub-clover from all over the world. We have distilled them down into 97 lines with more than 80% diversity. We will then form a 'hapmap' (a map of the clover genome which describes common patterns of genetic variation) and try to identify the particular gene linked to this methane-emitting trait. We should have a draft sequence by the end of this year.

What has the MLA Award contributed to this research?
MLA sponsorship for the award allowed me to travel to Japan to learn more about bioinformatics. Whenever you sequence anything, it creates a huge volume of data in binary language, collected by super computers, that needs to be translated into biological language. We're very short of those skills in Australia so it was a fantastic opportunity to spend six weeks in Japan with bioinformatic experts learning how to make sense of my data. I still use their super computer by logging in remotely.

What would you like to achieve from this research?
From this project I would like to see a more climate-smart sub-clover species available to producers and, from a personal career perspective, I would like to build my bioinformatics skills, as there's a real shortage of these in Australia.

In a nutshell...

Name:
Dr Parwinder Kaur

Lives: Perth

Works:
Research Associate at the University of Western Australia's Centre for Legumes in Mediterranean Agriculture (CLIMA)

Aim:
To sequence parts of the subterranean clover genome

Why:
To reduce the amount of methane livestock emit into the atmosphere

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Parwinder's work doesn't end there... This project will support other MLA initiatives, such as the accelerated development of a molecular toolbox for sub-clover and other Feedbase Investment Plan projects. This can be applied to work in pre-breeding annual legumes and sub-clover, and in research into improving pasture health and nutrition to identify sub-clover germplasm that is more resistant to root pathogens, or can realise its full production potential using less phosphorus fertiliser.

Research at work

The latest on-farm strategies emerging from MLA's investment in research

In this issue

EverGraze goes local

Whether you're in a water-logged or drought-affected area, on the west or the east coast, the EverGraze Regional Packages offer evidence-based options for producers in the high rainfall zone across southern Australia – at the click of a mouse.

The regionally relevant strategies and information on grazing systems and farm management are now available on the EverGraze website.

For the first time, producers in the NSW Central Tablelands, the south coast of Western Australia, south-west Victoria, north-east Victoria, the northern slopes of NSW and the southern slopes of NSW have easy-to-navigate, practical, evidence-based information tailored to their region's unique climate, topography and soil types. →

EverGraze

Project Leader Kate Sargeant said the Regional Packages brought the latest research and development outcomes right to the farm gate.

"Each region can be described in relation to the climate, soils, pastures, enterprise types and issues to be addressed," she said.

"With the regional context defined, these information packages can then target each region's unique needs. Also, by focusing on communicating how research outputs are relevant to local farming systems, I think we will fast-track their benefits to both industry and the environment."

Kate said one of the project's greatest strengths was its trouble-shooting option where producers can click on the "I want to..." section to tackle common problems in that particular area.

"For example, in the South West Victoria package, producers can learn the most relevant strategies for filling the winter feed gap," she said.

"The options presented consider grazing management, livestock system set-up, pasture species and tactical management options, such as the use of gibberellic acid and nitrogen.

"Tools including the Feed Budget and Rotation Planner, which is used for developing feed budgets and costing different winter feed options, help producers make the best decisions for their unique situations."

Each regional package features information on soils, climate, pastures, relevant research sites and case studies, livestock systems, benchmarking and environmental issues.

Kate said the packages are a work in progress.

"Initially, the focus has been to present the outcomes from EverGraze research. With time, more information will be added to address the breadth of grazing system-related issues and opportunities in each region, and as new research and development comes to hand."

What is EverGraze?

EverGraze is a national research, development and extension project based on the principle: 'put the right plant in the right place for the right purpose with the right management'.

The project aims to significantly increase the profitability of livestock enterprises in the high rainfall zone of southern Australia, while reducing ground water recharge and soil loss by wind and water.

EverGraze is funded by MLA, in partnership with the Future Farm Industries CRC and CMAs and Australian Wool Innovation.

EverGraze Regional Packages fast facts

- Regional Packages combine recommendations from EverGraze with principles, tools and training tailored to each region.
- Packages have been developed for the following regions: the NSW Central Tablelands, the northern slopes of NSW, the southern slopes of NSW, south-west Victoria, north-east Victoria and Western Australia's south coast. Another region – Victoria's east Gippsland – will be added towards the end of this year and more will follow as resources allow.
- All southern producers in the high-rainfall zone will find the tools and information useful.
- The resources include material on pasture species, grazing management and livestock systems.
- The information has been gathered from six large-scale research sites, regional advisory groups, on-farm experience and more than 60 demonstration sites and farmer case studies across southern Australia.
- The packages are web-based, providing user-friendly documents linked to detailed information on research and other resources.

EverGraze Tools

- Feed Budget and Rotation Planner
- Stocking Rate Calculator
- Feed on Offer Guide for Lucerne and Chicory
- Pasture Improvement Calculator
- Tactical Management for Green Feed Calculator

Project dashboard: EverGraze

MLA's financial contributions to the project (2005–2013):

$5.416m

AWI: **15%**
MLA: **17%**

Government (via CRC and CMAs): **68%**

Length of project: 10 years

Completed: 9 years

Project is part of MLA's objective to:

Create opportunities through genetic research and management practices to improve pasture and forage crop productivity, quality and persistence

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To visit the Regional Packages go to: **www.evergraze.com.au**

More on EverGraze on pages 14 and 15

Growing profits and pasture

Sheep producer Peter Hayes, of Moutajup, is convinced his adoption of scientifically proven EverGraze principles on grazing management has increased profits, reduced business risks and improved sustainability.

Snapshot

Peter Hayes, Moutajup, Vic.

Property: 426ha

Enterprise: Superfine wool production, supermarket/ export lamb trade, Merino stud

Livestock: 2,200 Merino ewes, 190 stud Merino ewes, 1,600 weaners, 1,200 wethers

Pasture: Tall fescue, rye, phalaris, clover, lucerne

Soil: clay to sandy loam, basalt

Rainfall: 631mm

The self-described evidence-based farmer has embraced the EverGraze mantra of 'right plant, right place, right purpose, right management' and has adopted some of the successful outcomes from the nearby Hamilton EverGraze Proof Site.

"For me, one of the greatest benefits has been learning about the EverGraze pasture systems and getting the confidence to plant summer actives, such as lucerne and tall fescue, to extend our seasons and fill the autumn and winter feed gaps," he said.

"Because of the work at the Proof Site and being able to talk to other producers who have adopted these strategies, I didn't feel like I was the one experimenting."

Peter, who is chair of the Hamilton EverGraze Regional Advisory Group, said the Proof Site's economic modelling of various grazing systems, including payback periods, helped him consider other marketing options for his sheep.

Tapping into new opportunities

An investment in lucerne and fescue, which gave Peter higher-quality feed earlier in the growing season, led to a new marketing opportunity.

"We join 2,200 Merino ewes (average 17 micron) and 190 stud females for spring lambing and join 300 of our older ewes each year to terminal sires," he said.

"We turn the crossbreds off as fast as possible, aiming for the Middle East market or light supermarket trade at 10-18kg carcase weight."

Peter grazed lambs on fescue from late September, achieving weight gains of 300g/day, which enabled him to turn off lambs three weeks earlier than he'd been able to before.

"I experienced similar success with the lucerne," he said.

"Researchers estimated its payback period at five to seven years but, when I planted my first paddock, I found the increased flexibility meant our returns improved faster than I expected."

In that first year, Peter placed shorn wethers with a starting value of $30/head on the lucerne. They gained 200g/day and within two-and-a-half weeks had turned into export wethers – worth an additional $20/head.

"As it turned out, I paid for the lucerne's establishment cost in the first year," he said.

Other benefits included a 1-2% increase in weaner survival and improvements in wool cut and staple length.

Finding the proof

EverGraze Project Leader Kate Sargeant, of Victoria's Department of Environment and Primary Industries, said Hamilton was one of six Proof Sites nationwide developing valuable, practical and proven messages for producers to improve farm profitability, environmental management and reduce risk.

"The work done at these sites shows producers how to maximise returns from their pasture choices and grazing systems, including environmental benefits from controlling water-logging and salinity," she said.

Kate said it was important to understand that every farm was unique in terms of its soils, landscape, climate, enterprise mix and existing practices.

"To make these findings from the Proof Sites relevant to producers, we have combined them with modelling, case studies, tools and training which are presented in the new regional packages on the EverGraze website," she said.

"They help producers consider a range of options including the costs and potential benefits of improving their own businesses."

The Proof Sites are located at Tamworth, Orange, Holbrook and Wagga Wagga in NSW, Albury/Wodonga on the NSW/ Victorian border, Hamilton and Chiltern in Victoria and Albany in Western Australia.

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Pastures to improve the bottom line

Two pasture systems tested at EverGraze's Hamilton Proof Site returned gross margins more than 100% higher than prime lamb production systems traditionally used in the area.

Applying the EverGraze principles over four years resulted in an estimated average annual gross margin of $617/ha (for the triple system) and $564/ha (for the perennial ryegrass system) compared to the district average of $282/ha.

"These exceeded the top 20% prime lamb production systems in the South West Farm Monitor project ($484/ha) by 16% and 24% respectively, and the average prime lamb production system ($282/ha) by more than 100%. This analysis did not include the cost of establishing the pastures," Department of Environment and Primary Industries Victoria's Dr Ralph Behrendt said (see Figure 1).

Ralph led the EverGraze research team that tested the performance of three grazing systems aimed at improving profitability while maintaining perennial groundcover and reducing the risk of salinity.

Species and varieties were selected to match the location, such as the well-drained crests, slopes and poorly drained clay flats in each system.

A cost analysis estimated the payback period from investment in the pastures was five to seven years.

The two successful systems were:

1. Perennial ryegrass system: early season flowering perennial ryegrass on the crest, mid-season flowering perennial ryegrass on the slopes and late season flowering perennial ryegrass on the valley floors.
2. Triple system: perennial ryegrass was replaced with winter active lucerne (with a dormancy rate of seven – lucerne is rated from one to 10 for dormancy with one being highly dormant over winter and best suited to snowfall areas) on the crests and summer active tall fescue on the valley floors.

The unsuccessful system was a 'Novel' system: chicory on the crests, late finishing perennial ryegrass on slopes and kikuyu on valley floor.

All pastures were sown with white clover and late flowering subterranean clovers and fertilised to maintain Olsen phosphorous levels of 15mg/kg.

Each system was grazed with high-performance livestock enterprises. Stocking rates, lambing and calving times were optimised to balance profitability against increasing profit variation and environmental risks.

Ralph said the team found that a greater diversity of perennial pasture species and varieties across the landscape extended the growing season and allowed greater flexibility for livestock management. It resulted in higher stocking rates, weaning percentages and overall production.

"While both systems had similar profitability, for an August-lambing, Merino-cross terminal enterprise selling store lambs in December, the inclusion of lucerne in the triple system resulted in less variability in gross margins and, in particular, reduced supplementary feeding costs in dry years," he said.

"During the 2006-07 summer (which followed the spring drought in 2006 but included the highest ever January rainfall on record), the response of lucerne to summer rainfall reduced supplementary feeding costs by $20/head or $300/ha compared to the perennial ryegrass system. This practically paid for the cost of the lucerne establishment in a single year. Lucerne also fully controlled water loss below the root zone, reducing the risk of salinity."

Ralph said the benefits of lucerne for finishing lambs and flushing ewes were not included in this gross margin analysis. However, results from the Wagga Wagga Proof Site indicated that grazing ewes on lucerne for two weeks prior and two weeks during joining resulted in increased ovulation rates and a 10% increase in weaning percentages.

Modelling for the triple system at Hamilton showed that lambs could be kept on lucerne to January in 60% of years and February in 30% of years while still having enough lucerne to flush ewes, and that this would provide further opportunities to improve profits in those years with wet summers.

Figure 1 **Gross margin for EverGraze triple and ryegrass system in 2006–2010 compared to the top 20% prime lamb enterprises in South West Farm Monitor Project**

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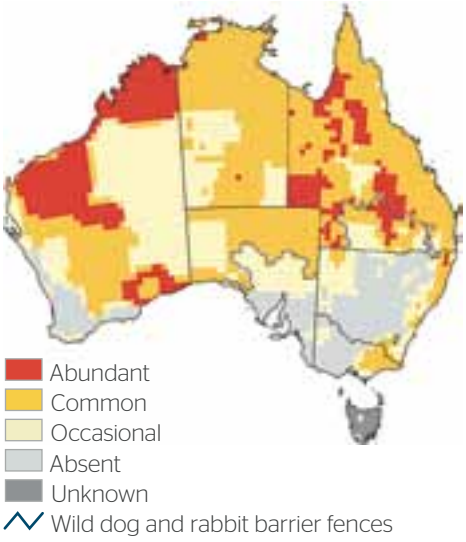
Invasive animals

Figure1 **Distribution and relative abundance of wild dogs and dingoes (*Canis* species)**



Source data: West, P. (2008). *Assessing Invasive Animals in Australia 2008*. National Land & Water Resources Audit and Invasive Animals CRC.

Fast facts

- In Victoria, an estimated 470,000ha of private land is affected by dogs, with sheep farming impossible on 82,000ha and 160,850ha considered uneconomic.
- Victoria spends $4.4 million annually on wild dog management.
- Wild dogs are estimated to cost the Queensland grazing industry more than $67 million a year.
- Between 90% and 95% of wild dogs in eastern Australia are hybrids, ie they contain domestic dog genes. The most pure dingo populations are found in remote parts of Central Australia.
- Adult dogs typically weigh 15–20kg.
- The largest reported wild dog weighed 71kg and was captured at Wallabadah, NSW, in the 1990s.
- Wild dogs carry hydatids which are transferrable to humans, and also affect offal sales and the live cattle trade with South-East Asia.
- Wild dogs carry *Neospora caninum*, a leading cause of bovine abortion.
- Wild dogs carry the dog tapeworms *Taenia hydatigena* and *Taenia ovis*, whose intermediate forms appear as bladder worm and sheep measles in sheep.
- Wild dogs have an impact on native flora and fauna, such as koalas and the critically endangered brush-tailed rock wallaby.

Grazing dogged by costly invader

Photo courtesy of Invasive Animals Cooperative Research Centre.

Wild dogs are affecting livestock production, and experts say only a coordinated, proactive response from the industry will stem the losses.

The National Wild Dog Management Advisory Group and other industry bodies are focused on reducing the impact of wild dogs on Australian agriculture.

Estimates of the cost of dealing with wild dogs vary from $45 million nationally (according to the Invasive Animals CRC) to AgForce Queensland's $67 million for that state alone. National Wild Dog Facilitator Greg Mifsud says it is clear more accurate data is needed to target control strategies and attract more funding.

"The AgForce estimate, in my opinion, is the most accurate we have. It incorporates not only feedback from producers, but also data from processing centres and saleyards, and I believe losses in other states would be similar," he said.

Wild dogs are found in every state and territory. According to Greg, anecdotal evidence indicates their numbers are increasing, despite industry-wide control efforts.

"After three years of good seasons and excellent breeding conditions, we are starting to hear of producers being impacted by wild dogs in areas not previously affected," he said.

"It's also symptomatic of changes in agriculture and rural demographics. There is now more variation in enterprises, more lifestyle and hobby farms, and an increase in absentee landholders, which can all contribute to breakdowns in control programs. We've also got cultural challenges in trying to engage the wider community to support the various control methods available."

MLA Environment and National Resource Management Project Manager, Cameron Allan, emphasised the need for strategic industry investment to ensure maximum benefit to producers.

"In partnership with the Invasive Animals CRC, AWI and other stakeholders, MLA has committed $610,000 to wild dog research and $450,000 to community engagement. MLA has also supported the development of a multi-dose ejector, aerial baiting strategies and the Blue Healer® antidote for the accidental poisoning of working dogs by PAPP – a new toxin being developed to complement 1080," he said.

"These investments are aimed at developing effective dog control programs into the future that comprise the various jurisdictions working together, using new tools and ensuring ongoing access to the control methods we have available."

Tips for wild dog control

- Develop a community-based wild dog management plan which provides information on wild dog movements and allows for better targeting and communication of the control program.
- For the best outcomes, control strategies need to be coordinated with neighbours and involve as many forms of control as possible (eg baiting, fencing, trapping and shooting).
- Be proactive rather than reactive (eg start baiting before dogs begin to attack stock).
- Become familiar with signs of dog activity, such as agitated stock, movement of kangaroos and wallabies from paddocks where they are usually found, and the presence of dog tracks and scats.
- When placing baits, be aware that wild dogs are creatures of habit and will use the same travel routes.
- Try to organise major farm activities around wild dog control programs so excessive noise and movement doesn't disturb them or force them out of the area.
- Place baits strategically rather than using broad-scale random distribution.
- Retrieve and destroy any unused baits.
- Tie baits with wire to known locations and/or bury them to allow for effective retrieval.
- Follow best practice guidelines for 1080 baiting to limit the risk to working dogs.
- Leave your working dogs at home when checking baits or travelling to areas they are known to be.
- Integrate as many control techniques as possible; no one technique on its own will work effectively.

Useful organisations include:

- Livestock Health and Pest Authority (for supplying poison, co-ordinating aerial baiting and providing mapping) **www.lhpa.org.au**
- National Parks and Wildlife Service (for supplying trappers and supporting baiting programs) **www.nationalparks.nsw.gov.au**
- Invasive Animals CRC (for expertise and best practice information) **www.invasiveanimals.com**
- Watch the *feedbackTV* episode about controlling pests and predators: **www.youtube.com/watch?v=Adz7z-rtL4k**

Biting into profits

Snapshot

Russell Cornall, Environmental Manager, Victoria River Downs Station, NT.

Property: Victoria River Downs 2,824km^2 Heytesbury Cattle Company 24,518km^2

Enterprise: Beef cattle

Livestock: Brahman

Pasture: Native

Soil: Mixture of black and red soils

Rainfall: 700mm

Russell Cornall setting a dog trap on Victoria River Downs station.

With wild dogs costing northern producers millions of dollars in losses each year, Heytesbury Cattle Company is forging a coordinated control approach that's showing promising results.

Wild dogs cost northern cattle producers millions of dollars and can kill up to 20% of newborn calves, according to Heytesbury Cattle Company's environmental manager, Russell Cornall.

Russell, who is based at Victoria River Downs Station in the Northern Territory, said the northern wild dog population had exploded in the past few years. Across Heytesbury's six stations in the NT and WA, the company estimates it's been incurring production losses of up to $3.62 million a year.

"That's a fairly conservative estimate and doesn't count the stock that comes in with dog bites, abscesses on their legs, chewed ears and missing tails," he said.

"It's certainly a big deal to us. Not too many businesses can afford to lose that kind of income."

Russell, who has been at Victoria River Downs for a year, has forged a career in wild dog control. Originally from Victoria's East Gippsland, he worked for the Department of Primary Industries in some of the state's worst wild-dog-affected areas, implementing control plans focused on baiting and trapping.

He believes the previous Government's changes to Northern Territory baiting legislation, combined with favourable seasons in recent years, have allowed dog numbers to rise significantly.

Invasive animals

"When it comes to wild dogs it's all about what you can't see. When they're killing it's the calves you don't see at weaning time that show their impact. With control programs, it's the dogs you don't see that prove they're working."
Russell Cornall, Heytesbury Cattle Company

→

However, Russell says Heytesbury's stations can achieve a more sustainable balance by running co-ordinated control programs.

"It's not about eradicating the wild dogs, its just about getting their numbers back under control again," he said. "There are places where wild dogs live beside cattle without having much of an impact, but on our stations, particularly those in the NT, they do."

Russell believes wild dogs can learn to kill cattle as easily as they can kill sheep.

"It's just a skill they learn," he said. "One dog can take down a 150kg weaner – and heavier – without any trouble once they learn how. In packs they'll tackle even larger animals. The vulnerable groups are young calves and weaners."

A multi-pronged attack

During the past year, Heytesbury's primary control methods have been ground baiting, trapping and shooting, and Russell is pleased with the results.

"In some areas we are seeing fewer dogs – and signs of dogs – which shows us our efforts are working," he said. "The key to long-term success is to use as many tools as you can, as no one method will work in isolation. Baiting is good for longer-term reduction in dog numbers, and is particularly effective with younger dogs that are a bit hungry," Russell said.

"Trapping is a great immediate response, particularly if you have mature individuals giving you trouble."

Last year, Russell caught 14 dogs in one Lane's soft jaw trap in just one month in the same place and, during January this year, shot 11 dogs spotted opportunistically around the station. He believes a single dog on Victoria River Downs could kill up to $12,000 worth of livestock in its lifetime.

"On that basis you can afford to invest a huge amount in dog control before it starts to become uneconomic," he said.

With support from the Invasive Animals CRC, Russell hopes to launch a coordinated assault on wild dogs with Heytesbury's neighbours this year, involving aerial and ground baiting as well as trapping and shooting.

"For best results I think it's important to run a coordinated and strategic baiting program over as large an area as you can and, in-between those large assaults, have some sort of continuous control," he said.

Lessons learned

- Do some sort of control work all the time.
- A coordinated approach involving all your neighbours will always yield the best results.
- Don't rely on one method alone.
- Be strategic about where you lay baits. Burying them where dogs stop to mark their territory is effective.
- Baiting is a good long-term reduction tool while trapping is very effective against troublesome individuals.
- Take time to learn how to set a trap properly and aim to catch the most wary dog. Bury the trap below the surface and camouflage it.
- Don't get despondent if you're baiting and not finding dead dogs. It doesn't mean the program isn't working.

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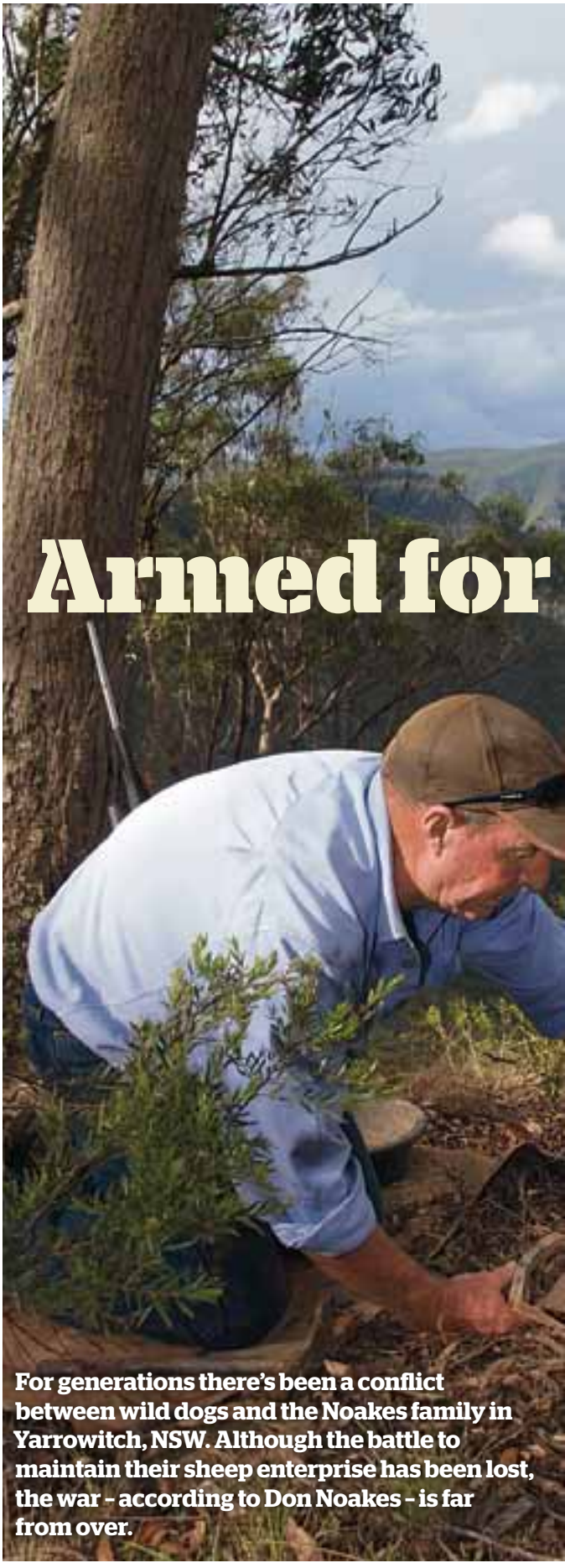

Armed for

For generations there's been a conflict between wild dogs and the Noakes family in Yarrowitch, NSW. Although the battle to maintain their sheep enterprise has been lost, the war – according to Don Noakes – is far from over.

battle

Snapshot

Don Noakes, Walcha, NSW.

Property: 1,000ha

Enterprise: Hereford bullock production for EU market

Livestock: 300 Hereford breeders

Pasture: Fescue, rye grass

Soil: Trap rock

Rainfall: 950mm

Don Noakes laying a wild dog trap on his property.

It was a sad day when Don Noakes turned his back on four generations of sheep production by his family, but the producer knew when he was beaten.

Pressure from wild dogs, combined with plummeting prices of the 1980s wool market crash, forced Don to face facts – his sheep operation was no longer viable.

"It was pretty sad and the economics weren't there, but at the end of the day it was the cruelty of it all that got the better of me," he said.

"Having to go out and destroy maimed sheep day after day was really tough."

Today, Don runs an EU-accredited Hereford beef herd on his 1,000ha property 'Old Woombi', about 40km east of Walcha, NSW. Although there isn't a sheep on the place, he remains committed to wild dog control.

Don maintains a 7km dog fence and, as president of the Yarrowitch Dog Association, helps coordinate a minimum of three baiting programs a year covering the local area of about 2,000km^2.

"1080 baiting is our first line of defence, and our most successful," Don said.

"I think it's important to use all the control methods available, but baiting is still the most efficient."

A coordinated effort by local producers, the NSW National Parks and Wildlife Service and the Livestock Health and Pest Authority (LHPA) sees 2,000 baits put out by hand in early March, 5,000 aerial baits put out in early May and another 2,000 laid by hand at the end of August.

"We'll also do strategic baiting in-between if producers are having problems," Don said.

"It's important to eliminate the dogs before they start to kill."

Trapping, in Don's view, is a last resort due to the time it takes to check traps each day. That said, he's still a fan of the Lane's trap, now available in soft jaw.

"I've used them for years and caught a lot of dogs in them, and I guess you're tempted to stick with what you know – but I'd prefer to bait and fence them out first," he said.

Don believes the biggest obstacle to effective wild dog control is the lack of consistency in the delivery of wild dog control across the state, as well as a lack of unified commitment from producers and other stakeholders.

Don's dog fence

2km: Traditional 1.8m high dog fence with two electric wires on outriggers.

5km: New netting fence with a hot wire at the bottom on outriggers and a hot wire on top in place of a barb. The most non-target pressure comes from wallabies.

"For example, the LHPA group in our area has committed $150,000 to aerial baiting alone, while a neighbouring area has committed only $20,000 to their entire dog control program," he said.

"Some landholders, particularly beef producers, don't want to be bothered with dog fences, despite the fact that in NSW – if you share a boundary with the National Parks and Wildlife Service – they will sometimes supply materials for fences, as long you put them up and maintain them. I think that's a pretty good deal."

Don is also critical of baiting regulations.

"In particular, I'd like to see more baits on the ground," he said.

"Presently, according to the NSW Environment Protection Authority's regulations we're allowed to put one bait (applied by hand) every 250m, but if one is picked up by a fox, then it's 500m between baits. To be more effective, I think we need 10 to 20 baits/km."

Don has been involved in trials of the M44 ejector, a baiting device which a dog pulls with vertical force and is then delivered a shot of 1080, and he looks forward to the next generation of dog control tools which includes the anticipated release of the new PAPP poison later this year.

Lessons learned

- Have a coordinated control plan with your neighbours, including government and corporate entities as well as private landholders.
- Baiting is the best defence and should be done before dogs start attacking livestock.
- In his operation, Don believes trapping is a last resort due to the time constraints of checking traps daily.
- A constant electricity supply is vital to keeping a dog fence effective.

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Meat Standards Australia

Scanning for market options

Snapshot

Ian and Kate McCamley, Rolleston, Qld.

Property: 26,000ha

Livestock: Cattle – finishing steers on grass to EU and MSA specifications

Pasture: Predominantly buffel grass

Soil: Scrub soils, sandy loam and duplex soils

Rainfall: 600–650mm

Ian and Kate McCamley have scanned thousands of cattle and learned some valuable lessons since hosting a Producer Demonstration Site (PDS) investigating compliance issues in beef marketing.

A focus of the on-farm research was to identify the fat depth of individual cattle to meet Meat Standards Australia (MSA), European Union (EU) and Japanese market specifications.

"The markets have significant premiums if you get it right. We trialled the fat scanner to see if it could fill a missing link in our business," Ian said.

"The one thing we didn't know accurately before was the fat depth 'on the hoof'. We could see most other things, but not the fat depth. Operating the fat scanner has given us that.

"We buy in young steers and finish them on pasture for the MSA and EU markets. We like to turn them through the enterprise fairly quickly."

Learning to use an UltraMac® fat-depth scanner was an integral part of the PDS, and this has led to significant business improvements, according to Ian. The scanners retail for around $3,600.

Since Ian started using the scanner, he has found the fall-out rate for his cattle is much lower. The animals hit the MSA and EU targets much more consistently.

"Currently, we target a steer with 6mm fat, which can bring 80¢/kg more than if he only had 5mm of fat. That 1mm of fat makes a difference of about $250 on the carcase," Ian said.

"Using the scanner has allowed us to identify the cattle that need a little bit extra to get them over the line."

Getting their teeth into it

The PDS also correlated carcase feedback data with MSA grading results. Ian and other local producers soon realised that the AUS-MEAT dentition carcase specification feedback produced different results to the new science-based MSA grade which uses ossification to determine carcase age.

"The PDS found that four and six-tooth MSA-graded carcases had the same average eating quality as the milk and two-tooth carcases," Ian said.

"Producers were frustrated to see that a six-tooth animal with a high MSA-eating quality grade receive a 30¢/kg discount compared to a milk or two-tooth animal with much lesser MSA-eating quality grade.

"Many beef retailers and wholesalers have never seen this sort of data and know nothing else than to order milk and two-tooth product."

Ian said the PDS was looking for profit drivers and encouraged industry to transition away from its reliance on dentition categories in the AUS-MEAT language and fully embrace the MSA system when setting commercial specifications. This would be a profit-driving paradigm shift for the cattle industry, by allowing it to genuinely identify the best eating quality carcases, no matter how many teeth the animal had.

Lessons learned

- Profitability can be increased by improving knowledge of an animal's fat cover.
- Using an UltraMac® fat-depth scanner enables producers to better assess animals and identify the most suitable market for particular animals.
- Dentition is not necessarily a relevant measure for carcases that are being MSA graded.

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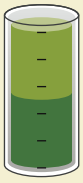
Pastures

Road testing rhizobia

Legumes may hold the key to productivity and persistence in subtropical pastures but, to do so, need effective soil bacteria.

Project dashboard: Rhizobia survival research project

Financial contributions to the project:
$344,435



MLA: **50%**

Government: **50%**

Length of project:
3 years

Completed:
1 year

Project is part of MLA's objective to:
Create opportunities through genetic research and management practices to improve pasture and forage crop productivity, quality and persistence

Researcher Gavin Peck, from the Queensland Department of Agriculture, Fisheries and Forestry, (DAFFQ) says poor survival of soil bacteria in hot, dry soils hampers the formation of legume nodules.

"Legumes will only be persistent and productive if effective nodules form," Gavin said.

New research funded by MLA and DAFFQ aims to identify the best ways of ensuring soil bacteria, called rhizobia, survive and nodules form.

"When summer-growing legumes are planted in northern Australia, the soil temperature can be so high the rhizobia can only survive for a few days at the most," Gavin said.

"Most of these summer-growing legumes – such as stylos and desmanthus – have seeds 1–3mm in diameter, so they are planted quite close to the surface to enable effective emergence. And it's the top few centimetres of soil that heat up the most."

The new research project uses glasshouse and field trials near Chinchilla and Goondiwindi in southern Queensland. The trials involve the summer-growing legumes caatinga stylo and desmanthus, which are promising legumes for Queensland farming and grazing systems dominated by clay soils.

The research is comparing traditional legume seed inoculation methods with newer techniques. The more traditional methods include coating the legume seed with a peat inoculant or a commercial seed coat treatment. Using these methods, the seed is sown near the surface. The newer techniques include using clay granules embedded with inoculant, and water injection of rhizobia. In both techniques, the inoculant is drilled to about 75mm deep.

For desmanthus and caatinga stylo, nodules often form in the second year of growth, when available soil nitrogen has been depleted. Rhizobia inoculant needs to have survived in the soil from when the legume was sown or native soil rhizobia are needed to form the nodules.

"Caatinga stylo has not been shown to form effective nodules with native rhizobia. Desmanthus does so in some soils. One aspect of our research is further investigating this, to see if we can actually get these legumes to form nodules with native rhizobia," Gavin said.

"The benefits of good nodulation can be huge, because the growth response in the legumes is so much better. The difference can be a factor of three or five times, so it's worth getting it right."

The results of this research are expected in 2014.

Left: Gavin Peck (Senior Pasture Agronomist DAFFQ) inspecting desmanthus in buffel grass pastures, Queensland.

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What are rhizobia?

Rhizobia are soil bacteria that, in association with legume plants, fix atmospheric nitrogen. They form nodules on roots of legume plants in a mutually beneficial relationship (symbiosis), in which the rhizobia get sugars from the plant and the plant gets nitrogen from the rhizobia.

The goodness of legumes

Previous MLA-funded research on the decline in productivity of sown grass pastures identified legumes as the best long-term solution to the losses across huge areas of Queensland and northern NSW.

Pasture rundown in these areas can halve productivity. Introducing legumes can increase available soil nitrogen and sustain grass production.

Pastures

Tough new legumes offer flexibility

'New' pasture legumes that have come from some of the toughest climates in the world are outperforming traditional sub-clover and medics and are finding a place in robust crop-pasture rotations.

French serradella pasture trial plots in Western Australia, photographed on 14 July 2010. The plot on the left was sown on 2 June, while the plot on the right was summer sown in February. Photo courtesy of the Department of Agriculture and Food Western Australia.

Deep rooted	✔
Quick to reproduce when there is a change in moisture	✔
Hard seeded	✔
Acid soil, pest and disease tolerance	✔

Welcome to Australia biserrula, French serradella and bladder clover.

These legumes – developed by Western Australian researchers in the past 20 years after worldwide searches for alternative pasture varieties – have been extensively trialled in Western Australia, southern and central NSW.

Research Agronomist Dr Belinda Hackney has been working on an MLA-funded project to develop management packages for the three new varieties that would appeal to producers looking for greater flexibility in the crop-pasture rotation.

"Once the legumes' seed bank has established, they will regenerate after cropping," she said.

"In our project, we evaluated 1:1 crop-pasture rotation systems, and all species performed well. The legumes provided organic nitrogen for the following crop, as well as high-quality feed for livestock.

"In WA, trials have shown it is possible to run four years of crop following biserrula and still have it regenerate after the cropping phase. This makes it much easier to alter the crop-to-livestock ratio in response to climate variability and price forecasts."

The length of the cropping phase and its effect on regeneration still needs to be clarified in NSW, as moisture and temperature differences can affect the rate of hard seed breakdown.

NSW trials found no difference in the yield and quality of wheat harvested following legumes compared with wheat supplied with nitrogen as di-ammonium phosphate.

Producers were also able to dry sow the hard-seeded unscarified or in-pod seed of some varieties in summer, using the high temperatures to break down hard seed and have it emerge on first good autumn rains. Alternatively, they could 'twin sow' unscarified or in-pod seed with their normal winter cereal crop. The legumes emerged in the stubble the following year, eliminating the competition experienced in 'cover cropping'.

While livestock production figures on the new pastures are limited, feed test results showed the legumes to be of high quality with high protein, metabolisable energy and digestibility levels.

The legumes also outperformed traditional sub-clover in terms of herbage production under adverse seasonal conditions, with the potential to extend the growing season in autumn and spring.

Challenges to growing the new varieties include sensitivity to broadleaf herbicides, which some producers have overcome by using blanket herbicide wipers to exploit the difference in height of legumes and target weeds.

Figure1 How to manage the new annual legumes

Variety	Site selection	Sowing	Fertiliser	Pest control	Management for regeneration	Harvesting
Biserrula (Casbah, Mauro)	Weed-free paddock No sunfonyl-urea herbicide 12 months prior to sowing 325–800mm average rainfall (in NSW) Not suitable for soils prone to waterlogging Soil pH from 4–7	Seed must be inoculated with correct rhizobium Shallow burial (1cm or less) Conventional sowing or direct drill 6–8kg/ha as stand-alone scarified seed, 1–3kg/ha if part of pasture mix	Minimum 10kg P/ha 10kg S/ha Molybdenum fortified fertiliser at sowing then every 1–5 years, if molybdenum deficiency	Monitor for red-legged earth mite and aphids in the year of establishment	Treat in same way as crop during year 1 If grazed lightly, remove stock prior to flowering Graze after seed set Moderate to high grazing pressure following establishment Grazing through winter encourages prostrate growth	Conventional cereal header – drum modification required Suction harvesting for commercial situations
Bladder clover (AGWEST Bartolo)	Weed-free paddock No sunfonyl-urea herbicide 12 months prior to sowing 400–650mm average rainfall (in NSW) Not suitable for saline soils or soils prone to waterlogging Soil pH from 4.8–8	Seed must be inoculated with correct rhizobium Shallow burial Sow scarified seed as stand-alone pasture (6–10kg/ha) Undersow scarified seed with reduced rate of cereal in final crop year Twin sow unscarified seed with normal rate cereal crop (20kg/ha)		Monitor for red-legged earth mite, blue-green aphids, cow pea aphids and lucerne flea Pseudopeziza leafspot has been reported in high rainfall areas of WA		Conventional cereal header – best results using open-front header with tined reel and crop lifters Similar drum settings to wheat, but reduced wind speed In very short seed crops, rake into windrows prior to harvesting
French serradella (Cadiz, Eliza, Margurita, Erica, Grasslands Koha, Serratas)	Weed-free paddock No sunfonyl-urea herbicide 12 months prior to sowing 375–800mm average rainfall (in NSW) Sandy to clay loam Sensitive to high levels of exchangeable manganese (Mn) Not suitable for saline soils or soils prone to waterlogging Soil pH from 4–7	Seed must be inoculated with correct rhizobium Shallow burial Sow scarified seed as stand-alone pasture in autumn Undersow scarified seed with reduced rate of cereal in final crop year Twin sow unscarified seed with normal rate cereal crop (use hard-seeded varieties)		Monitor for red-legged earth mite and native budworm Moderately susceptible to lucerne flea, moderate tolerance of blue-green aphids and cow pea aphids		Conventional cereal header

Pasture legume developers Angelo Loi and Brad Nutt pictured in a plot of the French serradella cultivar, Margurita, at a trial site in Western Australia.

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For more information on managing these new annual legumes visit:
www.mla.com.au/biserulla
www.mla.com.au/frenchserradella
www.mla.com.au/bladderclover

→ **Continued on page 24**

High strength pastures at Beckom

When drought and seasonal variability took their toll on Mike and Velia O'Hare's sub-clover seed bank, it was time to investigate alternatives.

Snapshot

Mike and Velia O'Hare, Beckom, NSW.

Property: 2,200ha

Enterprise: Wheat, canola and prime lambs

Livestock: 1,500 Wiltipoll x Dorper ewes

Pasture: Mix of lucerne and annual legumes

Soil: Medium loam to heavy clays

Rainfall: 475mm

Beckom producer Mike O'Hare says new pasture legumes such as French serradella, biserrula and bladder clover have a number of advantages over traditional sub-clover.

Sub-clover based pastures have formed the basis of crop rotation and livestock production in the O'Hares' farming system since Mike's father, Phil, purchased land in the district in 1963.

"During the drought we lost most of the sub-clover seed bank, and replacing that at present-day sub-clover seed prices was going to be a battle," Mike said.

Mike began investigating alternative annual legume varieties because, unlike sub-clover, they were aerial seeders, which would enable him to produce seed on-farm.

He bought French serradella seed in 2005 but, due to a lack of information about the plant's agronomy and lack of confidence in the seasonal conditions, he hesitated to plant it.

"I didn't plant it until I met (research agronomist) Dr Belinda Hackney in 2009. She gave me the knowledge and confidence to give it a go," Mike said.

"The seed was sown in a very dry year and performed very well, producing about 1,000kg DM/ha and a lot of seed. Sub-clover didn't do well and didn't set much seed that year.

"Regeneration was very good in the second year with about 4t DM/ha. The sheep have readily accepted it and do well on it."

A variety for every occasion

The O'Hares have also trialled bladder and gland clover and biserrula as part of Belinda's research.

Mike found that if planted on well-drained soil, the bladder clover had great ability to produce seed, even in tough conditions.

Biserrula's hard-seededness and ability to set seed under harsh conditions has also been a hit on-farm.

Although herbage production was low in its first year, it was able to set seed despite rainfall being half the average. In the same year, sub-clover failed to produce any worthwhile herbage and didn't survive to set seed.

Choosing a winner

"None of these are the perfect plant, but they have some advantages over sub-clover," Mike said.

"Biserrula is my favourite. It's the best pasture legume plant I've ever seen because it's so tough, is more competitive than other pasture legumes and under good conditions is very productive.

"It also hangs on longer in the season and in the recent wet summers it germinated early and produced a lot of feed through summer and autumn.

"Being able to alter the crop-pasture ratio from year to year is a tremendously valuable tool."

While the sheep accept biserrula, Mike says they preferentially graze the weeds, which is "fantastic" in a cropping rotation.

"I call it the All-Bran of pastures – they don't like it but it's good for them."

The only thing stopping Mike planting biserrula more widely is its links to isolated cases of photosensitisation (where the skin becomes abnormally sensitive to sunlight which can result in severe skin damage) of sheep in Western Australia.

The WA Department of Agriculture and Food has published information about managing sheep grazing biserrula to minimise photosensitisation (see link below) and WA growers have learned to manage it.

The O'Hares haven't had any cases of photosensitisation on biserrula on the farm, but at this stage Mike is hedging his bets, with half of 'Greendale' sown to biserrula and the other half sown mainly to bladder and gland clover. If problems with photosensitisation do occur, he has alternative feed sources.

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Department of Agriculture and Food Western Australia Farmnote – Photosensitisation in sheep grazing biserrula
www.agric.wa.gov.au/objtwr/imported_assets/content/past/fn_photosensitisation_sheep_grazing_biserrula.pdf

Sowing into new territory

250,000ha

sown to new pasture legumes with a potential target of more than

4 million ha

An MLA-funded project is building on advances in pasture legume breeding and agronomy to expand the area where new, hard-seeded varieties can be sown.

As well as breeding highly productive, drought- and disease-resistant pasture varieties, researchers at Western Australia's Department of Agriculture and Food (DAFWA) and Murdoch University have developed summer-sowing techniques for some of the legumes.

Summer sowing involves using an unscarified seed with a high level of hard-seededness to prevent undesirable germination in summer. Researchers have also developed a dry, granular rhizobium formulation that can be dry sown with the hard-seeded legumes.

Murdoch University's Professor John Howieson is leading the MLA project that will develop these new technologies for use in the drier regions of WA and NSW and the moister conditions of central and southern NSW.

He will also be investigating ways to dry sow the smaller-seeded varieties, such as biserrula and prima clover, which are more difficult to manage due to their size and very hard seed.

"While extending the knowledge of summer sowing of the larger-seeded species for farmers who want to accept that technology now, we'll also be researching ways to make summer sowing 'bullet proof' for the small and very hard-seeded species," John said.

Other aspects of the four-year project will include quantifying animal performance on the summer-sown legumes, developing optimal grazing strategies, and evaluating the option of grazing serradella pods as an alternative to summer feeding in Western Australia.

"In many parts of WA, producers have to supplementary feed lupins to sheep over summer, which is quite expensive," John said.

"We're looking at replacing lupins with serradella pod over summer. We have bits of data that say the pods are a good source of energy and protein, but we haven't done the right research to prove the exact benefit so that's what we'll be doing."

The project will also investigate the health of sub-clover rhizobia and try to understand, and overcome, its role in sub-clover decline.

Left: Murdoch University's Professor John Howieson is leading an MLA project which aims to expand the area in which new, hard-seeded, pasture legume varieties can be sown. Photo courtesy of Murdoch University.

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Genetics

Opening the gate to genetic gains

Breedplan, EBVs, selection indexes and the like have led to genetic advances in the southern cattle herd. But how do you take a genetic focus on a much larger scale to improve the productivity of the northern herd? An MLA-funded Producer Demonstration Site (PDS) is finding out.

The PDS at S. Kidman & Co's Helen Springs Station aims to equip northern producers with bull-breeding and fertility-boosting tools.

NT Department of Primary Industry and Fisheries' Principal Pastoral Production Research Officer, Tim Schatz, and station manager Chris Towne hope it will show how successful genetic selection can occur on an extensive, commercial property through performance recording, technologies and efficient management decisions.

"The most economically important trait in the northern beef industry is fertility," Tim said.

"Cows that reproduce and calve early allow producers to turn-off more progeny one wet season after weaning for the 350kg live export market.

"While the principles are the same as with smaller herds, the north needs practical ways to incorporate objective genetic selection into big herds in big paddocks."

Over three years (December 2012 to December 2015), the PDS will address challenges of genetic improvement in the north:

Expected outputs from the PDS

- A tool kit on how to set up a bull breeding nucleus on a commercial station.
- A field day to demonstrate progeny from the bull breeding program and selection techniques.
- Increased number of desirable bulls that are available to industry with information on genetic traits such as days to calving, scrotal size, onset of puberty and polledness.
- Increased number of producers with the ability to breed their own high-quality bulls.

overcoming the shortage of tropically adapted bulls with estimated breeding values for fertility traits, identifying superior females within large herds and objectively evaluating young potential sires on a large scale.

It involves a bull multiplier herd developed to breed high-quality sires for the station. Brahman and Charbray cows were selected for their reproductive performance and joined with Charbray bulls purchased on fertility traits, with the first calves weaned in April 2013.

Building on the herd recording already in place at Helen Springs and its outstation, Brunchilly, the PDS team will collect:

- birth date and weight, dam and sire (using DNA testing)
- at weaning: 200 day weight
- end of first post-weaning dry season: 400 day weight, height and scrotal size
- end of first post-weaning wet season: 600 day weight, height, scrotal size and semen morphology
- for female progeny: 800 day weight (pre-joining), 800 day height, and then weight. Pregnancy status, lactation status and BCS will be recorded twice a year.

The objective data recorded for male progeny will be combined with conformation, temperament and bull breeding soundness evaluation to identify potential sires. A selection index will be developed to rank these bulls, with data submitted to BREEDPLAN for analysis to aid selection of home-bred bulls to extend genetic gains across the station's commercial herd.

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No room

Fertility has been targeted at Helen Springs for more than a decade, and now the focus is the genetic contribution of bulls as well as the cows.

The 55,000-head Brahman/Charbray breeding herd has been pregnancy-tested since the station came into the S Kidman & Co stable in 2004.

"In recognition of the northern environment, we give commercial breeders one chance to miss a calf," Helen Springs manager Chris Towne said.

"If they come through dry twice, we move them out of the system so only productive genetics are retained.

"Preg-testing is an important management tool to boost our key profit driver, fertility. Our weaning rates (derived from PTIC females) are 83% from cows and 78-85% from first-calf heifers."

A whole-of-herd recording system, using a Gallagher TSi weighing and data platform, is another critical genetic management tool. At pregnancy-testing, condition score and pregnancy status are recorded; at weaning it's weight, age, breed, colour and vaccinations.

for passengers

Manager of Helen Springs Station, Chris Towne (left), with NT DPI&F Principal Pastoral Production Research Officer Tim Schatz.

Snapshot

S. Kidman & Co, Tennant Creek, NT.

Property: 10,200 km^2

Enterprise: Breeding, turn-off progeny to channel country or live export

Livestock: 55,000 head, Brahman and Charbray-cross

Pasture: Two-thirds Mitchell/Flinders open downs, one-third red spinifex/buffel

Soil: Black soil and red light loam

Rainfall: 400mm (October–March)

By recording breeder performance, Chris can identify animals that will calve between October and December – the optimum period to maintain breeder condition and allow weaning in April-May.

"We want fertile cows which calve at the right time so we can get more value from weaners when they are turned-off in October," he said.

"Weaners born outside this time frame have to be retained until the following year's turn-off."

Bringing the bulls into the picture

While bull buyers have made big gains through data recording, Chris is keen to fast-track sire potential at Helen Springs through a bull breeding nucleus.

"We join bulls at 3% (to cows ratio), so if one or two bulls/100 breeders don't perform, it can have a big impact on our bottom line.

"This PDS will help northern producers like us to become familiar with tools like EBVs, selection indexes, performance recording on a large scale, bull breeding soundness evaluation (BBSE) and semen testing to identify more fertile bulls. It will also show how genetic selection can be done on a big scale under extensive conditions in northern Australia."

Chris said the PDS required an extra level of management, as calves born in the bull multiplier herd would be tagged and recorded for birth date, weight and sire/dam.

He is overcoming one challenge of the extensive enterprise – multi-sire herds – by using DNA technology. Calf hair samples are taken at weaning, to identify sires.

Information gathering costs include $25/head for DNA testing, $124/year for BREEDPLAN membership; $6.03/head for BREEDPLAN to record parentage and process weight data; and $45/head for semen testing and BBSE.

"We consider this to be a worthwhile investment which will be repaid through the genetic gains the progeny of these bulls will deliver to the Helen Springs herd," Chris said.

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Lessons learned

- Use preg-testing with foetal ageing to select for fertility and identify annual turn-off.
- Herd recording is valuable to identify non-performing cows.
- Herd recording provides a running stocktake of how many cattle you have.
- Monitor body condition of breeders and match their nutritional requirements to pasture availability.
- Giving cows the opportunity to calve each year helps your bottom line.
- Select the right bulls for your environment and production goals – look closely at the genetic background of their dam so you can introduce fertile genetics into your herd.

Market compliance

The MSA beef journey

The Meat Standards Australia (MSA) success story wasn't written overnight. It has taken dedicated effort in all areas of beef and lamb production to develop and market a system underpinning product of consistent quality. This is the story of MSA beef in a paddock-to-plate journey on NSW's north coast that shows how each link in the supply chain plays its part.

The producers...

MSA has protocols in place for producers, and Don and Alison Cameron from Walcha, NSW, found they were already following most of the guidelines before becoming MSA-registered in 1999.

"We have always had a total commitment to producing top-quality meat for the market," Alison said.

"For 25 years we have been working with our cattle from a young age (8–9 months) yard weaning and intensive handling to ensure they are less stressed for later handling and trucking.

"This practice seems to work well for meeting the MSA criteria."

Together with their children, Sandy and Jessica, Don and Alison turn off more than 400 predominantly milk and two-tooth steers and heifers annually.

They produce home-bred Shorthorn and Shorthorn-Angus cross steers, as well as bought-in trade steers, and some heifers if they meet the specifications.

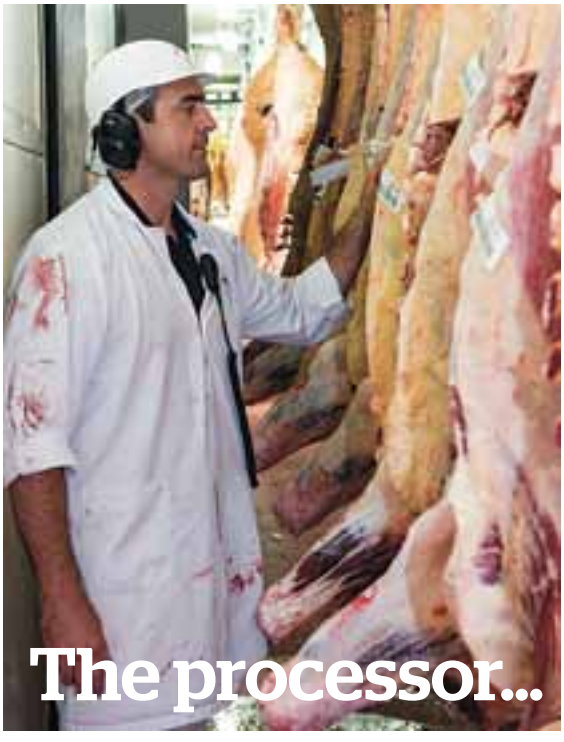
About 50 to 60% of their cattle go to Wingham Beef Exports to supply the MSA-backed 'Manning Valley... Naturally' brand.

"We have a good relationship with their buyers and their weight grids suit our cattle, as they take up to 380kg," Alison said.

The Camerons receive detailed MSA carcase feedback from Wingham, which they use to fine-tune their breeding program.

"We individually tag all animals, to identify the sire and dam to monitor the performance of progeny.

"We also use the MSA feedback to benchmark our cattle performance against the regional and state averages, which is a marketing tool for our Shorthorn stud."



The processor...

Consumer demand drove Nippon Meat Packers Australia to adopt MSA grading in its Wingham Beef Exports plant in September, 2011.

The processor's salesman had picked up on signals that local retail and food service customers were looking to target the high-end market.

Since then, MSA grading has helped Wingham Beef Exports develop a premium beef brand collecting 'fine food' awards throughout the country.

As well as adopting MSA grading, Wingham launched a premium, region-specific brand, Manning Valley...Naturally (MVN), based on specific characteristics: milk and two-tooth, grassfed, hormone-free, British-based cattle.

"It was important for us and our brand to be aligned with MSA, as it endorses our product," Wingham Beef Exports General Manager Grant Coleman said (pictured left).

"We also believe that, given the grass resource in this area, under MSA our MVN grassfed beef eats as well, if not better, than domestic grainfed beef."

As part of the MSA program, Wingham segregates the cattle that have higher eating-quality outcomes based on MSA grading, creating a Platinum range of MVN.

The Platinum range offers MSA five-star tenderloins, four-star cube rolls, three-star striploins and rumps with minimal ageing requirements, and targets the upper-level restaurant and butcher shop trade.

To achieve and retain MSA compliance, Wingham works closely with producers to communicate the benefits of producing cattle that fit MSA specifications.

30,214 producers and
77 brands signed up to MSA

The purveyor...

MSA grading solved a problem that had been troubling butcher Robert Trenchard (pictured right) for 57 years.

Now owner of Wingham Plaza Butchery, Robert Trenchard has been working in butcher shops since he was 10 years old, and had often found consistency of boned beef an issue.

"You could order a carton of rumps, for example, and even though it might all be yearling, you could get three different grades," Robert said.

"With MSA, they give you the promise that all the meat will be the same - and that's exactly what you get."

Wingham Plaza Butchery became MSA-licensed late last year and charges a premium for MSA-graded beef, using the MSA quality endorsement as a marketing tool with customers.

The shop sells the Manning Valley... Naturally premium branded beef from Wingham Beef Exports, identifying the MSA product to their customers using point-of-sale material with the 'MSA Graded' logo.

They have also provided taste testing in the store to educate their customers about MSA.

And on the plate...

Manning Valley...Naturally (MVN) branded beef is a 'perfect fit' for Wingham regional food store and café, Bent on Food.

Owner Donna Carrier (pictured left) opened the store eight years ago as an outlet for local producers on the Mid North Coast, and says the MSA-backed brand fits her philosophy of excellence.

"Our business has won 24 major awards, including two national awards," Donna said.

"MVN is also an award-winning, high-quality product; it fits perfectly with what we do."

Donna said Bent on Food and the brand's owners, Wingham Beef Exports, have established a close relationship over the past few years.

"Wingham Beef launched their MVN brand at our cooking school in November 2011 and they bring their Japanese owners here for meals when they're visiting," Donna said.

"Wingham Beef has also been ageing beef for us to use on our Friday and Saturday 'steakhouse' nights."

Bent on Food became MSA-licensed two years ago after being approached by MLA.

"We had already been buying MSA-graded beef, but I liked the idea of becoming accredited because it would mean having processes and procedures in place, which is good for the staff," Donna said.

"MSA is also a good marketing tool and we like to stay one step ahead of the competition - we're one of only two restaurants in the Manning Valley region that are MSA licensed."

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Start the process to become MSA accredited at **www.mla.com.au/msa**

Consumer research

What's cooking?

New MLA funded research on what Australians are serving up for dinner has confirmed earlier findings. And spaghetti bolognaise remains a firm favourite.

94%
of main meal preparers cook spaghetti bolognese regularly

56%
cook without a recipe

73%
want to learn about different cuts of meat

The cooking practices of 1,023 Australians were studied to gain an understanding of the relationship between cooking skills and the healthiness of the meal, particularly at dinner time.

What's Cooking? is the latest report in a series on main meal preparers' choices and practices. The previous reports were *Last Night's Dinner* and *Main Meal Repertoires*.

MLA Senior Nutrition Manager Veronique Droulez said the report provided useful insights for developing tips, tools and resources to support healthy eating.

"It's important that we help Australians enjoy our product as part of a healthy diet," Veronique said.

"This research helps us achieve this objective in a relevant and useful way."

It found most Australian main meal preparers take a simple approach to dinner, relying on three cooking methods and seven utensils to produce a range of different meals.

Convenience is a driver of cooking style, with a strong preference for one-pot meals.

Main meal preparers don't tend to use a recipe; 56% reported they would make the meal from memory, predominantly using roasting, stir-frying and pan-frying cooking methods.

Beef and lamb were two of the most popular protein choices with 51% of respondents cooking beef and 41% opting for lamb, one to two nights a week, while 22% cooked with beef, and 9% cooked with lamb three to four nights a week.

What Australian main meal preparers want:

- ✓ useful cooking tips based on what they already know
- ✓ information that makes their meal options:
  - tastier
  - faster
  - cheaper
  - healthier
  - more varied
  - easier and quicker to prepare and cook
- ✓ better portion sizes
- ✓ freezing options
- ✓ storage information for ingredients and leftovers.

Beef's versatility stood out, as respondents said they regularly added casseroles and stews to their repertoire.

Both beef and lamb meals were found to be mostly Mediterranean inspired, while curry and chilli flavours were also popular.

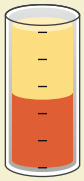
Veronique said the study results offered a new approach to healthy eating and nutrition education.

"Providing meal ideas that are intuitive and build on familiar ingredients, cooking methods and utensils offers a new more meaningful approach for nutrition education around healthy eating," she said.

"The report also provides valuable insights for guiding the development of MLA's popular nutrition education resources, such as the *Live Well Plan*, our latest healthy eating plan for weight loss."

Project dashboard: *What's Cooking* report

Financial contributions to the project:
$100,000
(Human Nutrition Research Program)



MLA levies: **50%**

Government funds: **50%**

Length of project (completed)**:**
2 years

Project is part of MLA's objective to:
Grow demand and enhance the nutritional reputation of beef and lamb.

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Championing beef and lamb

MLA's 'Proper Dinner' campaign earlier this year, fronted by renowned chef Marco Pierre White and integrated with *Masterchef the Professionals* TV program, pointed out that beef and lamb, packed with essential nutrients like iron and zinc, were central ingredients to a 'proper dinner'.

MLA Consumer Marketing Manager Andrew Cox said this campaign highlighted versatility as key in a society increasingly driven by convenience.

"We know Australians love beef and lamb. But, to remain on top we also need to work on reminding people of the great variety of healthy meals cooked with beef and lamb," he said.

"Research, like the *What's Cooking?* report, help us understand how Australian consumers approach cooking the main meal."

The next stage of the Proper Dinner campaign targets nutritional information for Australians in different life stages and reinforce the importance of eating beef and lamb three to four times a week.

The life stages targeted are:

→ mums

→ school students

→ women aged 18–30

→ empty nesters

The second phase of the Proper Dinner campaign was released this month through print and digital media backed by MLA's revamped website **www.themainmeal.com.au**

4,500

dieticians given a copy of *What's Cooking?*

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Recipe

Dukkah lamb

with winter roasted vegetable salad and tahini

This new winter recipe from themainmeal.com.au gives a twist to the traditional lamb roast – the addition of dukkah and the use of the lamb rump.

Ingredients

2 large parsnips, trimmed, peeled, cut into thick batons

8 baby beetroot, trimmed, peeled, halved

600g pumpkin, seeded, cut into thin wedges (skin on)

1 bunch Dutch carrots, trimmed, scrubbed, halved if large

2 lamb rump roasts (approx 400g each), fat trimmed

2 tsp olive oil

2 tbsp tahini

2 tbsp dukkah *(see tips)*

125 ml (½ cup) thick Greek yoghurt

1 tbsp lemon juice

Method

1. Preheat oven to 220°C or 200°C in a fan forced oven. Line a large baking tray with baking paper. Place vegetables in a single layer on prepared tray, spray with olive oil and season with freshly ground black pepper. Roast for 35–40 minutes, or until vegetables are tender.
2. Meanwhile, brush lamb rumps with olive oil. Heat a large nonstick frying pan over a high heat. Cook lamb, for 1–2 minutes each side or until browned. Transfer lamb to a rack over a roasting dish.
3. Spread 2 teaspoons of the tahini over each lamb rump, then sprinkle evenly with the dukkah. Roast for 15–20 minutes for medium, or until 65°C on a meat thermometer. Remove, cover loosely with foil and set aside to rest for 10 minutes.
4. Combine yoghurt, remaining tahini and lemon juice. Cut the lamb across the grain into slices of even thickness. Divide lamb and roasted vegetables between plates, and serve with the tahini yoghurt.

Serves: 4

Preparation time: 20 minutes

Cooking time: 40 minutes

Essential Tips: Dukkah is an Egyptian spice mix. Look for it in the spice section of your supermarket.

To make your own dukkah, combine 2 tsp toasted cumin seeds, 2 tsp toasted coriander seeds, ¼ cup toasted pistachios or almonds, and 1 tbsp sesame seeds in a food processor until finely chopped.

See more at: **www.themainmeal.com.au**

Energising the Japanese market

MLA has put the shopping patterns, cooking habits and buying considerations of Japanese consumers under the microscope. The findings are helping MLA identify marketing angles for future 'Aussie beef' campaigns in Japan.

Manager for Campaigns and Communication in MLA's Tokyo office, Miho Hanami said the research revealed who is buying Australian beef in Japan, and why.

"The traditional housewife is still the predominant buyer of Aussie beef, but her needs are no longer the only ones which must be considered," Miho said. "Single households, 'silver' households (over 50 year olds) and working women have become more prevalent in Japanese society."

"Consumers want a balance of quality and price when buying beef. The factors which underpin all their food choices – safety, taste, no MSG and health – also influence meat purchases."

Safety and price were identified as the most important concerns for Japanese consumers. They prefer to buy chicken and pork more regularly due to cost. Ground chicken breast is priced around 98 Yen/100g and ground pork at 108Yen/100g, whereas Australian sirloin steak costs 398Yen/100g.

Nutrition know-how

Research reveals that although one-in-five Japanese women claim to be anaemic or have someone in the household who is, they have virtually no awareness of the health benefits of beef.

"In a survey of 346 Japanese women, 65% knew iron deficiency causes symptoms such as anaemia and fatigue, 70% did not know beef is rich in iron, and 82% said they would eat/purchase Aussie beef more often if they knew it was high in iron," Miho said.

Consumers' lack of nutritional knowledge presents opportunities for marketing Australian beef to Japanese consumers.

MLA continues to promote the unique nutritional aspects of beef and lamb to fill this nutritional-knowledge gap and inform consumer attitudes to beef, chicken and pork collectively as 'meat', as opposed to fish or tofu. Partnering with health professionals to present nutrition seminars and working with 'iron beauties' (female nutritionists), also enhances Aussie beef's well-being credibility.

Healthy body, healthy soul

Japanese consumers value purity, harmony and balance in their lives – and in their food – so MLA is using the traditional concept of *genki* (body and soul wellbeing) to promote Aussie beef in Japan under the banner 'Aussie beef de *Genki*!' (feel energy with Aussie beef).

MLA's campaign encourages Japanese consumers to achieve *genki* by connecting with the vitality and freshness of Australia, and the health and wellbeing values of Australian beef.

MLA is using images of natural Australian landscapes, healthy animals and producers to support these messages.

Taste test

Japanese consumers shop for food a few times a week, usually between 3 and 6pm at supermarkets and – increasingly – anytime on the internet. They prefer package sizes which minimise waste and products which can easily be prepared in small kitchens.

Although Japanese consumers are increasingly choosing leaner cuts over traditional marbled beef, they perceive leaner beef as harder to cook. When they do cook beef at home, it ranges from steak, hamburger or stir-fry to traditional methods such as sukiyaki (a hot pot), shabushabu (thinly sliced beef cooked in boiling broth) and yakiniku (grilled).

Research revealed consumers lack meal inspiration and want to become more familiar with western beef dishes so, as part of the genki campaign, MLA Japan is developing recipes that suit Australian beef. Product tasting and cooking demonstrations educate consumers and position Aussie beef as versatile and user-friendly.

A long-term strategy is to develop small serving sizes of beef for single and older households, in-pack marinade solutions and 'all-in-one-pot' recipes that suit Japanese consumers' small kitchens and limited preparation spaces.

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Tokyo housewife Saeko Sumita knows Australian beef and lamb is healthy and delicious.

Meet the consumer

Saeko Sumita is a 36-year-old housewife who lives in Tokyo, with her husband and two young children. Here, she gives an insight into her food preferences as a Japanese consumer, and explains how she is influenced by the 'natural and safe' aspects of Australian beef and lamb.

What foods do you eat regularly? Pasta and stir-fry with meat and vegetables.

What meals do you like to cook at home? Fried chicken and dumplings.

When you go to a restaurant, what food do you order? I go to Western restaurants and order hamburgers.

Why do you like Australian beef/lamb? They are healthy and delicious.

How do you like it prepared? I cook it as stew, steak, and curry rice.

How did you learn about Australian beef or lamb? I saw TV commercial when I was a child. I remember the Aussie logo in the TV commercial. I know about Australia's nature.

What is important to you when deciding what to eat or buy? If the tasting sample of a product is good, I buy it. Also, if my children request it and the product has reasonable value, I buy it.

Japanese style

Aussie, Aussie, Aussie:

- Australian beef enjoys a strong market position – 66% of surveyed consumers consider it to be "excellent value".
- It is rated as better value than Japanese beef.

Beef eaters:

- More than half the respondents bought and ate beef at home in the past seven days.
- 12% of respondents used beef as a key ingredient in their most recent meal.
- Over 50s are more likely to have consumed beef recently.
- Beef was a key ingredient for about one meal per week; pork, chicken and fish together account for nearly six meals.
- One in five claims beef is their favourite protein – this skews to older life-stages.
- 60% said beef is delicious, 55% are willing to pay a bit more for it, and 55% said it was the most superior protein.
- "When I can trust the country of origin" was the highest reason for buying imported beef.

Down the aisle:

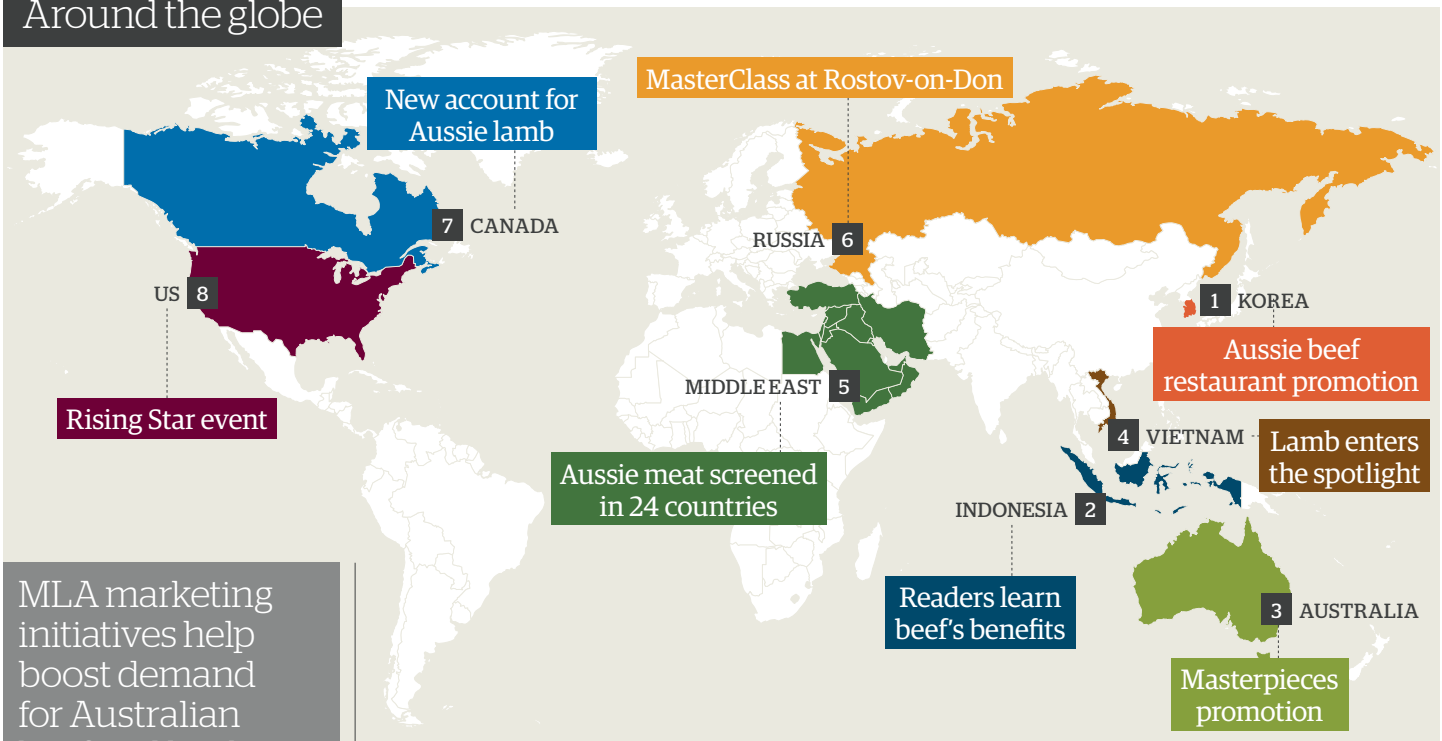
- Japanese consumers are more concerned about food packages (how the meat is presented and the labels) than in-store promotional materials.
- Couples and singles without children look for small servings (70–80g) so as not to waste food (freezing meat has negative perceptions).
- Shoppers want to buy the freshest food possible; they look for beef that is bright red and take note of the processing date.
- Convenience is key, so shoppers buy beef that is already 'cut to purpose'.

In the kitchen:

- The internet has a high usage in Japan and is the main source of cooking inspiration for 63% of consumers; with 53% using the online recipe website, cookpad.com
- Japanese kitchens are small, so utensil and crockery use in preparation is kept to a minimum by marinating beef in its Styrofoam pack and choosing one-pot cooking methods.
- Home-cooked meals are judged by aesthetics – how good it looks, and how colourful and well-presented it is.

(Data collected from MLA in-store surveys and research conducted by the Japan-Cooperative General Research Institute.)

Around the globe



MLA marketing initiatives help boost demand for Australian beef and lamb both at home and in our global marketplace.

1 SOUTH KOREA

Placing a safe beef message

The *Hojuchungjungwoo* logo ('Australian beef clean and safe') is being featured on 50,000 placemats and on menus at Korean family restaurant T.G.I. Friday's. MLA collaborated with the chain to run the Australian beef promotion in 41 of the restaurant's venues.

50,000

T.G.I. Friday's Korean placemats display the 'Australian beef, clean and safe' logo

2 INDONESIA

Lifestyle promotion

Readers of *Martha Stewart Living* magazine in Indonesia were treated to a beef cooking class and demonstration recently, when MLA teamed up with the magazine. Around 45 of the magazine's readers attended a beef forum, which included a cooking demonstration by Ritz Carlton chef Rita Lizani. A nutritionist and a professional chef were on hand to emphasise key messages about Australia's beef quality. The nutrition seminar focused on how beef's nutrient content can help reduce anaemia, and was followed by Rita's demonstration of how to create four different beef dishes from two cuts.

3 AUSTRALIA

Selling the sizzle

The latest MLA Masterpieces non-loin cut product awareness campaign has continued to increase the popularity of secondary beef cuts in fine-dining restaurants. The campaign involved a lunch at Brisbane's Stokehouse restaurant promoting non-loin cuts of beef and lamb as fashionable, creative and versatile options that allow chefs to showcase their skills and improve plate costs.

MLA has also partnered with wholesalers around Australia to hold Masterpieces classes for chefs. These sessions combine butchery knowledge, recipe inspiration and cooking tips on how to get the best out of the cuts.

4 VIETNAM

Lamb shines in Vietnam

Now in its fourth year, Food Hotel Vietnam is the main trade event in Vietnam, attracting international exhibitors and 21,000 visitors. MLA sponsored the Vietnam Culinary Challenge Lamb Cooking Competition, where 13 chefs competed using Australian bone-in lamb shoulders. Each competitor received technical training before the competition from Australian master butcher, Barry Lloyd. Barry also presented at three training sessions in Ho Chi Minh City, where 42 chefs, butchers and importer sales staff were trained in Australian meat specifications and handling.

21,000

people attended Food Hotel Vietnam

5 MIDDLE EAST

Aussie beef hits the small screen

MLA's Middle East and North Africa region chef, Tarek Ibrahim, has a new show on the Middle East's dedicated food station, Fatafeat TV, being aired in 24 countries. The show, '100 Lahma' (100 Meat), showcases the best of Australian meat. It began in June and has 30 episodes, which present 100 meat recipes. The episodes run three times a day, with highlights including lessons on preparation, the use of different cuts and the Halal integrity of Australian meat. '100 Lahma' is the first Fatafeat cooking show to have English subtitles. Chef Tarek's stellar rise was boosted with the recent naming of him as a Masterchef by the World Association of Chef's Societies.

24 countries air the '100 Lahma' Fatafeat cooking show

6 RUSSIA

A taste of Australia

Around 100 people from foodservice, media and local VIPs tasted Australian rib eye and lamb racks at an MLA-supported Masterclass and Taste Australia event located 1,000 kilometres south of Moscow at Rostov-on-Don. A corporate chef demonstrated practical tips for value-adding using cuts like flank steak. Run by a major Moscow-based importer, the promotional combination followed on from a similar program run in Novosibirsk, Siberia in late 2012. Both cities are major regional centres with populations over one million.

7 CANADA

Large chain signs up to Australian lamb

A Canadian supermarket chain with more than 65 stores has switched to Australia for all of their chilled lamb requirements, as well as seeking more of our frozen lamb. As part of the move, some of their private label products have been re-launched with Australian lamb labelling. MLA has supported the re-launch through co-funding with the importer as part of the Industry Collaborative Agreement program.

8 US

Shooting for the stars

Australian beef and lamb were featured at the Starchefs.com Rising Stars event at AT&T Park in San Francisco. Rising Stars are up-and-coming chefs who display a passion for innovative cooking and represent the future of the contemporary American dining scene. During the event, sponsored by MLA, one of the Rising Stars prepared an Australian lamb charcuterie board, while another produced Australian Wagyu short ribs with black garlic, broccoli and cheddar.

On the ground

Japan

Melanie Brock
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Australia has just celebrated 50 years of exporting beef to Japan – our largest export destination for beef.

Over that time there have been many changes affecting the market, from food safety concerns to natural disasters. One of the recent changes as been the relaxation of import restrictions on US beef from 1 February 2013, allowing imports of US beef from cattle up to 30 months old. As a result, most retailers and foodservice companies started to increase the volume of US beef.

MLA has implemented a range of programs to help counteract this challenge, including:

- → Working with the trade to reinforce the five strengths of Australian beef: safety, ability to supply on a cut-by-cut basis, long shelf life, diversity of products and stable supply.
- → Holding the 'Aussie Beef 2013 Branding Seminar' in five cities around Japan where new Aussie Beef summer marketing and branding strategies were introduced to the 200 or so industry representatives at each event.
- → Continuing to commission consumer research to form the basis for marketing campaigns to grow demand for Aussie beef. Our latest research showed that Japanese consumers found Australian beef 'safe', 'familiar' and 'natural'. Based on these findings, the 'Feel energetic with Aussie Beef' message has been refreshed to underpin Australian beef's reputation as nutritious, safe and high quality.
- → Providing customised Aussie beef branding to enhance in-store supermarket sampling efforts.
- → Running an innovative two-day 'Meister (master) training program' for new recruits and current employees in wholesaler and import companies that handle the distribution and sales of Australian beef. The program aims to foster a group of young enthusiasts to become experts on Australian beef.

MLA will continue to work hard to maintain market share and grow customer loyalty to Aussie beef and has plans for more programs like these in the future.

Market observations

Record lamb exports

Dry conditions in southern Australia in 2012-13 drove increased numbers of lambs to market and exports reached record levels.

Australian lamb exports in 2012-13 totalled 200,590 tonnes swt, the largest fiscal-year volume of lamb meat ever exported – up 15% on last year's record and 24% on the five-year average.

Tim McRae
MLA Economist

Increased supplies and the export of record volumes when the Australian dollar was still trading well above parity pushed livestock prices lower. For an export-dependent industry, a high Australian dollar needs to be offset by lower livestock prices (and vice versa) for the industry to remain price competitive. The fall in the A$ throughout June, to well below US93¢, will hopefully assist returns to producers.

Shipments were higher to most markets in 2012-13, with China and the Middle East taking record volumes for the year at 39,493 tonnes swt and 58,662 tonnes swt – up 24% and 37% on respective record totals last year.

Most other major markets took large volumes of lamb, with the US totalling 37,480 tonnes swt (up 8% year-on-year) and the Europen Union 12,157 tonnes swt (up 3%). Papua New Guinea took 13,428 tonnes swt (up 14%) and exports to South-East Asia totalled 9,968 tonnes swt (up 6%).

Surprisingly, shipments to some of the smaller markets were down on last year, with Canada, Mexico, Japan, South Korea, South Africa and Switzerland finishing the year below the previous year's levels. This accounted for a combined reduction in export volumes of 1,702 tonnes swt (less than 1% of total exports).

Given the impact of the higher turnoff throughout 2012-13, the supply of lambs is expected to be tighter in the first half of 2013-14, potentially limiting the volume of lamb to be sent to overseas markets. However, this could be heavily influenced if the Australian dollar continues to decline in coming months. Along with tighter New Zealand supplies, this could contribute to increased demand for Australian lamb.

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Co-products

Australia's beef

Products from Australia's sheep and cattle industry don't just end up on the plate. You can also find them in fashion stores as shoes and accessories, on the road powering cars and in Asian markets as delicacies.

These co-products include edible offal and rendered item such as tallow, and meat and bone meal (MBM), as well as hides and skins. They are often viewed as the poor cousin of the carcase, but in fact make a substantial contribution to the industry, accounting for 20–40% of its value in recent months.

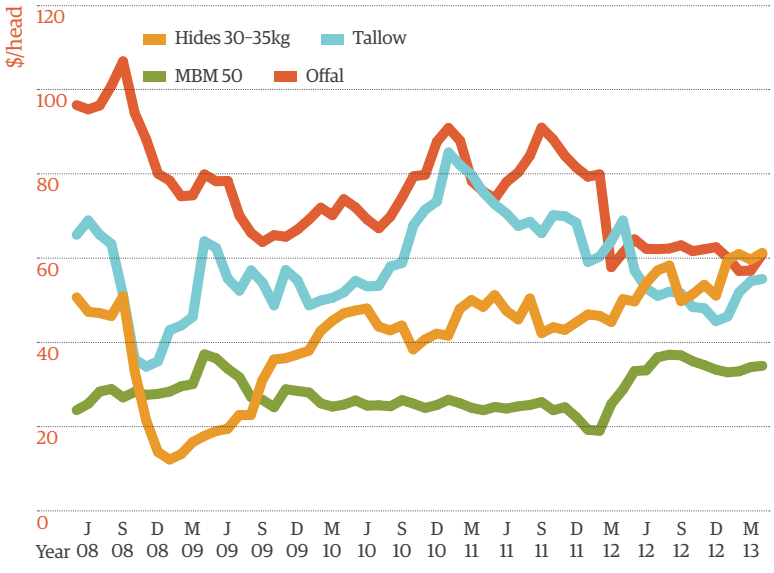
The increase in cattle and lamb slaughter this year has flowed through to co-product supply. However, the value of co-products as a whole has remained fairly stable.

Each month, on behalf of MLA, Kurrajong Meat Technologies tracks the potential co-product value for a range of carcase categories, including heavy steers (average 331kg cwt), prime steers (average 274kg cwt) and cows (average 178kg cwt). The co-product value per head is calculated by multiplying an estimated yield for each offal item with the month's average price. Values are broadly categorised into offal, MBM, tallow and hides.

The co-product value can fluctuate, depending on domestic and global supply, demand and the market access (see Figure 1). Despite some variations, the co-product value for heavy steers for the past year has been around $200/head, while prime steers averaged $170/head and cows about $125/head.

In the five months to May, overall potential co-product values were similar to those of a

Figure 1 **Potential co-product values of a heavy steer**



and lamb exports – **more than meat**

year ago. The star performers have been MBM (30–47% higher in January to May 2013 compared to the same period in 2012) and hides (15–26% higher). In contrast, offal prices were 9–19% below year ago levels while tallow prices were 8–22% lower (see Figure 2).

Let's look at these markets in more detail.

Hides

Hide prices have steadily improved since the start of the year, supported by increased demand from South-East Asian and Chinese tanners, where stocks are reportedly tight. There has been buoyant demand for leather for car upholstery, and this has supported prices of heavier hides. Prices have also been assisted by reduced competition from the US caused by prolonged drought conditions.

Meat and bone meal

MBM prices have risen significantly over the past year, averaging 44% year-on-year. Demand has been strengthened by high soybean meal prices (a competing feedstock) and stronger demand from Indonesia – a primary market for Australian MBM. More recently, however, demand in Indonesia has shown signs of weakening as feed producers include more soymeal in rations.

Demand from China has been limited, underpinned by reduced poultry consumption in response to avian influenza and reduced poultry production.

In the coming months, demand from Indonesia is likely to remain weak due to ports being closed for Ramadan, however, following that period, prices are expected to firm. There is a risk of demand slowing if US product gains access to this market.

Tallow

In contrast to hides and MBM, tallow prices have fallen, fluctuating between $45/head and $60/head this year for tallow from heavy steers.

In the past, the price of tallow has usually followed a similar pattern to the price of palm stearine. However, subsidies in the US for renewable fuel produced from tallow have recently distorted the price of tallow relative to palm stearine. Prices are expected to remain stable in the coming months due to good demand from Singapore for renewable fuel.

Edible offal

While some offal items are consumed domestically, the international market is significant, with beef offal exports in 2012 totalling $428 million – equivalent to the value of Australia's fourth largest beef export market, Taiwan.

Overall, offal prices in the five months to May 2013 were lower than the same period in 2012 (see Figure 3). A notable exception has been rumen pillars (derived from tripe). Traditionally they were only purchased by Japan, but Korea and China have emerged as new customers.

Australia's three largest beef offal export markets in 2012 were Japan ($167 million), Korea ($63 million) and Hong Kong ($52 million) – see Figure 4.

Sheep offal prices rose progressively in the first five months of 2013, driven by increased demand from Hong Kong, the Middle East and China. However, prices remain below year-ago levels with the exception of kidneys, which have risen 21%.

Outlook

Market access continues to play a major role in prices received for co-products, as well as the global supply and the value of the Australian dollar. Developing markets in South-East Asia, China, the Middle East and Russia are likely to remain strong, and Korea and Japan are expected to remain major outlets, even though their trading environments have toughened.

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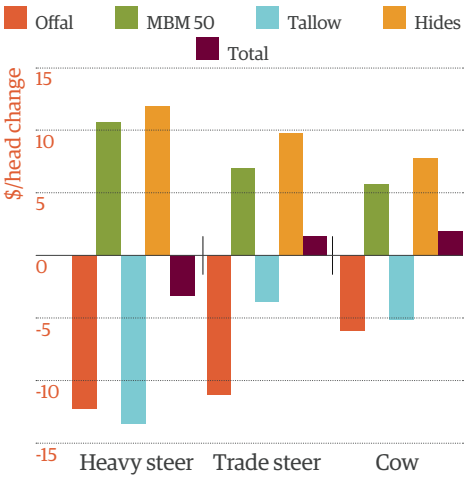
Producers can keep an eye on developments in the co-products market by downloading MLA's quarterly *Co-products Brief* visiting **www.mla.com.au/marketinformationpublications**

Figure 2 **Average $/head change in potential co-products values, January–May 2013 vs January–May 2012**



Source: Kurrajong Meat Technology

Figure 3 **Change in beef offal prices (January–May 2013 vs January–May 2012)**

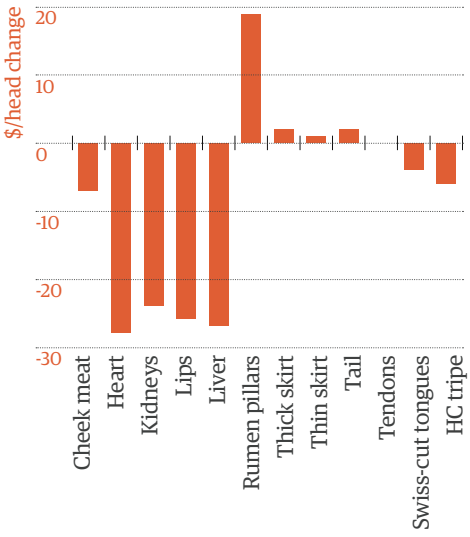
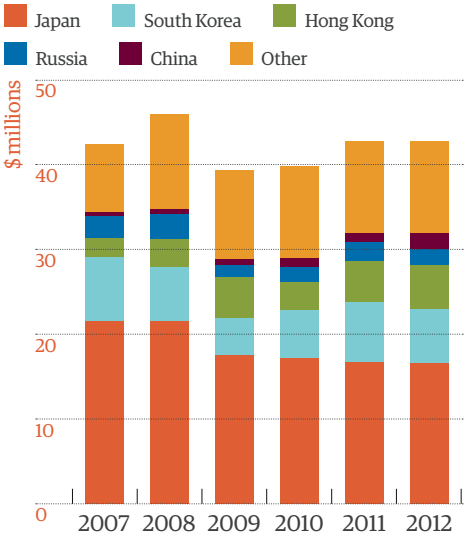


Figure 4 **Annual value of Australian beef offal exports**



Pacific Beef Expo

Hundreds of producers stopped by the MLA stand at PRIMEX in Casino NSW, to ask questions, pick up a publication or attend one of the three MLA Innovation workshops run each day from 20 to 22 June.

At the workshops, producers heard about Meat Standards Australia and watched a live grading demonstration; gained an insight into calculating costs of production using MLA's Cost of Production calculator and were given an overview of the opportunities and challenges of supplying the Europen Union market.

MSA's Terry Farrell giving producers a rundown on MSA.

Here are comments from producers who attended the cost of production workshop.

"We're looking forward to going to the (follow-up) cost-of-production workshop and exploring the MLA website and Cost of Production calculator." *Angie and Darrell Plater, Kunghur, NSW*

"I've identified costs before but never in a calculator. I'll make the effort to put my figures through the tool." *Ross Davies (pictured with Lyn Jones), Lismore, NSW*

MSA class winners of the Pacific Beef Carcase Competition, Yulgilbar's Rob and Lorraine Sinnamon were congratulated by Maydan feedlot's Geoff Willett and MSA's Jake Phillips.

Megan Davies, MLA
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MSA
www.mla.com.au/msa

MLA's Cost of Production calculators
www.mla.com.au/calculators

European Union market
www.mla.com.au/europe

Upcoming events

Find more events and information at **www.mla.com.au/events**

Get with the program

Switch on to the latest tools, technology and internet connectivity for more efficient beef production and boost your social media skills.

When and where:
21 August, Naracoorte SA

Bookings:
T: 0417 853 094
www.getwiththeprogram.eventbrite.com.au

BeefUp forums

Discover how to make more money from beef production at MLA's BeefUp forums. The forums deliver clear and practical information and tools that producers can take home and put into practice on-farm immediately.

When and where:
28 August, Adelaide River NT
30 August, Mataranka Station NT

Bookings: 1800 675 717
www.mla.com.au/events

BetterBeef coordinators workshop

Twenty-five Victorian Department of Environment and Primary Industries (DEPI) staff and private consultants came together for professional development on two of the three extension packages recently developed by DEPI's BetterBeef and MLA's More Beef from Pastures programs: feed allocation, profitability and productivity indicators.

The extension packages aim to increase the technical capability of the Victorian cattle sector. Each package presents research outcomes in an extension-friendly format with the aim of speeding up the adoption of sustainable and productive practices in cattle enterprises.

More information:
Cheriel Tidd, DEPI – Rutherglen // T: 02 6030 4521
www.dpi.vic.gov.au/agriculture/beef-and-sheep/beef/betterbeef-network

Victorian BetterBeef coordinators.

MLA's Lachlan Bowtell and Gary McPherson during the Master Butcher presentation at the Red Meat Update.

Tasmania Red Meat Updates

The Red Meat Updates, held on 20 June at Launceston, Tasmania, attracted more than 270 attendees and incorporated more than 20 presentations. The day had four focus areas: cattle, sheep, irrigated pasture and non-irrigated pasture. Of the producers surveyed at the event, 64% indicated that they would implement change to their farm business as a result of the Red Meat Updates.

More information: Macquarie Franklin // T: 03 6244 0100
www.macquariefranklin.com.au

The best wool and best lamb

The annual BESTWOOL/BESTLAMB conference was attended by more than 250 producers at Bendigo, Victoria, in June.

At a series of concurrent workshops, MLA's Richard Apps spoke on the science behind lean meat yield and eating quality in lamb, while MLA's Georgie Fraser and Influential Women Director Catherine Marriott highlighted the importance of social media. Producers were positive about both workshops, which were well attended for all sessions.

More information: www.dpi.vic.gov.au/agriculture/beef-and-sheep/sheep/bestwoolbestlamb

MLA's Sheep Project Manager, Richard Apps, talked about the value consumers place on quality.

Planning for success

This workshop equips sheep producers to review their business, undertake a SWOT analysis, develop achievable goals, strategies and actions, and develop a monitoring program. The process will also allow producers to see areas where they can create joint projects to maximise efficiency and pool resources.

When and where:
10 September, Carrieton SA

Bookings: 08 8841 4500
www.makingmorefromsheep.com.au/events.htm

AgForce state conference 2013

This conference is your chance to hear speakers relevant to your business, talk to AgForce staff and meet other primary producers from across the state. The conference is also the place to communicate the issues and concerns which need to be addressed by industry.

When and where:
17–19 September, Townsville Qld

Bookings:
www.agforceqld.org.au

BusinessEDGE workshops

A two-day financial and business management training workshop for northern beef producers to improve beef business efficiency and profitability.

When and where:
10–11 October, Dalby Qld
14–15 October, St George Qld
28–29 October, Taroom Qld
30–31 October, Springsure Qld

Bookings: 07 5482 4368
jackie@jackiekyte.com.au

More information:
www.mla.com.au/events

MLA Annual general meeting

At MLA's AGM and producer forum the MLA Chairman and Managing Director will present a full update on the company over the last financial year. The producer forum will provide members with the opportunity to gain a greater understanding of the activities that the company is involved in and the opportunities that exist for their business.

When and where:
14 November, Wodonga Vic

More information:
www.mla.com.au/agm

PRODUCERS OPEN THEIR GATES

Like to get practical tools, tips and new ideas on how to improve your business?

Follow six Australian cattle and sheep producers over the next 12 months as they open their gates and go on a journey to increase the reproductive efficiency of their stock and boost their pasture production.

Backed by a team of business coaches, researchers and mentors, you can track each producer's progress as they strive to better their business, while tackling the challenges of everyday farm life. Get the dirt on what works for them, plus learn how to get the very best out of your own enterprise.

FOLLOW THE MLA CHALLENGE NOW.

Visit **mla.com.au/challenge**

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