mla Your levies at work // January/February 2014

Feedback

Return on investment

A note from the MD...

The January/February 2004 edition of Feedback contained stories on the detection of BSE in the US on 23 December 2003, and the release of the Keniry Review of the Australian Livestock Export Trade by then Federal Agriculture Minister Truss.

I remember these vividly, not only because they were issues that had major impacts on the Australian cattle and sheep industry, but they were the first issues I had to deal with as an MLA employee.

MLA spent the next year reassuring global customers of the Australian cattle industry's freedom from BSE, and the work and effort that Australian producers went to in backing their product.

MLA also spent much of the next couple of years working with the Department of Agriculture to roll out Memorandums of Understanding with major sheep export markets to give greater assurances about the welfare of livestock exported.

As I write this last contribution to Feedback as an MLA employee, I reflect on the significant work the industry has undertaken to continue the two themes of guaranteeing the integrity of our global meat offering, and improving the welfare of livestock exported.

As the world witnesses continued growth in population and wealth in developing nations, global demand for food is also growing. Despite being a significant exporter of beef and lamb, Australia is a relatively small producer (around 4% of the world's beef production) and must carefully choose the market segments it seeks to supply.

Given cost structures in the industry (particularly post farm gate) Australia is ill placed to try to be a low cost supplier, and instead must try to fully capitalise on the work that has been done in guaranteeing the integrity of our products to sell into the market segments that look to pay extra for increased assurances.

It is into these segments that much of the record export volumes from 2013 went, with many customers paying record prices for Australian beef and lamb.

This is not the news many of our producers want to hear, given that drought forced them to unload stock into a saturated market place and they received farm gate prices not too dissimilar to that received a decade ago.

For many, the recent festive season was anything but, as they spent the last few months feeding/watering or selling livestock. I can only pray that the current weather systems forming in the north bring much needed rain and relief to producers.

Given a fair go with the season, producers might get to share in the benefits gained in the global markets for the work that they, assisted by MLA, have done in positioning their beef, lamb and goat as having the highest integrity.

You deserve nothing less. Thank you for your support over the past decade.

Scott Hansen
MLA Managing Director
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Contents

Cover: Producer Clayton South from Wagin, WA. Image by Carolyn Telfer of Anita Jean Photography.

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Australia Day lamb campaign

Leading the next generation of lambassadors

Celebrating 10 years as Lambassador, Sam Kekovich has once again rallied against unAustralianism in the latest Australia Day lamb campaign.

Launched on Sunday 12 January, Sam delivered his annual address to the nation – but before naming and shaming unAustralian behaviour in the year that was, he had an announcement to make.

"My fellow Australians, after 10 years as Lambassador fighting unAustralianism, I'm taking a step back," Sam declared.

He said his mission this year was to bestow his expert knowledge of all things Australian with the goal that parents would 'step up' to successfully raise the next generation of 'lambassadors', or as Sam likes to call them, 'Generation Lamb'.

In the 2014 television commercial, Sam marches through a childcare centre, encouraging parents to "educate the new generation about the perils of a lambless life," and while there, warns that "teaching a tot to love lamb is the pressing duty of every parent."

MLA's Group Marketing Manager – Consumer Programs, Andrew Cox, said the campaign built on the success of previous Australia Day lamb campaigns, making it clear that lamb is the patriotic food choice for the national day and beyond.

"Last year we saw record retail lamb sales across the Australia Day period returning values 48% above the 12-month average, and we are planning to build from that platform in 2014," Andrew said.

In a final bid to encourage Aussies to do their patriotic duty this year, Sam gave his parting word of advice to a group of parents holding their little ones; "Barbecue lamb on Australia Day – show them how it's done!"

The campaign is supported by outdoor advertising and interactive recipe-dispensing panels in shopping centres, a radio partnership with the Nova FM morning show, point-of-sale materials and major advertising coverage across commercial television and Pay TV networks.

Consumers can also interact with the campaign through targeted online social media promotion across MLA's consumer focused 'We Love our Lamb' Facebook page or visit **www.BeALambassador.com.au** to leave their own unAustralianism rant.

MLA's latest Australia Day lamb campaign sees Sam Kekovich salute the next generation of lambassadors.

Andrew Cox, MLA
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www.facebook.com/weloveourlamb // www.BeALambassador.com.au

Watch the television commercial at **www.youtube.com** and search 'Sam Kekovich challenges generation lamb'.

48%

increase in retail lamb sales in the 2013 Australia Day period on the 12 month average

Following the main meal

MLA's rebranded consumer website beefandlamb.com.au (formerly themainmeal.com.au) is now live.

Consumers can now get a taste of the new website which features a huge selection of contemporary and traditional beef, lamb and goat dishes.

There are more than 440 recipes, alongside cooking tips, advice on buying beef and lamb and a breakdown of different cuts.

The website has a fresh new layout and reinforces the **beefandlamb.com.au** brand with consumers through recipe collections, seasonal meal ideas and healthy meal options.

Currently, the most popular recipes on the website are barbecue standing beef rib roast, beef rump with lime and watermelon salad and spiced beef rib eye cutlets with roasted baby carrots and yoghurt dressing.

MLA's Regional Manager Australia, Lachlan Bowtell, said with changes in consumer needs and consumer interest in food at an all time high, this was an opportunity for MLA to refresh the brand.

"We wanted to build a stronger digital presence and clearer alignment with other products, consumer campaigns and programs," he said.

"The rebrand is also supported with monthly e-newsletters enticing consumers to keep beef, lamb and goat on the dinner plate."

1.2 million

visitors to the website in the past year (including themainmeal.com.au traffic)

www.beefandlamb.com.au

Farm on film

MLA has produced a new practical video showcasing the impact labour efficient practices can have on profitability and lifestyle. The video is filmed on the sheep property of David and Lyn Slade, based near Mount Barker, Western Australia. The Slade's are joined on camera by researcher John Young. The video complements the articles on pages 29–31 of this edition. View the video at **www.mla.com.au/slade-labourvideo**

Great expectations

Sally O'Brien
Chair
WA Meat Profit Day
Organising Committee

What:
Meat Profit Day

Where:
Irwin Recreation Centre, Port Denison, WA

When:
Thursday, 3 April 2014

Theme:
'Meating' Expectations and Thriving

It has been many years since the northern region of Western Australia has hosted an MLA-funded Meat Profit Day (MPD). Organising Committee Chair, Sally O'Brien, who runs a sheep, cattle and cropping enterprise at Irwin, told *Feedback* an exciting program has been developed around a theme of 'The WA Red Meat Industry – Meating Expectations And Thriving'.

Why is it important that producers come along to the MPD?
Given the industry's successes and challenges to date, the local committee is keen to present a day that will provide insights into current and future opportunities in the industry. Speakers have been sourced locally, as well as interstate and overseas.

Added to this is a unique chance to spend the day with others working in and around our industry.

What are some of the topics up for discussion at the MPD?
The WA MPD will look at issues such as the live export industry, supply network alliances, market outlooks – both domestic and international, the practical use of on-property technologies and many other areas. We will be providing each member of the audience with take home messages they can apply to their business. Added to the day will be a session where attendees can join in a meat 'conversation' to tackle some of those queries often left silent.

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For information on attending or sponsoring the event contact
Erin Gorter, Evergreen Farming
E: eringorter@agvivo.com.au
T: 0429 833 752

For bookings go to
www.mla.com.au/MPD-WA

And the award goes to...

MLA's marketing team has been recognised at the annual Media Federation Awards for its collection of successful consumer beef and lamb marketing campaigns.

As one of 48 finalists chosen to contest the 15th annual awards in October 2013, MLA's work was recognised ahead of other contenders including Virgin Mobile Australia and Universal Sony Pictures Home Entertainment Australia for the top gong.

The 2011 'Ignite Your Beeflex' summer beef campaign and the 2013 'Lambnesia Epidemic' Australia Day lamb campaign were specifically mentioned, resonating well with judges and consumers.

'Ignite your Beeflex' encouraged men to step up to the grill, triggering their primal instinct and tapping into the male passion of sport, with custom-built smoking billboards and scent-emitting bus stops developed. Sales of barbecue beef cuts increased, Facebook engagement rose by 3,000% and butchers rated it the best summer beef campaign in history.

In the Australia Day lamb campaign, Sam Kekovich as the 'lambassador' has seen Australians associate the consumption of lamb with the national identity.

The 2013 campaign boosted lamb sales by a record 48% in the Australia day period and 96% of consumers surveyed said lamb was the patriotic food choice on Australia Day.

The 'Lambnesia' campaign warned of the dangers of forgetting to buy lamb on the national day, with an online 'lambnesia' test generating 294,000 plays.

Butcher participation at 87% was strong and 48% reported a sales impact of 'excellent' to 'very good'.

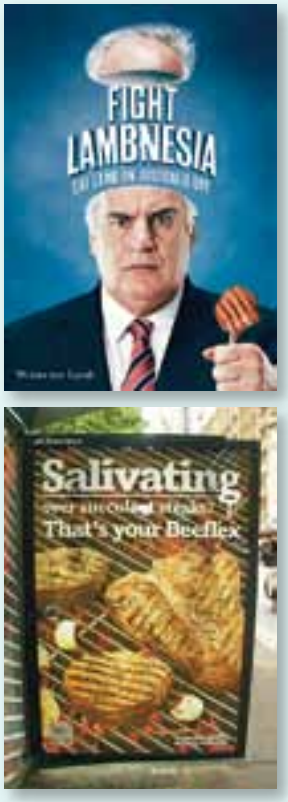
When announcing the award, judges commented; "As an inaugural award to recognise a strong body of work with impeccable results, vision and collaborative style with their partners, it is hard to look past the MLA marketing team."

MLA's Group Marketing Manager – Consumer Programs, Andrew Cox, said the award reinforced the team's goal of boosting domestic sales of beef and lamb in a rapidly evolving consumer marketplace.

"Recognition from our peers is important because it shows we are employing industry best practice in the way we approach the marketing challenge," he said.

"The award is really a credit to some great thinking by many dedicated professionals over the last 15 years."

Andrew Cox, MLA // E: acox@mla.com.au



MLA's 2013 Australia Day lamb campaign 'The Lambnesia Epidemic' and the 2011 'Ignite your Beeflex' beef marketing campaign received special mention at the 2013 Media Federation Awards.

Disease ruled out

An MLA-funded project has confirmed that *Besnoitiosis*, or elephant skin disease, is not a threat to Australian cattle.

Besnoitiosis is caused by the parasite *Besnoitia besnoiti* (*B. besnoiti*) and results initially in fever and photosensitivity with skin becoming hard, thickened and wrinkled in the second stage of the disease.

The life-cycle and host-parasite relationship of the *B. besnoiti* organism is not yet understood and an effective treatment is not available.

Property owners near the Tailem Bend area of South Australia reported signs of *Besnoitia* infection in western grey kangaroos.

Samples from the kangaroos were taken by researchers at the University of Adelaide and analysed. The university had previously reported evidence of anti-*Besnoitia* antibodies in South Australian cattle.

Results showed that there were *Besnoitia*-like organisms present in the kangaroo samples. While the project could not identify the exact species of *Besnoitia* present in the kangaroo samples, serological and other testing showed that it was not the *B. besnoiti* species which affects cattle.

There have been no clinical signs of *Besnoitiosis* in Australia, but it is present in Africa and has been emerging as a threat to the European cattle industry in recent years.

To read the full research report go to **www.mla.com.au/elephant-skin-disease**

Project dashboard: *Besnoitiosis* testing

Financial contributions to the project:

$25,000

MLA levies: **50%**

Government: **50%**

Length of project: 15 months

Completed August 2013

The project is part of MLA's objective to:

Create opportunities through research to minimise the threat and impact of exotic, emerging and endemic diseases on Australian livestock enterprises.

Pasture management

Northern perspective

Gavin Peck
Senior Pasture Agronomist, Queensland Department of Agriculture, Fisheries and Forestry
Toowoomba, Qld

Gavin Peck has spent the past 14 years working in sown pasture research and extension and livestock and natural resource management in northern Australia.

How significant is the problem of sown pasture 'rundown' in northern Australia and should producers be worried about it?
Rundown of sown grass pastures is an extensive problem in northern Australia, especially in the buffel grass country of central and southern Queensland. It is often so gradual, occurring over say 20–30 years, that producers don't realise it is happening. It's definitely worth worrying about because, over time, it will reduce pasture and animal production by 50% and a lot of enterprises can't sustain that.

What causes it?
There are two main causes of declining pasture productivity: 'land condition', that is the ability to capture rain through having good grass; and pasture 'rundown', which is due to nutrient tie-up in soil organic matter that reduces the availability of nitrogen to plants. The first is avoidable with good grazing management but the second is inevitable, as nitrogen cycles progressively gets tied up in soil organic matter over many years.

How do producers know whether their pastures are suffering from rundown?
The symptoms are widely recognised but often producers attribute them to other causes, such as water or seasonal conditions. The most common are: reduced pasture growth; a change in pasture density where you see a carpet of small tussocks or grass becomes clumpy; nutrient deficiency symptoms such as yellowing or reddening of leaves; little or no flowering; a change in pasture composition; and reduced animal performance.

What should producers do about it?
It's an individual decision, depending on your climate, enterprise, needs and the

Stop the decline

Pasture decline may not be making tabloid headlines but it is having a huge impact on farm profitability Australia-wide.

According to pasture experts, Stuart Burge and Gavin Peck, pasture decline is responsible for up to an estimated 50% reduction in pasture and animal production and, over the next 30 years, is expected to rob northern producers alone of $17 billion in costs and lost income.

Southern perspective

Stuart Burge
Extension Agronomist and Agricultural Consultant,
Cooma, NSW

Stuart Burge has worked with producers for decades helping them lift pasture productivity and has delivered programs such as MLA's EDGENetwork Weed Removers Pasture Improvers Workshop.

What are the early indicators of pasture decline?
You will notice your perennial pastures and sown species declining, weeds will invade, soil acidity and dryland salinity may become problems and productivity and livestock returns will be reduced. I believe the loss of perennial grasses is the single, greatest cause of environmental degradation in the Australian grazing industries.

What causes pasture decline?
In my opinion, the largest contributors are inappropriate grazing and/or overgrazing, which are compounded during times of drought.

Why is pasture monitoring so important?
Early intervention saves money. Pasture establishment is a huge but essential investment, between $250/ha and $350/ha, and protecting that capital investment through measures such as weed control (which only costs about $30–$40/ha) or fertiliser is minimal when compared to the potential losses in productivity from pasture decline.

How can producers monitor their pastures and when?
The best time to assess pastures for composition is at the end of winter/early spring in southern Australia when all the pasture components are present. Do it once a year – at the very least – and at the same time each year and in the same location within a paddock. There are various techniques you can employ but I find the rod-point technique the easiest.

Can you explain the rod-point technique?
You need a stick, ideally about 30cm long, but even a pen will do if you have nothing else. Choose an area that is generally representative of the paddock and this becomes your monitoring site that you will use year after year. Set up a recording sheet with columns for the various pasture components, which might include: perennials, annuals, broadleaf weeds, litter and bare ground – you may want to go into even more detail particularly if you have introduced species such as phalaris, fescue, ryegrass or lucerne – it's up to you. As you traverse the monitoring site, throw the rod

resources you have at your disposal, such as machinery. There are basically three mitigation strategies available; you just need to work out which one suits you. They are: accept lower pasture production (and stocking rates); increase nitrogen cycling through mechanical disturbance; and increase nitrogen levels (add N).

What's considered the best long-term option to improve productivity of rundown sown grass pastures?
Increasing nitrogen levels through legumes was identified in an MLA-funded review as the most cost-effective mitigation option, with the potential to reclaim 30–50% of lost production and provide whole-farm returns of up to $1,300/ha/year over 30 years.

Persistent and productive legumes include the summer-growing leucaena, desmanthus and Caatinga stylo and, on clay soils in southern Queensland, the winter-growing medics. Legumes have had mixed results commercially but in trials they have provided the best productivity improvements where there are well-adapted legume options.

Research has shown stylos produce an extra 40–60kg/head/year while leucaena delivers an additional 70–110kg/head/year. Applying nitrogen fertiliser is another method of increasing grass production. This approach is more likely to be applied strategically to paddocks for specific purposes rather than across whole properties.

Poor establishment has been the most common reason for failure of legumes. Industry routinely uses low-cost methods, such as aerial seeding with no seed bed preparation, which very much depends on follow-up rainfall.

Tips and Tools – Northern Australia

A range of MLA tools are available:

- Tips & Tools: *Grazing management for productive native pastures* **www.mla.com.au/pasturegrazingmanagement**
- Tips & Tools: *Strategies to boost productivity of native pastures* **www.mla.com.au/pasturestrategies**
- *Grazing land management: Sustainable and productive natural resource management booklet* **www.mla.com.au/GLMmanual**

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See the technical feature on pages 24-25, which offers further advice on minimising the impact of pasture rundown.

Read the findings of the MLA-funded *Review of productivity decline in sown grass pastures for northern Australia* at **www.mla.com.au/review-sown-grass-pastures**

To arrest the trend, Stuart and Gavin urge producers to become more aware of their pastures, through monitoring and being proactive in their management approach, particularly with grazing strategies, weed control and fertiliser applications.

Pasture is perhaps the most valuable asset a producer has so, whether you're in northern or southern Australia, it's worth considering the broad range of actions available to improve and protect pasture quality.

into the air 50 times and each time it lands, stand over it and record what is immediately touching either end of the rod. Don't cheat! At the end of the exercise you can calculate a percentage for each component that will be representative for the paddock. File your record away and you will be able to see how your pasture changes over time, starting during the year of establishment. It's also important to note any climatic or seasonal factors that may affect pasture composition.

What should producers be comparing the pasture to?
It's important to have your own pre-determined composition target ranges, for example, 60–70% perennials and 10–20% clover, and then use a monitoring technique that assesses how close your pastures are to those targets. Be aware your composition targets will need to vary according to the climate, slope, aspect and livestock enterprise. There are no one-size-fits-all solutions.

At what point do producers need to re-sow their perennial pastures?
Once your perennial pasture species fall below 20% of total composition you will need to re-sow. There simply isn't enough content there to thicken up over time. Above 20%, if they are well managed with weed control and fertiliser and rested for 12 months from grazing, perennial pastures should be able to recover. The trick is not to let it get down that far.

What's the best way for producers to restore their pastures?
Proactive management is the best antidote. It is critical that farmers ask themselves why the pasture composition is changing, ie what is contributing to the potential onset of pasture decline? Control weeds if needed, soil test to check if fertiliser is required and use flexible grazing management so that pastures have the opportunity to recuperate from grazing. I think producers need to be more aware of their critical levels of both pasture composition and dry matter (kg DM/ha), and making management decisions based on those.

Tips and Tools – Southern Australia

A range of EverGraze and MLA tools are available to producers:

- MLA Rainfall to pasture growth outlook tool
- EverGraze Feed budget and rotation planner
- EverGraze Stocking rate calculator
- MLA Feed demand calculator
- MLA Cost of production calculator – Beef
- MLA Cost of production calculator – Lamb

Visit **www.mla.com.au/toolbox** and **www.evergraze.com.au/library-content/evergraze-tools-calculators**

Order the MLA *Pasture health kit* at **www.mla.com.au/pasturehealthkit**

Consider attending a Prograze course: **www.dpi.nsw.gov.au/agriculture/profarm/courses/prograze**

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In profile | Building capability

Ray Vella // *Nuffield scholar*

If someone had told Ray Vella he would one day discuss agriculture with a US Senator in Washington DC and meet a member of the royal family in London, he would have laughed.

But an MLA-funded Nuffield Australia Farming Scholarship was Ray's ticket to the world, giving him a new perspective on production challenges and the opportunity to meet people like the Duke of Gloucester.

During the six-week Global Focus tour of North and South America and New Zealand, as well as 10 weeks of individual travel to Brazil, the US and Canada, Ray investigated management and genetic tools to produce quality beef from pasture-based systems in harsh environments.

"Talking to researchers about genomics and visiting the home of Beefmaster cattle (Lasater Ranch in Colorado), large enterprises in Brazil and highly efficient dairies in New Zealand opened my eyes to strategies that Australian producers can adopt to increase productivity," Ray said.

"The US was a perfect example. Corn prices were at record highs and cow herd numbers at an all-time low, but they were producing more beef per animal through genetic improvement by breeding animals that did not have to be over-fed to meet market specs – saving time and money."

He was also struck by the importance of holistic management to maintain soil and pasture health.

"Adopting correct long-term carrying capacities, routinely spelling pastures and managing animal impact to maintain groundcover, which retains moisture and organic matter in the soil, in turn reduces feed costs and decreases pressure to sell cattle at the wrong time as a result of limited forage availability," Ray said.

Since returning from his trip, Ray has already set his sights on boosting profitability and productivity at 'Bald Hills', the property run by Ray and his wife, Leah.

In 2008, frustrated by the prevalence of "fed not bred" bulls in the marketplace, Ray and Leah started a registered Brahman herd to breed bulls suitable for their environment. They now plan to incorporate the Lasater Ranch selection philosophy – hinged on conformation, hardiness, fertility, disposition, milk production and weight – into their breeding nucleus, to filter through their commercial herd.

"A profitable industry is underpinned by individual enterprises that target the most appropriate market for them," Ray said.

"We're going to incorporate genetic management tools, such as better recording and selecting for fertility, weight-for-age and marbling traits. I hope to use fixed-time artificial insemination by sourcing genetics from the top 10%."

The Vellas' long-term goals include introducing hot-fence weaning and lifting the portion and quality of their cattle which meet EU market specifications to 100%, as well as potentially changing to an organic enterprise.

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Snapshot

Ray and Leah Vella, Marlborough, Qld.

Property:
7,300ha

Enterprise:
Breeding and fattening cattle

Livestock:
3,000 cross-bred cattle (Brahman/Simmental/Brangus), for EU/MSA market, plus Brahman stud for breeding own bulls

Pasture:
Buffel grass, green panic, seca stylo and other legumes

Soil:
Mix of rich volcanic, scrub, sandy loam, granite and ironbark

Rainfall:
800mm

Ray's top 10 lessons learned for his business:

1. **Hot stuff:** Separate cows and calves at weaning with electric fencing to maintain visual contact and reduce weaning stress. This requires specific infrastructure and quiet stock.
2. **Perfect match:** Use EBVs, eye muscle area fat scans and scrotal circumference to select cattle based on sound breeding objectives and economically relevant genetic data. Target fertility traits at a young age to prioritise which genetics to retain.
3. **Breeding, not feeding:** Research bull breeders' selection practices and observe how livestock perform in their environment.
4. **Target market:** Know which market suits your environment and select the most appropriate breed/s of cattle.
5. **Well-grounded:** Pasture management, legumes and forage budgets benefit herd and soil health, increasing productivity.
6. **Just add H_2O:** Good quality water supply for stock is paramount.
7. **Paddock plans:** Use mapping and recording tools to plot paddocks, assess carrying capacity and implement rotational grazing.
8. **Mix it up:** A cross-breeding program, combined with visual and performance-based selection for specific traits in each breed, is essential for viable commercial breeding businesses in northern Australia.
9. **Communicate:** Producers should tell the story of the Australian cattle industry. Ray kept a blog of his Nuffield journey (**www.marlboroughmantravels.blogspot.com**) and uses Twitter (@VellaRay).
10. **Record:** Visiting highly efficient enterprises showed me the importance of recording genetic traceability in our herd.

Snapshot

Michael and Michelle Lyons, Charters Towers, Qld.

Property: 23,200ha

Enterprise: Breeding and finishing

Livestock: 3,000–3,500 cattle

Pasture: Mostly native pastures augmented with introduced pastures of Urochloa and buffel plus introduced legumes of stylos and desmanthus

Soil: Loams on the Campaspe River frontage to grey cracking clays to light sand ridges

Rainfall: 650mm

In profile | Building capability

Michael Lyons with his son, Connor. Photo courtesy of Sharon Howard.

Michael Lyons // *Nuffield scholar*

Michael Lyons hopes to gain a global perspective on natural resource management for profitable grazing this year with an MLA-supported Nuffield Farming Scholarship. The Lyons family has diversified into educational tourism to share the sustainable practices being implemented on their 23,200ha property 'Wambiana' (featured in the October 2013 issue of *Feedback*). Michael will visit South Africa, the USA and South America to learn how innovative businesses in similar environments are managing their land and livestock.

What prompted you to apply for a Nuffield Scholarship?

The northern beef industry has experienced the 'perfect storm' in the last few years: large herd size, lost live export markets, high Australian dollar, rapidly increasing input costs and deteriorating seasonal conditions. There is potential to improve gains through improved pasture management, selecting fertile, adapted cattle and managing production costs. In our family business, this means working with nature as much as possible to reduce risk and input costs. For example, by diversifying into tourism we can create an alternative income stream without putting additional pressure on our natural resources. →

New Nuffield scholar Michael Lyons with his father, John, and son, Connor, at Wambiana. Photo courtesy of Sharon Howard.

→

Why is natural resource management important for profitable grazing?

We operate in a complex ecosystem that presents a host of opportunities, so I will research how progressive operations utilise natural resources for complementary enterprises. There are grassfed cattle enterprises in South Africa and South America, operating in similar climatic zones to ourselves, with multi-enterprise businesses.

What other tools could benefit Australia's cattle industry?

I'll look at strategies to produce cattle better suited to our environment. I'm interested in the selection philosophy of producers such as Jim Leachman in Montana and Kit Pharo and the Lassater Ranch in Colorado to breed moderate-framed animals – adapted to their environment – that produce a calf every year and require fewer inputs. I'll visit enterprises in Brazil to see how reproductive technologies can multiply these high-performing genetics.

Travel plans:

March 2014: Six-week Nuffield Global Focus Program, travelling with six other Australian/NZ scholars to New Zealand, Canada, USA, Mexico, Brazil and the UK.

Throughout 2014: Ten weeks of individual study to South Africa, South America and the USA.

Stay tuned: Follow the journey of Nuffield Scholars at **www.nuffield.com.au/scholars-blog-sites**

Michael Lyons
E: mmlyons@bigpond.com

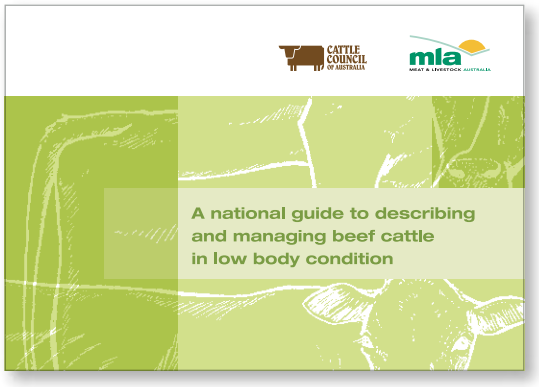
www.target100.com.au/Farmer-stories/The-Lyons-family

Would you like to be an MLA Nuffield scholar?

The Australian Nuffield Scholar program is part of a global network of Nuffield scholars from all agricultural industries. The scholarship involves international study tours which allow the scholar to research their chosen area, which provides the basis for a report back to industry on their learnings. Applications close for the annual intake in June each year and MLA funds one scholar position annually. Go to **www.nuffield.com.au**

Timely launch of new body condition guide

A new guide published by MLA offers a simplified national language for assessing cattle body condition and provides a timely tool to assist producers in managing drought-affected stock.



A national guide to describing and managing beef cattle in low body condition **was developed with extensive industry input and includes a new, simplified Body Condition Score (BCS) system plus new classifications within the National Livestock Language.**

Cattle Council of Australia Vice-president and Cloncurry producer, Peter Hall, said the new system brings clarity and consistency to body condition scoring.

"It ensures that everyone involved in the beef cattle industry can speak the same language, whether we're talking about southern or northern cattle, right across the country," Peter said.

Co-author and cattle industry consultant, Ian Blackwood, said the new system would replace traditional descriptions such as 'poor', 'backward' and 'weak', which were not well defined and often meant different things to different people.

"The old descriptions were very subjective," Ian said.

"Now if a producer is on the phone to an agent or transport company and says 'I've got cattle that are BCS 1 or BCS 2', the person on the other end can look at the guidelines and know exactly what the cattle look like."

Cattle Council Animal Welfare Adviser Justin Toohey, said the release of the guidelines was timely as they also provided valuable guidance and intervention points for producers with drought-affected animals.

"The guidelines contain detailed illustrations and descriptions to help producers assess their animals, as well as practical advice for managing the animals' feed and transport requirements to ensure the best animal welfare outcomes," Justin said.

The guide also includes a table showing equivalent classifications for beef cattle body condition under the National Livestock Language system (referred to as 'Muscle Score, Fat Score' or 'MS-FS') and the new BCS system.

A national guide to describing and managing beef cattle in low body condition can be downloaded from the MLA website at **www.mla.com.au/lowbodycondition**

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Animal welfare

Ready to race to the polls

Australia's new and improved poll gene test, available now, could potentially revolutionise the nation's cattle herd by improving profitability and animal welfare outcomes by reducing costs and risks of injury.

CSIRO scientist, Dr John Henshall, who helped develop the second generation test, said the challenge was for industry to convert the science into practical benefit.

"The test, originally designed for Brahmans, is now much more accurate – up to 99% – and can be used on most northern and temperate breeds," he said.

"Instead of taking up to 40 years to convert a horned herd to polled through natural selection, by using the test to identify homozygous (true polled) bulls, that can be fast-tracked to about eight years."

MLA's Animal Production Research Coordinator for Northern Australia, Geoff Niethe, said from a commercial perspective, the new test's application across a range of breeds spelt opportunity for producers.

"One of the problems, particularly for Brahmans, is currently there just aren't many polled animals with all the desirable traits you may want in your selection index and this makes breeding of purebred animals quite difficult," he said.

"However, producers could consider out-crossing to breeds where polled animals are more common and this would quickly increase the prevalence of the polled gene in the herd. This may also offer better depth of quality and choice in other desirable traits such as carcase and fertility traits.

"If high Brahman content is required, those cross-bred offspring could be joined back again, taking with them a much higher incidence (depending on breed choice) of polled expression."

$40 million

estimated cost of bruising in the cattle industry annually

John said it was important to understand that being polled in cattle is a stand-alone trait, similar to eye colour in people, and there is no scientific evidence of any links to other traits.

However, Geoff said some producers were still concerned polled animals in some breeds were associated with specific defects such as spiral penis dysfunction but these defects are related to particular family lines and not the polled gene as such.

He said each bull should be assessed on its total merit and value to the herd and not just on the strength of one trait.

"This new test is a great opportunity for industry to address some significant problems," Geoff said.

"It's estimated producers lose more than 2% of their calf-drop due to complications after dehorning (such as infection) so there are significant production gains to be made as well as easier compliance with the new animal welfare guidelines likely to come in later this year."

Geoff said other gains to be made by wider adoption of the polled gene test include more polled animals so therefore less bruising which is estimated to cost the Australian beef industry up to $40 million annually and less pressure to source labour for dehorning.

The Australian Poll Gene Marker test is commercially available from Animal Genetics Laboratory at the University of Queensland and from Zoetis Animal Genetics and is up to 99% accurate for Brahman, Brangus, Charolais, Droughtmaster, Hereford, Limousin, Santa Gertrudis, Shorthorn and Simmental.

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For more information on the poll gene marker test go to:
www.mla.com.au/pollgenemarkerlaunched

Poll gene marker fact sheet
www.mla.com.au/pollgenemarker

Market access

Industry welcomes Korea FTA

The Australian cattle and sheep industries have welcomed the Australian Government announcement of the successful negotiation of a Free Trade Agreement (FTA) with South Korea, saying it was critical for the future of the industry.

Korea is the
3rd
most valuable beef export market for Australia taking
137,695t
in 2012-13, worth
$704 million

54%
of Korean beef imports are Australian

Stephen Kelly
South Korea Industry Taskforce

South Korea Industry Taskforce spokesman, Stephen Kelly, expressed appreciation that the government was able to progress negotiations with South Korea, and to secure an agreement that was equivalent to the US, in terms of tariff reductions over time.

"The successful negotiation of an FTA with South Korea that is equivalent to the US in terms of tariff reductions, and sees the removal of the current 40% tariff over 15 years, has been a priority for the Australian cattle industry for a number of years. It will also see the phasing out of the 22.5% sheepmeat tariffs over 10 years," Stephen said.

"Working with industry, Ministers Andrew Robb and Julie Bishop and the government have managed to fast-track negotiations and secure this agreement for Australia in a matter of months. This will potentially save the Australian cattle industry $1.25 billion in the next 15 years.

"The agreement is extremely positive and will help secure the ongoing supply of Australian beef for Korean consumers in a highly competitive global protein market.

"However, the fact that the US secured their FTA in 2012 means there will always be a tariff differential between Australian and US product of up to 5.3%."

Stephen said the taskforce was concerned the volume of safeguard conditions contained in the agreement may be restrictive.

"The safeguards could mean that tariffs increase if export volumes exceed a certain level. However, industry notes that these safeguards are not applied automatically and is of the belief that they should be applied judiciously and not to constrain natural increases in trade," Stephen said.

The next priority is to ratify the agreement as soon as possible.

"On 1 January 2014, the tariff differential between Australian and US beef into Korea grew to 8%. We now need to see the agreement ratified as a matter of urgency, to allow the benefits to start to flow," Stephen said.

Australia has a reputation as a reliable supplier of clean, safe, quality beef for Korean consumers.

MLA invests levies in activities to support trade liberalisation, to help remove barriers and impediments to Australian red meat sales. In particular, MLA has been assisting government and peak industry councils to secure free trade agreements with countries - including Korea and Japan - that eliminate tariffs on red meat exports.

www.mla.com.au/KoreaFTA

Tune into MSA

Four new digital webisodes developed by MLA put a spotlight on the Meat Standards Australia (MSA) grading system.

The videos take a fresh look at MSA, providing a step-by-step explanation of what's required to deliver quality beef and lamb through the MSA supply chain.

MLA Marketing Manager National Accounts, Garry McAlister, said developing the digital format was an effective way to educate producers and consumers.

"In February 2012 and 2013 MLA introduced a 'What's New?' infomercial to help grow awareness of the MSA symbol to 50% of the target audience of consumers aged 18–54," Garry said.

"As the campaign shifts to a digital format our goal is to increase consumer awareness of the symbol to 60% by 30 June 2014.

"The webisodes demonstrate that, with MSA, choosing tender beef and lamb has never been so easy. We want consumers to see the MSA symbol as a symbol of quality they can trust."

The videos are hosted by fifth generation butcher Anthony Puharich from Victor Churchill's Butchery, Sydney, and fourth generation beef and lamb producer Lachlan Graham of Argyle Prestige Meats, Harden, NSW.

Both are experts in their field and discuss how MSA works, the science behind the system, and how meat quality is measured.

"We asked industry representatives to get involved because they are seen as knowledgeable, authentic and credible," Garry said.

"We want them to reinforce the message that MSA takes the guesswork out of buying and cooking Australian beef and lamb."

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The videos can be seen on MLA's consumer website **www.beefandlamb.com.au/msa**

www.mla.com.au/msa

Fifth generation butcher and meat expert, Anthony Puharich from Victor Churchill's Butchery, Sydney, co-hosts the four new MSA webisodes.

Research at work

The latest on-farm strategies emerging from MLA's investment in research, development and extension

In this issue

Hand in hand

Enterprise profitability and good natural resource management can occur simultaneously, according to producer and Central Tablelands EverGraze Regional Group Chair Wes Brown.

Pasture management

Snapshot

Wes Brown, Cargo, NSW.

Property: 883ha

Enterprise: Dorpers for prime lamb production and trade cattle

Livestock: 1,000 ewes, 200 yearling cattle

Pasture: Phalaris, ryegrass, cocksfoot, microlaena, sub-clover, red grass (about 80% native pasture)

Soil: Ranges from poor light soils to good deep red basalt soils

Rainfall: 875mm

After five years of watching and learning, Wes Brown is putting the recommendations from the EverGraze Proof Site at Orange into practice, and has already found his greatest lesson is that profitability does not have to come at the expense of sustainable natural resource management.

"I think it is one of the most promising outcomes of this EverGraze project – it blows away the traditional convention that one has to come at the expense of the other, and it shows a new way of approaching the business of animal production," he said.

Wes has been keenly involved in the Orange Proof Site, not only as chair of the Central Tablelands EverGraze Regional Group but also as a nearby producer; he has been manager of 'Grenabri' at Cargo for the past 25 years. He said approaching the landscape as a series of production zones was a real learning curve for the group.

"One of the most surprising outcomes from the Proof Site was that most of us thought the low production zones would be low in phosphorus and the high production zones would be high in phosphorus but, in fact, it was quite the opposite," he said.

"It was a real game-changer to learn that if the soil can't hold water, plants can't utilise the phosphorus."

Wes embarked on a period of transition at Glenabri 10 years ago, with the aim of diversifying income from the traditional fine wool growing to prime lamb breeding and, when seasons allowed, cattle trading.

This meant a stronger focus on pastures, how to graze them more profitably and sustainably and how to get the best response and value for money out of fertiliser. He applied EverGraze strategies and the research outcomes from the Orange Proof Site and divided the property into high, medium and low production zones. Major infrastructure investments were made, subdividing the property into 50 paddocks, adding watering points and creating laneways for easy stock movements.

"It has meant almost 10 kilometres of additional fencing (part-funded by a grant through the Lachlan Catchment Management Authority), but it has allowed us to fertilise and graze these areas according to their 'payback ability'."

"It also helped me decide to fence off 485ha of low production country (scrubby bush) and to focus my efforts on the property's more fertile areas."

Profit from productivity

Wes said the approach of only fertilising high production zones had been successful. (For information on how to divide land into production zones, see the main story on the Orange Proof Site on pages 16–18.)

"I can't quantify the benefits exactly as there have been other factors affecting my fertiliser decisions, such as low rainfall and high phosphate costs, but it has definitely boosted profitability by saving money, creating more feed and generating more income," he said.

Wes also embraced the Proof Site's work on rotational grazing strategies, adapting its findings from a slow rotation system (three months in/three months out) to a faster rotation system with longer rest periods.

"I keep gross margins on all the individual paddocks on a per-hectare basis for prime lambs and cattle and, as a result, I've found the paddocks I originally thought were the most productive, weren't at all," he said.

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"It's shown me that growing traditionally cultivated forage crops isn't as profitable as grazing native pastures – provided you manage them properly with lots of short, sharp grazings followed by long rest periods and keeping plenty of ground cover."

EverGraze recommends greater than 70% ground cover and more than 800kg/ha herbage mass on flat/undulating country and more than 90% ground cover on steep hill country.

"I try not to let any paddock have less than 1,000kg DM/ha at any time. The triggers to move stock vary, including stock-based factors, MLA pasture ruler principles and guidelines from MLA's Prograze course which is delivered by the Department of Primary Industries," Wes said.

"I know by assessment and feed budgeting how much feed I have in front of me and I can adjust stocking rates accordingly. It takes the knee-jerk reactions out of management and I feel less stressed and more in control."

Lessons learned

- → Improved profit and environmental outcomes can occur simultaneously.
- → Fertilising to production zones is a strategic way of lowering costs while increasing profits.
- → In the NSW Central Tablelands, the land's ability to respond to fertiliser is influenced by its water-holding capacity.
- → Measure everything you can because sometimes what you think is occurring, isn't.

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Order the pasture ruler at **www.mla.com.au/mlapastureruler**

Read a Tips &Tools about *Improving pasture use with the pasture ruler* at **www.mla.com.au/pastureruler**

Order the *Pasture health kit* at **www.mla.com.au/pasturehealthkit**

Learn about the Prograze course at **www.dpi.nsw.gov.au/agriculture/profarm/courses/prograze**

In the zone

Almost five years of EverGraze research at the NSW Orange Proof Site promises to challenge traditional thinking on grazing and land improvement.

Above: Sheep in the Orange trial.

Results from the latest EverGraze research suggest that treating every area of your farm as having the same production potential may become a thing of the past.

The EverGraze project at the Orange Proof Site on the NSW Central Tablelands has shown the folly of this traditional approach, highlighting that significant improvements to enterprise profitability can be achieved by treating land according to its production potential.

Proof Site leader, Dr Warwick Badgery, said the four-and-a-half year project (2008–2012) put four management strategies to the test.

They were:

- → identifying and mapping production zones and matching fertiliser application with the most productive/responsive land
- → using fertilised native pastures to drive a high-value, dual-purpose Merino enterprise
- → applying minimum feed on offer (FOO) – 800kg DM/ha – and ground cover (80%) benchmarks
- → testing grazing rotations to see if better pasture utilisation could improve production while maintaining ground cover

Experiment design

The 40ha site at 'Panuara', which is highly variable in aspect, slope, soil type and depth, was monitored during spring. As the pasture started to dry off, the site was divided into high, medium and low production zones, which were fenced to create one, four and 20-paddock rotations (figure 1). The paddock sizes were 3.5ha, 0.875ha and 0.175ha per paddock, respectively.

All rotation areas encompassed similar proportions of high, medium and low production zones and only the high production zones were treated with fertiliser.

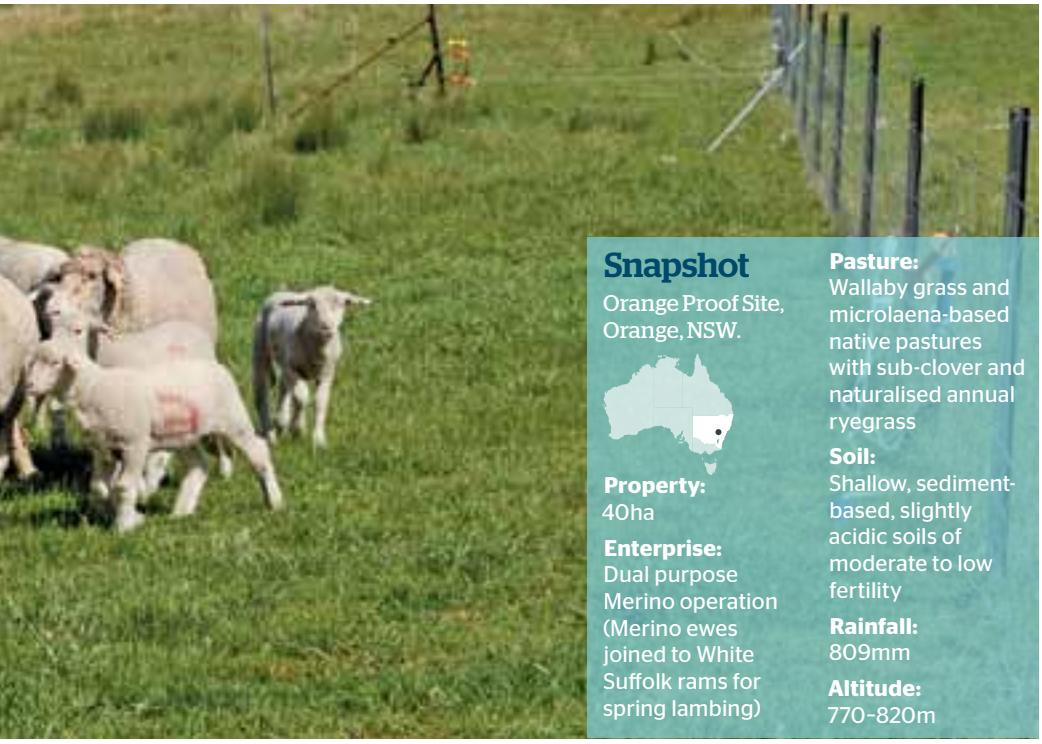
Merino ewes of Centre Plus origin, joined to White Suffolk rams for spring lambing, grazed the site in one, four and 20-paddock rotations until benchmark targets were reached.

Production zones

Warwick said the zones were determined by visually estimating green herbage mass and the boundaries were marked using a hand-held GPS.

"The high production zones (HPZ) represented 20% of the site and contained actively growing pasture on lower elevations and drainage lines where there was greater soil depth. Medium production zones (MPZ) – the mid-slope area where pasture was starting to dry off – represented 59%; and 21% was low production zones (LPZ) – mostly tops of ridges with often coarse, gravelly soil where pasture had dried off and contained no living species," he said.

Soil tests done before any fertiliser treatment produced some surprising results.



Snapshot

Orange Proof Site, Orange, NSW.

Property: 40ha

Enterprise: Dual purpose Merino operation (Merino ewes joined to White Suffolk rams for spring lambing)

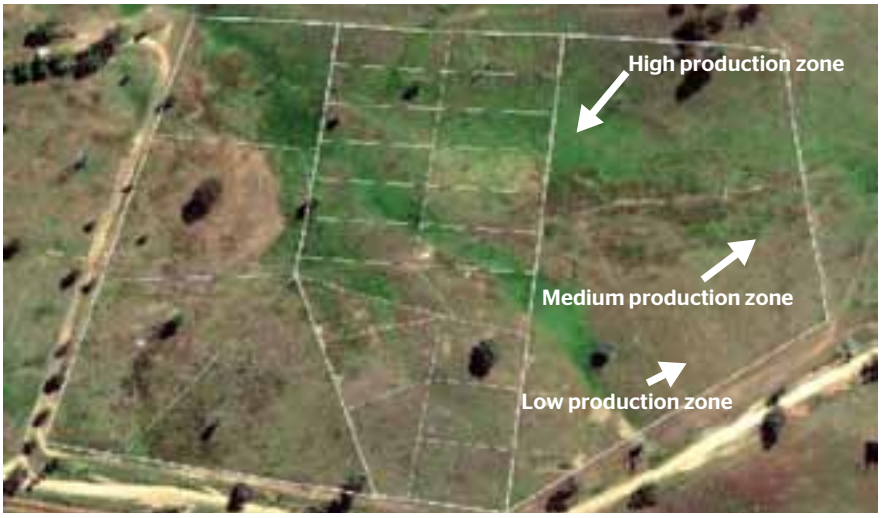
Pasture: Wallaby grass and microlaena-based native pastures with sub-clover and naturalised annual ryegrass

Soil: Shallow, sediment-based, slightly acidic soils of moderate to low fertility

Rainfall: 809mm

Altitude: 770–820m

Figure 1 **The Panuara site divided into its production zones and one, four and 20-paddock rotation systems.**



Source: www.evergraze.com.au

"We naturally thought the HPZ would have high phosphorus levels and the LPZ would have low phosphorus levels, but in fact it was the reverse," Warwick said.

"Soil water-holding capacity, which was highest in the HPZ, proved to have a significant effect on plant growth and ability to utilise phosphorus. In much of the LPZ, there wasn't the moisture available or pasture species present to get a significant response from the fertiliser."

Warwick said other factors may also have contributed to the differences in soil phosphorus between the zones, such as waterlogging or movement by sheep to camps, but the project clearly demonstrated the variation in the ability of land to respond to inputs.

Phosphorous (in the form of single superphosphate) was applied only to the HPZ at 250 kg/ha in 2009 and 125 kg/ha in 2010. With no fertiliser inputs, the LPZ and MPZ declined in their phosphorous levels, from 54–41mg/kg and 31–23mg/kg, respectively.

The differences between the productivity of these zones were significant, with the HPZ producing 10t DM/ha compared to 4.5t DM/ha from the LPZ.

Practical outcomes

The project demonstrated that not all country will respond the same way to fertiliser applications. Cost savings can be made by targeting the application of fertiliser to areas with the greatest potential for response, while reducing inputs on areas with less potential.

Late spring is a good time to determine production zones, as differences in soil moisture content are obvious and different pasture species are easier to recognise.

At Panuara, soil water-holding capacity was strongly influenced by production zone, with the HPZ storing 30% more soil water in the root zone than the LPZ, providing longer periods of pasture growth.

Pasture composition was strongly influenced by position in the landscape with high-quality species such as microlaena and sub-clover more prevalent in the HPZ, while the LPZ was dominated by less-productive wallaby grass.

Thriving native pastures

The project showed pastures with a high native perennial component maintained stable composition by managing minimum feed on offer (800kg DM/ha) and ground cover (80%) benchmarks. This was regardless of grazing style.

The project compared the effect on pasture composition of a one, four and 20-paddock rotation. Any differences were either short term or seasonal.

Warwick said ground cover was slightly higher in the 20-paddock system than the other two, while standing herbage mass was considerably greater in the 20-paddock system, allowing an increase in stocking rate from February 2009.

"While natives consistently made up for more than 70% of the total pasture, the importance of annual ryegrass in winter – when natives have low growth rates – was clear, particularly in the Central Tablelands," he said.

"It was interesting to note the effect grazing rotations had on the ryegrass percentage of total pasture composition. We found it greatest during spring in the 20-paddock system, probably due to it experiencing less selective grazing pressure than the one-paddock system (figure 2)."

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The trial site was only destocked once during the experiment due to a lack of feed quality. The sheep were placed into a feedlot and all costs were included in the gross margin analysis.

Stocking rate flexibility is key to rotational grazing success

For producers comparing rotational grazing with set stocking, the ultimate quandary is "Which will deliver the best outcome for me"?

According to Warwick, the research at the Orange Proof Site has provided some valuable insights and guidelines to help producers decide.

"Stocking rates started the same for all systems but, by the end of the trial, the 20-paddock system ran an average 7.8 DSE/ha, compared to the four-paddock 6.5 DSE/ha and the one-paddock 6 DSE/ha," he said.

"However, in order to ensure the 20-paddock system was more profitable long term it was vital that the stocking rate was increased in response to higher FOO. If this didn't occur, there was no significant difference."

Warwick said the 20-paddock rotation had some clear benefits.

"The average green feed on offer was often higher in the 20-paddock system than the four and one-paddock systems, and it produced higher average sale weights of lambs/ha (20-paddock 207kg; four-paddock 181kg; and, one-paddock 173kg) and higher gross margins," he said.

Warwick said the real test of viability for the more intense rotation systems was investment in infrastructure.

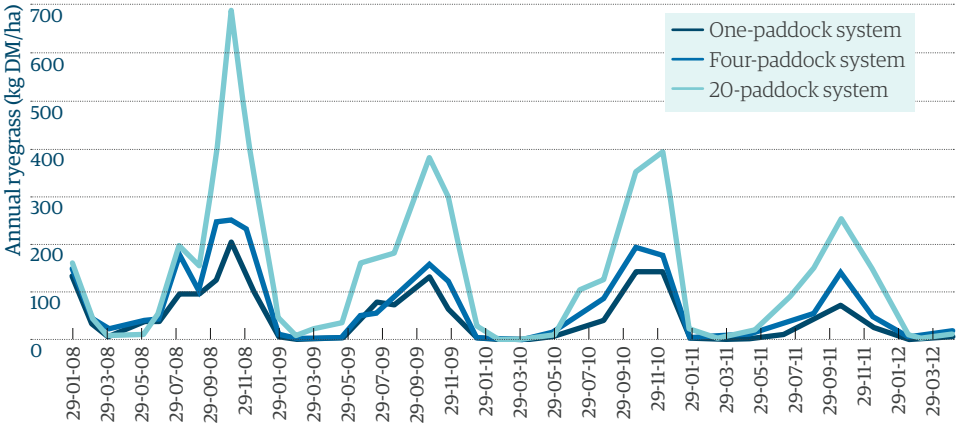
"Where only moderate amounts of subdivision are required (for example, converting 14 paddocks set stocking into 20 rotational grazing), then it is viable to change systems," he said.

"However, where more substantial investments are required, the change may not be profitable. The best way to start is by combining mobs and rotating around existing paddocks. The cost of fencing can be lowered using electric fencing."

Warwick said the cumulative cash flows when moving from continuous grazing to a 20-paddock rotation were calculated based on the average 18% increase in the lamb production (kg/ha) found in the experiment once stocking rates had been adjusted (figure 3).

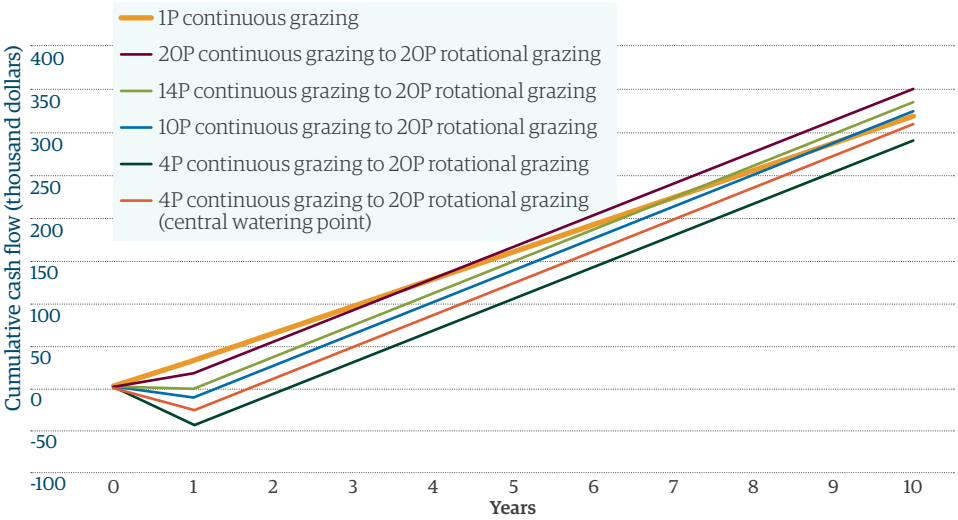
This increase in production was achieved with higher ewe and lamb numbers, rather than higher lamb growth rates.

Figure 2 **Comparison of annual ryegrass production across the different paddock rotation systems.**



Source: www.evergraze.com.au

Figure 3 **The cumulative cash flow for changes from continuous grazing to rotational grazing with 20, 14, 10 and four initial paddocks (P) over 10 years. For the four initial paddocks, a central watering point subdivision method was also investigated to reduce establishment costs.**



Source: www.evergraze.com.au

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For more information on the Orange Proof Site and research outcomes visit **www.evergraze.com.au/research-and-demonstration/orange-proof-site**

Tips and tools

The EverGraze 'Dividing up the farm for grazing management' page provides recommendations for grazing management and tools including simple guides for classifying different landscapes, developing a farm map and devising an action plan for managing each class. Visit **www.evergraze.com.au/library-content/grazing-management**

Use MLA's phosphorus tool to help calculate fertiliser applications. Visit **www.mla.com.au/phosphorustool** or use the EverGraze Pasture improvement calculator at **www.evergraze.com.au**

For further economic analysis on splitting farms into production zones and adopting rotational grazing systems visit **www.evergraze.com.au/library-content/higher-stocking-rates-but-lower-animal-performance-on-native-pasture-rotational-grazing-systems**

Pasture management

What's hot and what's not: Optimising fire management in grazed tropical savannas

A research project which started 20 years ago is delivering strategies for using fire to control woodland thickening on grazed savannas, and showing that late-season burning is substantially better for the bottom line.

High-value pastoral land across northern Australia's tropical savannas is not being burned enough to combat woodland thickening, while lower value pastoral land, indigenous and conservation land is falling victim to 'overburning' with too many late-season wildfires.

These are among the findings of a long-term research project in the Northern Territory's Victoria River District, which is providing insights into the use of fire in grazed savannas.

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NT Department of Primary Industry and Fisheries' Dr Dionne Walsh lighting fires as part of the Kidman Springs fire experiment.

'Kidman Springs' fire experiment findings:

On red soil

- Two-yearly and *early* fire suppressed perennial grass yield and promoted annuals and forbs.
- Four-yearly *late* fire managed woody cover.

On black soil

- Two-yearly or *early* burns reduced total yield and perennial grass yield, and increased annual grass yield and the percentage of legumes.
- Four-yearly *early or late* fire managed woody cover.

Table 1 Implementing early vs. late fires had an opportunity cost of $85/km² ($346,171 per annum)

Scenario	Average annual profit	Number of years with a loss
No fire	$647,737	6
Early burn	$828,234	6
Late burn	$1,174,405	4

Table 2 The production implications of fire on property

Scenario	TBA* (m²/ha)	Pasture growth (kg/ha)	Stocking rate (AE/km²)	LWG✧ (kg/hd/yr)	LWG (kg/ha/yr)
No fire	3.7	1,200	5.1	96	48
Early burn	2.8	1,253	5.2	107	5.4
Late burn	1.9	1,530	6.2	112	6.7

**TBA = tree basal area (a measure of tree cover)*

✧ LWG = liveweight gain

The fire experiment on Victoria River Research Station (known as 'Kidman Springs') was established with MLA-funding in the 1990s to assess the impact of fire management on woody cover and pasture condition.

The experiment was replicated on grazed red and black soil sites, with experimental plots burnt early or late in the dry season every two, four or six years. The experimental plots were compared to unburned controls.

NT Department of Primary Industry and Fisheries Senior Rangeland Scientist, Dr Robyn Cowley, said the project was providing clear evidence for optimal fire regimes in grazed savannas, and was relevant to producers from Townsville across to the Kimberley.

"Four-yearly late season fires were the most effective for managing woody cover while maintaining pasture condition," Robyn said.

"Two-yearly fires should be avoided, unless required to promote rapid change in woody cover, because of the damaging effects on pasture condition.

"While early fires are recommended on conservation land to reduce damaging late-season fire frequency and extent, on grazed pastoral land early fire was associated with declining pasture condition, probably due to the longer exposure to post-fire grazing on early burnt sites."

The business of burning

Economic modelling of a commercial cattle station found four-yearly fires improved animal production and enterprise profits, with late-season fire providing the greatest benefits.

There was an opportunity cost of implementing early-season fire (as recommended for carbon and biodiversity outcomes) of $85/km² compared to burning later in the year (table 1).

"If you burn late in the dry season, you don't have to burn the whole paddock," Robyn said.

"You just burn a quarter of the paddock and you can leave the animals in there to graze the other three-quarters.

"It's not long then before the wet season starts, and next year you can burn another quarter. This is known as rotational burning."

Robyn said four-yearly, early-season fires could be used to control woody growth on black soil, but careful post-fire management and spelling would be needed to avoid negatively affecting pasture composition (table 2).

Savanna Burning: Understanding and using fire in northern Australia **http://savanna.cdu.edu.au/publications/savanna_burning.html**

Want to read more about managing grazing lands with fire?

http://futurebeef.com.au/topics/grazing-land-management/#fire

www.mla.com.au/fire

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Fire extension plans

MLA is scoping the feasibility and methodology to conduct an RD&E (Research, Development and Extension) program around fire and grazing management.

Input to the plan has been sought from pastoralists, researchers and Queensland, Northern Territory and Western Australian organisations involved in production and natural resource management RD&E.

MLA's Environment and NRM Project Manager Cameron Allan said the plan's development was prompted by evidence of industry members' growing lack of confidence in using fire as a pasture and woody weed management tool, despite the benefits borne out by research.

"There are numerous organisations that generate and provide information and services around vegetation management and use of fire," Cameron said.

"We want to understand why producers are not seeing a compelling case for the use of fire and, if improved information is needed to assist a decision on the use of fire, we want to work with all stakeholders to make that information available."

The consultation process sought to recognise who is already working on vegetation management using fire and what they are doing, and map out a more collective approach to add value to what is already under way.

"Recognising who else is working in this space and gaps that need to be filled to present a compelling case for producers will help determine where MLA should invest," Cameron said.

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Snapshot

James and Marjorie Lord, Mount Isa, Qld.

Property: 234,000ha

Enterprise: Breeding for domestic and live export markets

Livestock: 17,000 composite Brahman cattle (spread over 'May Downs' and finishing block 'Nottingham Downs', west of Hughenden)

Pasture: Predominantly buffel grass and blue grass on spinifex country

Soil: Sandy loams

Rainfall: 470mm

Fighting fire with fire

After 27 years running their Mount Isa property, 'May Downs', James and Marjorie Lord have reached a clear conclusion about fire management: one way or another, you must use it.

James and Marjorie Lord (above) have introduced 'patchy' burning in an attempt to control wildfires on May Downs.

"This is spinifex country," James said. "It burns naturally about every seven years."

The Lords have had to implement their own burning plan or risk losing valuable pasture to wildfires, but they haven't always been so keen to embrace fire management.

When James and Marjorie bought May Downs in 1986 the land was in a bare and fragile state, and James was concerned about water movement and run-off. James believed the over-use of fire as a management tool had contributed to the poor land condition, and he planned to avoid it as much as possible.

The land condition needed to improve if the property was to be economically and environmentally sustainable.

"I saw fire as exposing the soil to erosion and reducing the property's carrying capacity, so I tried to exclude it," he said.

In 1997, James implemented a property development plan using rotational grazing and spelling to graze the country more evenly.

These improved grazing practices led to much healthier conditions, including the establishment of buffel and blue grass.

However, as pasture improved and fuel loads increased, so did the risk of fire. In October 2001, 80% of May Downs' pasture was lost to wildfire.

James decided to include fire management in his whole-of-property planning. He now works with Firescape Science to burn different patches of country over the wet season to reduce fuel loads.

"We do some burning from the ground and some from the air by dropping incendiaries from helicopters," James said.

"We focus on internal patchy burns so any unwanted fires do not spread across the whole property."

This patchy, or mosaic, burning early in the year has reduced the risk of extensive pasture loss.

"It's all about understanding the risks and benefits," James said.

"We are getting better at managing wildfire risks in the Mount Isa area, but there's room for improvement."

Lessons learned

- Fire management is essential in spinifex country.
- Cool, patchy wet season burns reduce the risk of destructive, dry season wildfires.
- Careful post-fire management is essential to avoid over-grazing.
- Fire management should be incorporated into general property planning.

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Feeding sheep for financial gain

The saying 'you need to spend money to make money' rings true for Agricultural Economist, John Young, from Kojonup, Western Australia.

John says feeding sheep does pay – as long as you feed the right amount, to the right sheep, at the right time.

He analysed the economic impacts of the Lifetime Ewe Management (LTEM) program, which has been rolled out to 1,600 producers in 320 local groups since 2007 by the Sheep CRC (partly funded by MLA) working in partnership with Rural Industries Skill Training.

Using 'MIDAS' – a whole-of-flock modelling tool with a feed budgeting module – John calculated the profitability of 27 feeding strategies on typical farms in south-west Victoria, southern NSW, and south-west Western Australia. Variables included:

- → flock condition scores (CS) at joining
- → changing ewe energy requirements during pregnancy
- → commodity prices
- → quality and availability of pasture

The model calculated the optimum stocking rate and rate of grain feeding required to maximise profitability while achieving CS targets for ewes. This helped producers identify profit drivers in their own flock.

"Many producers I meet know if they make a profit each year, but they are so focused on cost-minimisation that they often don't look at how they can make a return by investing in extra, targeted inputs," John said.

He said producers could get 'more bang for their buck' by incorporating precision feeding through:

- → assessing supplement quality
- → calibrating feed carts to monitor how much sheep are offered
- → assessing pasture quality and availability
- → condition scoring or weighing animals
- → setting targets for different classes of animals
- → feed budgeting to determine what supplementation is needed to achieve these targets

Knowing what to feed, why and when underpins this profitable feeding strategy.

In the current market, about two-thirds of the financial impact of altering ewe nutrition is

Western Australia-based agricultural economist, John Young.

gained through the effects on progeny survival (lambs marked as a percentage of lambs scanned) and one-third is through progeny wool production.

For profitable 'feeding for reproduction', the priority mobs to feed at different periods of the year are:

- → in late pregnancy: ewes below CS 2.5, twin-bearing ewes
- → post weaning: Merino weaners, the twin-bearing ewes, maiden ewes

"By targeting nutrition to these priority ewes, producers will see the economic impact of better feeding straight away from increased ewe and lamb survival rates," John said.

Pregnancy scanning allows producers to identify dry/single-lamb/multiple-lamb ewes and feed them accordingly to eliminate unnecessary feeding costs. It also allows them to sort ewes into single and twin-bearing paddocks so lamb birth and survival (to lamb marking) rates can be monitored. Generally, Merino ewes should achieve 85–90% survival rate in single mobs, and 75–80% in twinning mobs.

"Targeting supplementation to twinning ewes might cost an extra $10,000, but it can increase the survival of twins by 20–25%, which carries through to profit, delivering up to an extra $30,000/year for the average enterprise of 3,000 ewes," John said.

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Regional guidelines for optimising ewe management:

Region: Medium rainfall zone (Great Southern) in WA – lambing July/August.

Targets: Allow moderate loss of condition from joining to day 90 provided the condition can be regained prior to lambing on green feed; aim for CS 3 at joining.

Region: High rainfall zone (Victoria, Tasmania, South Australia) – lambing in late winter/spring.

Targets: Allow moderate loss of condition from joining to 'break of season', provided the condition can be regained prior to lambing on green feed, aim for CS 3 at joining.

Region: Cereal-sheep zone (Western Australia, South Australia, Victoria) – lambing in May.

Targets: Maintain ewe condition from joining through to lambing; aim for CS 2.7 or higher at joining; provide good feed during lactation to ensure high lamb growth rates.

Region: Southern slopes of NSW, central Victoria – spring lambing.

Targets: Allow moderate loss of condition from joining to 'break of season', provided condition can be regained prior to lambing on green feed; aim for CS 2.6–3 at joining.

The full MIDAS economic analysis report is available at **www.lifetimewool.com.au/economics.aspx**

Traits of profitable producers:

- → Condition-score their flock
- → Run pregnant ewes in either single-lamb or twin-bearing flocks
- → Establish priority mobs for precision feeding
- → Often have smaller paddocks for improved management
- → Regularly monitor pasture utilisation to make nutrition decisions

LTEM builds on a five-year lifetimewool research project run by AWI and state government departments. It is coordinated by Rural Industry Skills Training (Victoria), and involves small groups of sheep producers. For information on LTEM groups in your area, contact **Darren Gordon** on T: 03 5573 0943 or E: dgordon@rist.com.au

Managing to make money

Pregnancy-scanning, separating twin-bearing ewes and strategic feeding have enabled Western Australian producer, Clayton South, to double stocking rates while increasing lamb survival.

Snapshot

Clayton South, Wagin, WA.

Property: 2,500ha

Enterprise: Cropping, lamb/wool production

Livestock: 4,000 Merino/Dohne breeders, 3,000 joined to Dohne rams, 1,000 cross-bred flock mated to White Suffolk rams

Pasture: Clover-based with ryegrass

Soil: Predominately loam, some clay, gravels

Rainfall: 300–320mm

It's not just about increasing profitability – by optimising supplementation to ewes, Clayton is also overcoming seasonal and labour challenges.

Clayton crops 70% of his 2,500ha property at Wagin in the Great Southern region, and runs a self-replacing Merino/Dohne flock on the remaining land. In the early 2000s, the Souths sold the wether component of the flock to focus on productive ewes.

Clayton credits his local Lifetime Ewe Management group and programs run by Sheep's Back (the AWI-funded grower network for Western Australian woolgrowers) with refining his management to better utilise pasture and target nutrition to priority mobs.

Although Clayton attributes some of the 2012 lambing results to a good 2011-12 spring and summer, the strategy changes have been effective. He has doubled stocking rates from 5 DSE/ha to 10 DSE/ha; increased pregnancy scan results from 115–120% to 140–145%; lifted the weaning rate of lambs in the twin mobs from an average of 140% to as high as 160% last year; and achieved a 10–15% reduction in ewe mortality.

Clayton has increased feed costs by about 20%, depending on the season but, by targeting this extra nutrition to twin-bearing ewes, has increased his gross margin by $82,000 (or an extra $11/DSE).

"A key strategy is pregnancy scanning to identify twin-bearing ewes – these are the most productive animals in our business," Clayton said. "It costs us 80¢/ewe to scan, but as far as I am concerned this is the best 80¢ we can spend, as looking after these ewes and their twins is what makes us money."

Clayton's management includes:

- → separating twin-bearing ewes in smaller flocks (his largest mob is 150 ewes)
- → reserving paddocks with the best pasture and shelter for twin-bearing ewes
- → maintaining all ewes at a minimum condition score (CS) of 3
- → increasing supplementation to lift twin-bearing ewes to CS 3.5 or 4 for lambing
- → budgeting available pasture
- → calibrating trail feeders and measuring uptake of lick feeders
- → lupin flushing (timing lupin feeding to increase the ovulation rate of the ewes)

As well as using calibrated sheep feeders, Clayton uses a feed budget spreadsheet to calculate each mob's energy requirements, and a stop-watch while trail-feeding to prevent over- or under-feeding.

"This is a vital management tool when I can't access skilled labour, as I use the spreadsheet to write up a farm map for the worker so all he has to do is feed at the correct number of seconds for each mob," he said.

Two years ago, Clayton introduced a crossbred flock using White Suffolk rams. All dry ewes (including maidens) are culled from the main flock, to ensure replacement ewe lambs are only selected from the most productive ewes. These dry ewes are moved to another property and joined to White Suffolks the following year, and any that are still dry after scanning are sold.

"Running an all ewe flock exposes us to a level of risk, so prioritising our ewes gives us an exit strategy and a tool to make selling decisions," he said.

"If we have to lighten stocking rates, we can cull ewes in the crossbred flock first and retain our most productive ewes."

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145%
pregnancy scanning rate, up from
120%
$11/DSE
gain in gross margin

Pasture management

Looking forward

Snapshot

Dennis Cormack, Guluguba, Qld.

Property: 2,227ha

Enterprise: Cattle production for the Japan ox trade

Livestock: 330 Hereford breeders and progeny

Pasture: Buffel, green panic, blue grass and spear grass

Soil: Box creek flats, loam, Brigalow, balah and bottle tree country

Rainfall: 625mm

Amid drought-induced dust clouds it's difficult to think long term, but Dennis Cormack from Guluguba in Queensland is focused on sustaining quality pasture as a good survival strategy.

Dennis has seen some good seasons in the 15 years since he took over the family farm. He has gone on to buy neighbouring properties but, overall, there haven't been too many good years. Climatic challenges have taken their toll, particularly on the buffel grass that had self-seeded over three-quarters of the property.

"On the better country, the buffel grass seems to be persisting, however, on the less fertile areas, it is slowly disappearing," he said.

"As the soil fertility declines, the buffel grass becomes more stunted and clumpy and spear grass and sabi grass are taking hold, which reduces productivity significantly."

Dennis usually renovates 40–80ha at a time, targeting pasture that hasn't been responding adequately to beneficial rainfall.

Dennis has experimented with several renovation techniques over the years. He found the best results came from working the ground with a one-way plough, followed by a chisel plough, and sowing it down to a mixed forage crop of oats, forage sorghum and a legume such as vetch.

And looking back

MLA-funded work is reviewing earlier research and the persistence of legumes species in a quest to find more solutions for pasture rundown in northern Australia.

As part of the study, leading pasture researcher from the Queensland Department of Fisheries and Forestry, Gavin Peck, visited old legume research sites across southern and central Queensland and found a number of legume lines that had persisted for more than 20 years. These included lines of desmanthus and also Caatinga stylo.

"We have the legumes that will go the distance, we just need to get them established into grass pastures," he said.

Current research and on-farm trial work is focused on improving establishment and management of these legumes and so improving producers' confidence in their value.

MLA is also supporting scoping studies on the value of nitrogen and phosphorus fertiliser application in production systems based primarily on sown grass pastures.

"For nitrogen fertiliser in particular, there is a commonly held and understandable belief that fertiliser application in northern production systems is never economic," Gavin said.

"However, previous economic analysis of research results using nitrogen fertiliser did not consider the potential benefits to pasture in the years following nitrogen application (only immediately after a rain event following initial application)."

A CSIRO trial testing nitrogen fertiliser (100kg/ha) applied to green panic demonstrated there was still a dry matter response 20 years after the last fertiliser application.

Another nitrogen fertiliser trial during the 1980s showed that buffel grass produced an extra 30–60kg DM/ha for every kilogram of nitrogen applied.

A desk-top analysis is being done to see if there are any current situations where nitrogen fertiliser could be cost-effective.

"I've had good results with this method, particularly if I do it just before a decent rain. The improved pasture growth lasts five to seven years before the ground is run down to the point where it should be done again," he said.

"It's cost-effective because I can do it myself."

Blade-ploughing was another method he tried. While he felt it let more water into the roots, it didn't provide growth in the long term and – at a cost of $160/ha for contractors – was more expensive.

"The buffel grass tended to come up in huge clumps and it took forever to break down," Dennis said. "I would do it again but only for woody weed control."

Other methods tried included spraying out buffel grass to regenerate it by encouraging deeper, less compacted root growth; planting legumes and applying various rates of fertiliser.

Spraying didn't work, but Dennis has had success with legumes – particularly desmanthus (pictured).

"I've tried burgundy bean, siratro, desmanthus, round-leaf cassia and stylos, but desmanthus has been the most successful so far. It's the only one that persists and stock do well on," he said.

"I've got plots established 15 years ago that are still productive. Good nodulation of legumes is critical, but successful inoculation at planting is extremely challenging in our harsh climate, and is often overlooked by producers and seed companies.

"Caatinga stylo hasn't worked here yet because I haven't been able to source a pure line of it. Sourcing good quality pasture grass and legume seed, or any seed at all, has been a real issue for some of these species."

Dennis has taken part in trials where urea has been applied on small plots at 50–200kg/ha.

"There was more growth and a significant colour difference and when I let cattle in on those areas, they flogged the sites where it was applied," he said. "However, I'd like to see more trials on a broader scale before I do anything further.

"It's a huge investment to watch disappear into the atmosphere if you don't have rain coming over the hill."

Although happy to pass on his own experiences, Dennis said pasture decline was an individual problem requiring individual solutions.

"Every producer has to find the method, or combination of methods, that best suits them," he said.

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Gavin expects this will show that, while broad-scale fertiliser application is still prohibitively expensive in most situations, producers may be able to use it in specific situations to cost-effectively boost productivity.

"For example, producers could apply fertiliser to a paddock to ensure the finishing of steers in that season or to ensure lighter heifers get to the critical mating weights," he said.

The review of phosphorous research was assessing the likely economic value of using fertiliser to improve growth of legumes such as desmanthus and Caatinga stylo. The more legume growth, the greater the amount of nitrogen fixed from the atmosphere and cycled into the soil and the greater the boost to overall pasture production.

The scoping studies will indicate if additional research or extension effort on fertiliser use is justified.

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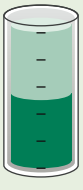
Project dashboard: Improving productivity of rundown sown grass pastures

Financial contributions to the project:
$1,259,710



MLA levies: **50%**

Government: **50%**

Length of project:
5 years and 3 months

Completion:
August 2016

The 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.

Working it out

More than 260 producers have attended Pasture Rundown – Causes, Costs and Options workshops since 2011, funded by MLA and the Department of Agriculture, Fisheries and Forestry, Queensland (QDAFF).

Participants have travelled from as far as Nebo in the north and Dirranbandi in the south.

The workshops are part of a five-year program that tests management options to improve the productivity of rundown pastures. So far the workshops have resulted in 158 documented management plans, which producers plan to implement on more than 500,000ha of sown pasture.

QDAFF Senior Pasture Agronomist, Gavin Peck, said it was encouraging that more than 80% of workshop participants nominated specific things on their farms they intended to change.

Of the strategies presented, increasing nitrogen levels by either applying nitrogen fertiliser (in test strips) or introducing legumes attracted the most interest, with 90% of producers planning to test it. Increasing nitrogen cycling through mechanical or chemical renovation was selected by 45% and accepting pasture rundown and the corresponding lower productivity by 15%.

Many producers planned to test several different strategies on different parts of their properties.

The trials will continue as part of the program for a further two years and producers who are interested are encouraged to join (see contacts below).

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Market compliance

Grid locking non-compliance

Producers of grassfed cattle are paying a high price for non-compliance, with failure to meet market specifications costing the industry millions of dollars each year. According to Beef CRC research, halving non-compliance could realise more than $92 million over 12 years.

MLA-funded research has shown that technology which equips producers and processors with real-time, interactive livestock data to better describe cattle at point-of-sale is the key to meeting market specifications.

NSW Department of Primary Industries (DPI) Senior Research Scientist, Malcolm McPhee, led the project, which assessed nearly 80,000 grassfed cattle against two carcase grids: a commercial one already used by industry and a hypothetical grid.

"Out of nearly 20,000 steers, 17% failed to meet hot standard carcase weight specifications (HSCW) and 13% failed to meet cold carcase rib fat specifications. Based on the commercial grid, non-compliance rates in these steers equated to a $26/head loss in price received for HSCW and an $11 per head loss for rib fat," he said.

"The corresponding losses in price received for heifers were $7/head for HSCW and $25/ head for rib fat.

"Compliance rates to market specifications is an important industry issue."

Malcolm said tools such as the BeefSpecs calculator could help producers and feedlot managers meet weight and fat specifications, reducing non-compliance rates.

The project also considered improvements in collecting accurate data for the BeefSpecs calculator. While technical skills can be a hurdle to accurately measuring impacts, the effectiveness of BeefSpecs could be enhanced by:

- technology such as image analysis, to assess animal characteristics such as frame score and initial P8 fat that are primarily assessed using a subjective measurement
- training to develop producers' skills in live animal assessment, to increase the accuracy of inputs entered into BeefSpecs and to maximise producers' abilities to meet market specifications

Malcolm McPhee
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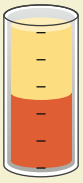
Tools:

- **BeefSpecs calculator:** a planning tool developed by the NSW DPI with MLA funding, which uses breed, management and performance data to calculate fine liveweight, P8 fat depth and carcase weight so producers can match cattle to markets. **www.mla.com.au/beefspecs**
- **Livestock Data Link:** Leveraging off the National Livestock Identification System (NLIS) database, this web-based tool under development will provide easy-to-understand carcase feedback information to help producers boost compliance. Producers supplying livestock to participating plants can access Livestock Data Link through their NLIS account: **www.nlis.mla.com.au**
- **MSA feedback forms:** Producers can use processor feedback to identify where cattle are and are not meeting market specs and adjust management accordingly. **www.msagrading.com.au**

Project dashboard: Assessment of compliance in grassfed cattle and evaluation of increasing accuracy of BeefSpecs inputs and impact on compliance rates

Financial contributions to the project:
$74,000



MLA levies: **50%**

Government: **50%**

Length of project:
11 months

Completed

The project is part of MLA's objective to:
Create opportunities to improve compliance to market specifications by 3% by providing information and tools that encourage practice change on farm, such as Livestock Data Link and BeefSpecs

'Meating' the mark: A processor's perspective

Just as a consistent line of livestock can streamline on-farm management, processors know that reducing variation in key traits creates efficiencies, cost savings and demand for compliant cattle.

The family owned New England, NSW, Bindaree Beef, processes up to 5,500 head each week, sourced from southern Queensland and NSW.

Bindaree Beef's Head Livestock Buyer, Bronson McLay, said while complete compliance with each market would be ideal, realistically he would like to see no more than 5% of cattle fall short of specifications.

Bindaree works with suppliers to target two main issues:

- Stock falling outside market grids for traits like carcase weight, fat cover, dentition or the specific requirements to meet Meat Standards Australia (MSA) such as pH levels.
- Variation within a line of cattle which leads to inefficiencies.

"No one likes to receive a discounted price for an animal which, visually, appeared to meet the market. Producers will see different prices for graded and ungraded stock for a range of reasons," Bronson said.

Bindaree Beef Head Livestock Buyer, Bronson McLay, (left) with Bindaree Beef Director and General Manager Livestock, John Newton.

"It's a simple fact of business that processors prefer to align with suppliers, producers or lot-feeders who can supply consistent lines of cattle into the market they are consigned to, so compliance doesn't just mean more $/kg – it can also increase a producer's market share."

He said non-compliance can force what should be a premium product into a much lower category of product. For example, Bindaree could redirect a YG (young animal with 0–2 teeth up to 30 months of age) animal with dark cutting from the high-end retail and restaurant market into manufacturing.

"And it's not just about lost sales," Bronson said.

"Variation impacts all aspects of processing, as carcases have to be drafted off to separate boning room runs, given a different product code and packaged separately.

Inconsistency results in more handling, which is not ideal in an industry focused on efficiency."

There is no silver bullet, but Bindaree Beef's Sales and Marketing Manager, Andrew Gapes, said producers can lift compliance through:

- **Selection:** breeding cattle with desired genetic traits.
- **Nutrition and management:** to meet carcase targets and maintain glycogen levels for reduced dark-cutters and high pH animals.
- **Pre-slaughter management:** reduce stress by minimising handling, pre-draft weeks before delivery and don't yard too early.

"Each production system is different and influences how much change a producer can achieve," Andrew said.

"For example, producers with regular turn-off can incorporate processor feedback on a monthly basis while other producers might only have one or two chances a year to get it right."

Andrew said industry information (BeefSpecs, processor kill sheets and MSA feedback systems) combined with supply-chain communication and benchmarking were tools to improve market compliance.

"Bindaree has an open door policy and we encourage producers to visit our processing plant, to see our systems and gain an insight into our market requirements and why compliance and consistency are so important," he said.

Bindaree Beef has set targets to enhance carcase feedback systems, implement the new MSA index, run producer workshops and launch new brands by the end of 2013-14.

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www.bindareebeef.com.au

www.mla.com.au/MSAindex

Compliance in 2012-13:

- National MSA compliance averaged 93.9% of all eligible cattle presented.
- More than 30,000 cattle and sheep producers were accredited for MSA supply – up 28%.
- There were nearly 7,000 new MSA producers.

Key messages from Bindaree Beef:

- Producers mainly drop out of MSA because of meat colour and high pH – combat this by pre-drafting weeks before delivery and maintaining high nutrition.
- Don't be complacent – strive to lift compliance/consistency and become a preferred supplier.
- A mutually beneficial processor-producer relationship needs two-way communication.
- Meeting processor requirements avoids discounts and could generate more sales.
- Compliance doesn't stop at the gate – align with transporters and processors who have superior handling systems.
- By sharing information, industry can reward above average performance.
- MSA lets producers benchmark their cattle and processors identify preferred suppliers.

Redpa's recipe for MSA success

Tasmanian beef producer, Paul Saward, has found genetics, nutrition and pre-sale management are critical to consistently achieving Meat Standards Australia (MSA) compliance rates of 90% and above.

Snapshot

Paul, Denise and James Saward, Redpa, Tas.

Property: 400ha

Enterprise: Breeding and fattening cattle

Livestock: Can run up to 400 cows and heifers in calf, 18 two-year-old steers, 150 yearling heifers, 168 yearling steers and 20 bulls

Pasture: Perennial rye and white clover

Soil: Clay loam, basalt, sandy loam

Rainfall: 1,100mm

In the three years since *Feedback* last caught up with Paul, he has fine-tuned the breeding and finishing business he runs with wife Denise and son James at Redpa, in far north-west Tasmania.


MSA gives local cattle producer an edge

As an enthusiastic supporter of industry programs like the National Livestock Identification System, Paul (pictured above with James) jumped at the chance to supply MSA-graded cattle when the Greenham plant at Smithton in Tasmania was MSA accredited in 2007.

"These premium markets provide us with up to $100/head extra, compared to non-compliant cattle, and suit our management system," he said.

Paul explained the important factors in consistently achieving high MSA compliance:

Management

Paul is happy with how his predominately Murray Grey herd meets weight-for-age targets and has the right temperament. He focuses on marbling and ossification, using selection tools like estimated breeding values to choose bulls with high scores for intramuscular fat.

"We would like to achieve 95% MSA compliance or better. Sometimes – depending on the time of year – we get close to that, for example with our two-year-old steers in November, when pasture is at maximum quality," he said.

The Sawards added 46ha to their grazing area in 2010, and now run breeders from their second calf onwards on a developed scrub block, while young cattle and first-calf heifers are kept at Redpa. Weaners are finished to reach up to 300kg dressed weight at 20 months.

"We put the pressure on our cattle to perform, with a short joining period of 25–30 days for heifers and six weeks for cows," Paul said.

"This produces 75% PTIC (pregnancy tested in calf) for heifers and 95% for cows. We cull females that fail to produce a live calf or are empty when we scan in March/April, and many of these younger (culled) females grade MSA."

Nutrition

Nutrition is vital to maintaining MSA compliance, so Paul supports stock during tough autumns by putting young cattle in the best pastures, supplemented with hay and silage. He has also sub-divided some paddocks to manage seasonal risk and invested in 100 water troughs – 20 in the last two years alone – with plans for another six.

"Reducing paddock sizes has increased our production potential (2–3ha is ideal), as we can better utilise pasture, increase carrying capacity and the ability to achieve target weights, improve pasture quality and minimise over-grazing," Paul said.

When crops such as poppies proved to be vulnerable to seasonal conditions, the Sawards turned their focus to improving pastures with better grazing, fertiliser and some redevelopment. Hay is used to bridge the autumn feed-gap and generate extra income.

Record keeping

Paul has always kept extensive herd records so he can show he meets the requirements of Greenham's audited programs, such as low or no antibiotic use, and a maximum of three drenches in an animal's lifetime.

Stress minimisation

Paul said his MSA compliance was hinged on careful pre-sale handling, to minimise 'dark cutting'. (Dark cutting refers to meat that does not bloom or brighten when cut and exposed to air, and is mainly linked to the animal having been stressed). The Sawards' stock are used to being handled, due to the rotational grazing system and laneways, and Paul sorts cattle into trucking groups a month before they go to Greenhams.

He avoids exposing cattle to strangers and uses truck drivers who meet his stock handling expectations.

Paul also removes cattle which stir up the mob – jeopardising MSA compliance – and fattens females for culling after their 10th calf.

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Want to learn more about meeting MSA requirements? Go to **www.mla.com.au/msa**

Read the original profile of Paul Saward in the October 2010 edition of *Feedback* **www.mla.com.au/casestudies** and search 'Paul Saward'

Labour efficiency

Labour challenges get the MIDAS touch

There is good news for sheep producers who compete with other industries, such as cropping or mining, for skilled workers.

The recently released findings of a major study into sheep enterprise labour challenges found opportunities still exist for producers to improve on-farm labour efficiency and profitability.

The MLA, Murdoch University and Department of Agriculture and Food Western Australia project addressed workforce challenges faced by producers, such as:

- declining rural populations and reduced ability to attract and retain farm labour
- competition for skilled workforce from other industries
- competition from the highly mechanised and labour-efficient cropping sector
- the changing seasonal labour demands of sheep enterprises
- the impact on stocking rates and farm profit from constrained labour

Agricultural Economist, John Young, used the farm modelling tool, MIDAS, to identify the importance of labour-saving management strategies in four sheep areas (Great Southern and central wheatbelt regions of WA, southern Victoria and southern NSW).

"Historically, the sheep industry has seen quantum changes in productivity with innovations in fencing, mechanical shearing and perennial pastures, but recently on-farm technology has remained relatively stagnant," John said.

"Nevertheless, there are still huge variations between costs of production and production efficiency, so this project delved into strategies which are delivering labour efficiency savings on profitable enterprises."

Labour efficiency is measured by the dry sheep equivalent (DSE) per full-time employee equivalent (FTE), with an industry benchmark of efficiency of 10,000 DSE/FTE.

The MIDAS model calculated the annual labour demands of sheep and crop enterprises and assessed the impacts on profitability from increasing the efficiency of each husbandry task, working longer hours, running larger mobs of sheep, employing contractors, introducing lick feeders and breeding 'easy-care' sheep.

The job list

By breaking down labour use, the project identified links between labour efficiency and profitability and pinpointed critical times when saving labour is most valuable.

John said profitability requires a whole of system approach to save labour across many activities.

> And if you are an owner-operator, working longer hours won't actually put you in front – the project revealed that increasing your hours only contributes a small proportion of the total potential benefits of reducing labour constraints.

However, strategies which can deliver big dividends include improving pasture/sheep monitoring and grain feeding systems, adopting easy-care sheep and increasing efficiencies in mustering.

John encourages producers to do the sums in their own enterprise, and to see if access to labour is holding back the scale of their business or if there are other limiting factors such as pasture quality or infrastructure.

Working smarter

The labour efficiency report revealed tips to save labour in sheep enterprises:

- Flock handling methods which make husbandry less physically demanding encourages workers to be involved in sheep enterprises.
- Reduce labour requirements throughout the year, not just in one or two activities.
- Time activities around labour availability eg in the cereal/sheep zone of WA, there is increased competition for casual labour around the seasonal break.
- Prioritise jobs by assessing production penalties if jobs are delayed.
- Tools such as remote monitoring can increase the efficiency of monitoring sheep and pastures provided there is a clear focus on why they are being used.
- Laneways and good dogs enable efficient mustering.
- Rotational grazing large mobs may enable increased stocking and farm profit.
- Easy-care sheep, non-wool or shedding breeds can be profitable for owner-operators who are unable or unwilling to hire labour.
- Using contractors only significantly increases profitability if they perform a range of jobs.
- The critical nature of information management means some farm administration has to be completed by the owner/manager, but other office jobs can be outsourced.
- Training in workforce management is a good investment.
- Keep a detailed log (15 minute intervals) of daily activities to see how time is spent.

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Read the full report on *Scoping the benefits of saving labour in sheep enterprises in Australia*: **www.mla.com.au/laboursaving**

Sheep: the simple guide to making more money with less work: **www.sheepcrc.org.au/information/publications/sheep-the-simple-guide-to-making-more-money-with-less-work.php**

Ease of operation

The basic principles of running a labour-efficient sheep enterprise is to do the necessary jobs easily, on time and efficiently, and to take a whole-of-system approach, according to producer, David Slade (pictured).

The Slade's 4,000 hectare property at Kendenup in Western Australia is very much a family business, involving David, his wife Lyn, their son Andrew and his wife Nicole, daughter Vanessa and her husband Scott plus two employees.

David's innovation and willingness to invest in strategies ensures on-farm activities are easier, safer and more enjoyable.

It begins with planning. All jobs are listed on a white board, identifying who is responsible and prioritising time-critical jobs.

Labour efficiency is then driven by:

Laneways: Connected by a central laneway to most paddocks, a system of 25–30km of internal laneways allows fast and efficient movement throughout the farm.

"The laneways are an essential investment – we use them to drive around the farm, to put out feed, and move sheep and cattle, without driving across the paddock and wrecking pasture," David said.

"We maintain the laneways to be as good as a gravel road, so we can drive at 100 km/hour to get things done quickly and safely."

Watering points: Dams are used in most paddocks as they are cheaper than troughs and can be checked less often. Any troughs are positioned along the laneway for easy monitoring.

Rotational grazing: Running mobs of up to 2,000 sheep saves labour and is better for pasture composition, usage and supplementary feeding. At lambing, flocks are reduced to around 250 ewes and not rotated. Apart from health and welfare checks, the Slades avoid excess shepherding which may cause mismothering.

Easy-care sheep: David was impressed with Greeline sheep during a study trip to New Zealand in 2006. He sourced genetics that suited Australian conditions and market requirements, and has now bred 7,000 Greeline maternal composite ewes. The self-replacing flock maximises prime lamb production, with high fertility, strong mothering ability and milk production, fast early growth and a meaty carcase. Lambing rates range from 150% in the stud ewes to 125% in the main flock.

"The biosecurity aspect of a self-replacing flock was very important to us and we run a closed flock, using artifical insemination (AI) to introduce new genetics," David said.

"This reduces the exposure to problems such as footrot, ovine Johne's disease (OJD), lice and resistant worms."

Feeding: Sheep are supplementary fed for four or five months a year. The family uses a six-tonne truck which is filled quickly using an auger and fed-out with an electric-over-hydraulic control, operated from the cab – allowing 10,000 sheep to be fed in two hours.

Hay is fed-out from a six-wheel ex-army truck that can take 10 big square bales (image 1).

Yard work: Well-designed yards allow the Slades to work with sheep, not against them. Between David, Andrew and Scott, they run 12 good dogs. Two Hecton air-operated crutching cradles (which David first saw in NZ) are used in conjunction with a double moving floor that David built to make it easier to push sheep up to the cradles. A team of four can crutch 2,000 sheep a day.

Another item David saw in New Zealand, and subsequently bought, is a Pratley conveyor which restrains sheep for faster, safer handling and delivers them to the operator.

"The conveyor cost me about $30,000 and will probably last 20 years or more. But it's one of our biggest labour-saving devices – we can vaccinate 2,000 sheep an hour," he said.

"Sometimes we do four jobs at once through the conveyor including drenching and tagging – more than 1,000 head/hour."

Sheep are jetted twice in summer, with 1,500 head/hour going through the

Snapshot

David and Lyn Slade, Mount Barker, WA.

Property: 4,000ha cleared land, 500ha bush

Enterprise: Prime lamb and beef cattle; 1,000ha cropped

Livestock: 7,000 Greeline maternal composite ewes; 700-800 Sussex cows outcrossed with Angus

Pasture: Mediterranean pasture - annual ryegrass and clovers

Soil: Loam over gravel clay

Rainfall: 500-550mm

1


2

Electrodip jetting race David bought from New Zealand.

If something isn't available commercially, David will make it himself, with his projects including:

- a fencing machine which enables wire to be unrolled and strained without leaving the tractor seat (image 2)
- interlocking feeders so many sheep can feed at once with adequate space (10m trough space per 100 sheep) to prevent a tail
- a tractor-pulled, hydraulic lamb marking trailer allowing lambs to be marked in the paddock. It even provides shade for the workers who can push through up to 2,500 lambs a day

David said their strategies have been influenced by the highly mechanised nature of the cropping industry.

"We focus a lot of attention on making our sheep handling more efficient so jobs can be done quickly and easily. I want people to like working here."

Lessons learned

- Do jobs on time and keep reinvesting in the farm.
- Make sure everything is in good working order, to avoid wasting time.
- There's no point mucking around with inadequate machinery.
- Research the right equipment, find someone who has it and spend a day using it.
- Making work safe and easy is essential to retaining a happy workforce.

To watch a video featuring David Slade and John Young talking about and showcasing labour efficient practices go to: **www.mla.com.au/slade-labourvideo**

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Making it pay

David Slade has crunched the numbers on his considerable investment in labour-saving equipment. Here are some examples of his investment and the resulting financial gains. All labour is calculated at $37/hour (calculated to cover annual leave, superannuation, insurance etc).

Labour-saving initiative	Investment	Labour and financial benefits
Feed out bin for back of truck	$10,000 (expected to last 20 years)	It saves 12 hours a week on the previous system. Combined with running costs of the vehicle, the saving equates to $720/week. If sheep are fed for 16 weeks a year the saving is $11,520/year.
Sheep conveyor	$32,000 (expected to last 20-30 years)	It saves 150 labour hours/year or $5,500/year.
Hay feed out wagon	$80,000	It saves 15 hours/week plus vehicle use, saving $15,120/year.
Electrodip machine	$14,200	It has allowed lower cost products to be used for fly and lice control. Savings of 50¢/head have been made. If treating 16,000 sheep it's a saving of $8,000/year.
Fencing machine	$7,000	It saves two hours for each kilometre of fence built. At 26kms of fencing a year it is a saving of $1,924/year.
Twin crutching cradles	n/a	Twin crutching cradles allows the Slades to crutch their own sheep, without having to employ contractors. It's a saving of 80¢/sheep or $8,000/year.

Roll up, roll up

In new research, MLA is looking to producers to help quantify the labour input in their businesses. The research, being conducted by Rural Directions, invites producers to access a new online tool, submit their labour data, start to understand how to make the most of their on-farm labour and benchmark their results against industry peers. To find out more or to participate in Round 2 of the project visit **www.ruraldirections.com/qli**. Registrations close on 21 February.

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Summer beef and lamb ideas

The summer sizzle

Barbecues and a backyard gathering are a quintessential part of Australian culture. Whether it be barbecued T-bones, a slow-roasted lamb shoulder, marinated beef kebabs or the humble sausage, the versatility of beef and lamb is endless, making it ideal for summer entertaining.

Here we talk to four lovers of red meat about their top tips for preparing and serving their favourite summer dishes.

John Alexander, Executive Chef, Eaton's Hill Hotel and Function Centre, Brisbane

What's your favourite summer beef or lamb dish? Currently either the 120-day grainfed 400 gram CAAB (Certified Australian Angus Beef) rump cooked medium rare, seasoned with flakes of salt and cracked black pepper; or lamb T-bones (loin chops) with minted pea mash and a red wine jus.

What's your top barbecuing tip? Don't rush it! Keep your heat at three quarters of the dial and wait until the grill is hot. Then don't rush the turning. You want to give the steak some time to make sure that it is sealed so you don't tear it.

What's your standby summer dish that's always a hit with friends and family? If I have my family down from Rockhampton I have to say steak with sautéed mushrooms and a fresh tossed garden salad, while my friends in Brisbane always ask for my lamb leg with pumpkin salad.

What flavours do you love most with beef or lamb in summer? I recommend slow cooking a lamb leg with a rosemary and garlic rub which is then sliced and placed over a Moroccan cous cous and pumpkin salad, or a thick cut rib fillet (cube roll) with a salt and pepper rub.

Matt Horne, Chef de cuisine, Conventions and Events, Crown Perth

What do you enjoy cooking in summer? Experimenting with smoking and slow cooking some non-loin cuts on the Weber barbecue I just bought.

What's your favourite summer beef or lamb dish? Grilled Mediterranean lamb cutlets, marinated in olive oil, garlic, Worcestershire sauce, lemon zest and juice, served with roasted royal blue potatoes, grilled red onion, blistered vine-ripened cherry tomatoes, balsamic reduction and Persian feta.

What's your top barbecuing tip? Heat! The barbecue needs to be pre-heated before cooking. Char grill is great for nice flavoursome beef and lamb and the flat top is good for sausages. If the barbecue isn't hot, the meat will stew and won't caramelise.

What's your favourite beef or lamb cut? I'm a big fan of the beef flank, which I char-grill and slow cook, and I've been experimenting with short ribs and 72-hour slow cooking which gives a wonderful juicy and tender end product.

Sam Kekovich, lamb expert and official Lambassador

What's your favourite summer lamb dish? I'd have to say lamb cutlets marinated in beer and cooked in a little garlic oil with a nice salad and some tomato sauce.

What do you enjoy cooking in summer? I'm an outdoor person so the barbecue is my forte, although I'm not adverse to sitting down to a lovely roast lamb on a Sunday, with a few roast vegies.

What's your top tip for cooking lamb? Well it's a very personal thing - some like it quite pink but I personally like my lamb a bit more on the medium to well-done side. But my tip is not to be a flipper. Leave the meat to sear and baste with a nice Aussie olive oil, sear on one side for 3–5 minutes and then flip.

What does your ultimate summer meal involve? I'd be sitting in a nice open air environment like the backyard, with a great group of friends and family, a barbecue laden with lamb sausages, cutlets, loin chops and as many other lamb products I can heap on there, while rejoicing about all the trappings of living in the wonderful country we do.

Merrick Watts, comedian and beef-lover

What's your favourite summer beef dish? Anything on the barbie but particularly beef, and even better, a big juicy T-bone steak. Nothing beats a beef steak, with my favourite baked potato, salad and red wine jus, with friends and family.

What do you enjoy cooking in summer? Barbecuing smoky beef ribs - rubbed with sea salt and cracked pepper and slow cooked to let the smoky heat work its magic.

What's your top barbecuing tip? Make sure you oil and season your meat before you throw it on the barbecue. And resting is always important too. After char-grilling you don't want to make the mistake of not resting the meat.

What's your favourite beef cut to barbecue? Definitely the almighty T-bone - you can't go wrong with that.

Looking for more sizzling summer inspiration? Go to **www.beefandlamb.com.au**

Recipe

Serves: 6

Preparation time: 15 minutes, plus marinating time

Cooking time: 45 minutes

Here's a new taker for the summer barbecue menu – guaranteed to be a crowd pleaser.

Greek-style butterflied leg of lamb

with roasted vegetables and grilled lemon

Ingredients

1 boned and butterflied leg of lamb, fat trimmed (about 1.3kg)

6 cloves garlic, roughly chopped

1 small bunch fresh oregano, leaves roughly chopped

1½ tbsp olive oil

400g kipfler potatoes, scrubbed and cut into wedges (or any other waxy potato eg Desiree)

400g butternut pumpkin, cut into wedges

2 lemons, halved

Greek salad:

4 large ripe tomatoes, thickly sliced

2 Lebanese cucumbers, cubed

½ red onion, finely sliced

120g reduced fat feta cheese, crumbled

1½ tbsp olive oil

3 tsp red wine vinegar

Tips

- → You could use a boned and butterflied shoulder of lamb instead of the leg.
- → For maximum flavour, try marinating the lamb overnight.
- → The most accurate way to test the temperature of the lamb is using a meat thermometer. Medium lamb should read 65°–70°C.
- → If you don't want to use a chargrill pan, you can add the lemon halves to the lamb and vegetables for the last five minutes of cooking time.

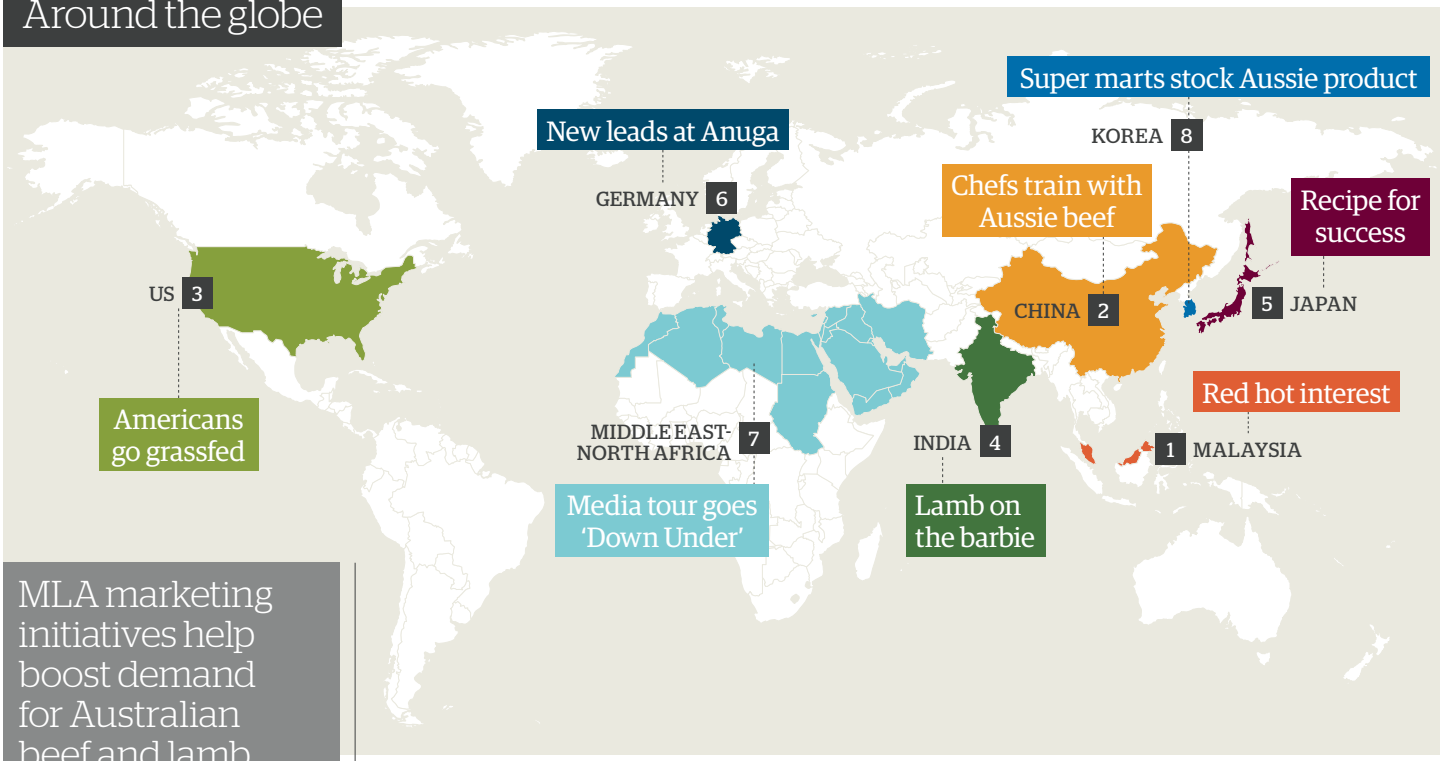
Method

1. Pound the garlic and oregano in a mortar and pestle to a coarse paste. Add 2 tsp olive oil and rub well into the lamb. Cover with cling film and marinate for 30 minutes.
2. Preheat the oven or lidded barbecue to 180°C. Season the lamb with salt and pepper and place in the middle of a large roasting pan.
3. Toss the potatoes and pumpkin with the remaining olive oil and season with salt and pepper. Scatter the vegetables around the lamb and cook for 45 minutes for medium, turning the vegetables over halfway through.
4. While the lamb is cooking, preheat a chargrill pan to hot. For the grilled lemon, cook the lemon halves for 1½ minutes on each side, or until lightly charred. If you are using the barbecue you can cook them on the grill plate.
5. For the salad, lay the tomato, cucumber and onion out on a platter and top with the feta cheese. Season with pepper and drizzle with the oil and vinegar.
6. Take the lamb out and set it aside to leave for 10 minutes, loosely covered with foil. Turn off the oven or barbecue and leave the vegetables in to stay warm. Carve the lamb and squeeze some of the grilled lemon on top. Serve with the vegetables and Greek salad.

Another option: Sumac lamb wraps

For a Middle Eastern twist, try rubbing the lamb with olive oil and sumac (a Middle Eastern spice blend). Roast as usual, carve thinly and serve with grilled flat bread, hummus, cos lettuce leaves and a side of pickled vegetables.

Around the globe



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

1 MALAYSIA

Audience fit for a king

At the Red Majesty Chef Cup, nine teams of MLA-trained chefs from Taiwan, Singapore, China and Malaysia competed in front of about 8,000 people, preparing, cooking and presenting Australian rib eye beef and lamb legs in modern Chinese avant-garde presentation, for a cash prize. The competition helped demonstrate to chef visitors that Australian beef and lamb can be part of a modern Chinese menu.

8,000

spectators watch the Red Majesty Chef Cup

2 CHINA

Beef wins over Beijing

A Chinese importer held a two-day Australian beef training workshop for 65 chefs and kitchen staff at a newly opened restaurant in regional Beijing. The workshop included product knowledge sessions and cooking demonstrations using Australian beef with local flavours. The six-floor restaurant is the biggest in the area, serving Australian beef in hotpots and *teppanyaki* dishes. The importer currently supplies Australian beef to more than 140 retail chain stores in the greater Beijing region.

3 UNITED STATES

Amazing grass

As a sign of the rising popularity of Australian grassfed beef in the US , two retailers have started in-store Australian grassfed beef programs offering five cuts – tenderloin, ribeye, striploin, top sirloin (rump) and ground beef. Australian beef was stocked in 160 stores of a chain located in the north east of the US and in 200 stores of a chain in the mid-Atlantic region. MLA supported the program with industry information and presentations and co-funded point-of-sale materials and advertising.

360

US stores stock Australian grassfed beef

4 INDIA

Firing up the barbie

MasterChef Australia judge, Gary Mehigan, promoted Australian lamb through talks and live cooking demonstrations in his

role as ambassador of India's 'The Great Southern BBQ'. The event was sponsored by MLA and two barbecues were hosted by the Australian High Commission featuring lamb racks provided by two Australian exporters. Around 100kg of lamb was consumed in three hours. The festival is a major cultural event held in two Indian cities – Chennai and Delhi – as part of Oz Fest 2013. The events were attended by around 500 Indian government and business people, expatriates and media.

5 JAPAN

New recipe book serves it up

A new Aussie beef and lamb recipe book was released in collaboration with well-known Japanese dietician Dr. Yumi Date. It includes easy-to-cook and tasty Australian beef and lamb recipes, information about Australia's 'clean green nature' and the health benefits of red meat from the viewpoint of a health professional. It generated significant publicity on *Asa Ichi* – a live national morning show with 17 million viewers, and Aussie Beef & Lamb Facebook page 'likes' increased by 25% to more than 8,000 during the campaign. The recipe book was developed in response to MLA surveys which revealed that Japanese consumers think there are not enough recipes using beef and they want more variety.

6 GERMANY

On show at Anuga

MLA hosted 20 beef and lamb exporters at the biennial Anuga trade show in Cologne, Germany and each secured new business leads. Anuga is the largest food trade show in the world and attracted 155,000 visitors from 187 countries and 6,777 exhibitors. MLA's stand was visited by more than 1,200 attendees from 70 countries during the five-days. Samples of Australian lamb and beef dishes were showcased to guests at the stand's restaurant, with more than 1,000 meals served.

1,000

Australian beef and lamb dishes served to trade show guests

7 MIDDLE EAST-NORTH AFRICA

Media see 'down under'

Eight journalists from the Middle East-North Africa (MENA) region, representing 19 publications, toured Australia in October to gain an understanding of Australia's beef and lamb supply chain. MLA helped facilitate the media tour with visits to a producer, feedlot, abattoir, premium butchery and retailers. The tour generated media coverage in the MENA region, reaching an estimated audience of one million people.

8 KOREA

Direct sourcing Aussie beef

Two major Korean retail outlets stocked Australian beef during a promotion in November through partnerships with Australian cattle properties. E-Mart secured cattle supplies at a lower price to sell Australian beef loin cuts *bulgogi* (stir fry) and brisket to celebrate its 20th anniversary at all 148 stores nationwide. Lotte Mart partnered with an Australian property to directly import popular Australian beef cuts of chuck eye roll, oyster blade, thin skirt and short chuck ribs in all 107 stores nationwide. MLA provided promotional materials including festival banners with the *Hoju Chungjung Woo* (clean and safe Australian beef) message. During the promotion E-mart and Lotte Mart sold 110 tonnes and 60 tonnes of Australian chilled beef, respectively.

Market observations

2013 – a year of cattle highs and lows

Last year will be remembered as one when beef production reached record levels, underpinned by the drought-induced surge after what were 30 wet months which had encouraged significant herd rebuilding.

Ben Thomas
MLA's Beef Market Analyst

It is likely adult cattle slaughter will reach 8.36 million head in 2013, up 13.7% year-on-year – the highest level since 1978. Due to a large proportion being females and in store condition, average adult carcase weights were 278kg/head, back 10kg per head from the previous year. Overall beef and veal production is likely to reach 2.4 million tonnes cwt for 2013, also up 10% year-on-year.

While slaughter and production surged, so did exports, with records regularly broken, mostly centred on China. For 2013, beef and veal exports exceeded one million tonnes swt for the first time reaching 1.1 million tonnes swt for 2013, up 14% year-on-year.

Japan remained the largest market in 2013, although conditions were sluggish and received 289,000 tonnes swt, down 6% from 2012 levels.

Korea continued to be a strong market and received 144,000 tonnes swt of Australian beef for 2013, up 15% year-on-year, while exports to China sustained the rapid pace set towards the end of 2012, and took 155,000 tonnes swt – up considerably from the 33,000 tonnes swt in 2012.

Demand from the US was slightly lower year-on-year, at around 213,000 tonnes swt.

While exports have surged, cattle prices have done the opposite, as the widespread dry conditions saw little restocking and reports of some processors being booked out 12 weeks in advance.

Consequently, the Eastern Young Cattle Indicator averaged 314¢/kg cwt for 2013, 15% lower year-on-year, while the national heavy steer indicator was back 5% over the same period.

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On the ground

A global view

Following another jam-packed year of marketing activities around the world, *Feedback* talked to MLA's Regional Managers on their reflections of 2013 and their marketing priorities for 2014.

Australia

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Last year saw the relaunch of many marketing programs including the consumer website **beefandlamb.com.au**, building the MSA identity online and moving foodservice journal *Rare Medium* to an online format. These changes built a stronger digital presence and streamlined MLA's campaigns to increase beef and lamb's penetration in trade, foodservice, and boost retailer support. With decreased retail prices, consumers have bought more red meat, with beef sales (by volume) up by .09% and lamb up by 9.78%.

Looking forward, red meat will continue to face challenges in the form of strong competition from other proteins for 'share of stomach'. This year will also see a renewed focus by MLA on consumer marketing, especially through MLA's online and social media community, to strengthen the beef and lamb brands.

North America

David Pietsch
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Australia's ability to supply a diverse range of beef and lamb products to niche consumer segments in the US and successful promotion of the commitment of producers to sustainable production were highlights in 2013.

The most promising development in beef was the growth in retail stores – now more than 3,000 – and foodservice outlets offering Australian grassfed beef. This growth is in response to the continued emergence of consumer demand for pasture-raised products.

Growth in lamb sales through existing customers supported by MLA's International Collaborative Agreement program, and an increase in family-dining foodservice chains willing to trial Australian lamb dishes, were also positive highlights.

In 2014, at a time when US domestic supplies of beef and lamb will be reduced, the focus will continue on developing retail and foodservice customers, research and advocacy. Our aim is to demonstrate that 'sustainable' does not necessarily equal 'local' and that beef and lamb produced in Australia are some of the most sustainably produced in the world.

EU-Russia

Michael Crowley
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One of MLA's biggest achievements for 2013 was an inaugural two-day Australian Festival in Moscow, attracting more than 100,000 people and media coverage from 20 journalists in 100 print and electronic media reports. In Italy in November, "Australia Month" was run in 46 restaurants owned by an Italian importer. Two Australian beef cuts of different price points were featured and more than 60,000 Australian steaks were sold.

In Germany, MLA hosted 20 exporters on its stand at the ANUGA trade show in Cologne, Germany. As the largest food trade show in the world, it attracted around 155,000 visitors from 187 countries, and 6,777 exhibitors. Around 1,260 contacts (existing customers of Australian red meat and potential leads) were captured from 70 countries.

This year is looking bright with improved market access in the region. Russian chilled beef volumes are set to continue their growth, along with Australia increasing its market share of the high quality grainfed beef quota. Demand for grassfed beef and lamb to the EU are expected to remain strong with forecasts predicting full utilisation of the EU quotas in 2014.

Korea

Michael Finucan
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2013 ended on a high with the conclusion of the Australia-Korea Free Trade Agreement (FTA) negotiations. Despite having a 5.3% tariff disadvantage compared to the US, Australian volumes to Korea in 2013 were up 15% with Australia maintaining a majority of the imported market share of 54%. MLA focused on supporting retail chains and family foodservice restaurants to share the clean and safe attributes of Australian beef to consumers through sampling and menu promotions.

In 2014 the Korean market is expected to be an important one for Australian beef and the challenge will be holding back the US until the FTA is ratified by Australian and Korean governments.

Japan

Michael Finucan (acting)
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Australian beef experienced tough conditions in Japan last year. Strong competition from China for Australian beef and the relaxation of US age restrictions saw Australia's volumes drop 6%. Despite this, Japan continues to be the largest export market for Australian beef.

A highlight for the year was the launch of the new Aussie Beef 'Genki' campaign which received more than 50,000 Facebook views and reached an estimated 20 million people through advertising.

There are positive signs emerging in the Japanese economy, but tough trading conditions are likely to continue as the US takes advantage of its improved market access. To combat this, MLA will continue to aggressively promote Australian beef in Japan.

Middle East-North Africa

Jamie Ferguson
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Australian beef and lamb exports to the Middle East and North Africa region reached record levels in 2013. During the year, MLA's Middle East PR campaigns were valued at US$1.6 million and reached more than 2.4 million people. A consumer and retail campaign promoting Australian lamb and beef Halal integrity during Ramadan reached 18 million people in eight countries and captured an online audience of 62,000.

MLA chef Tarek Ibrahim's 100 Lahma (100 MEAT) 30-episode Pan Arab television series was a major success, reaching 55 million homes in 24 countries.

In 2014, tailored campaigns, sampling, trade endorsements, affinity marketing (partnering with complementary products), and tourism partnerships with local media will be a major focus. A challenge going forward will be keeping our social media audience engaged through offline activities.

Indonesia

John Ackerman
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The Indonesian market had a gloomy start to 2013, with a reduced quota for both boxed beef and live cattle. However, increased demand and reduced supply created continually rising prices, which culminated in regulatory change in late August 2013, essentially removing all quotas. Australian beef exports during 2013 reached the fourth highest annual volume on record at 39,418 tonnes shipped weight and live cattle permits in excess of 200,000 for the last three months of the year.

Our in-country marketing programs across retail, foodservice and consumer channels have continued to support Australia's continually increasing market share (currently in excess of 75%).

This year, MLA will continue to promote the nutritional benefits of Australian beef as a unique selling point to Indonesian consumers.

South-East Asia/ China

Andrew Simpson
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The insatiable demand of China and the rising wealth of South-East Asia have created our single largest export trading bloc. Two important Asian exhibitions in 2013 – SIAL Shanghai in May, and Food Hotel China in November – were highlights. Hosted via MLA, these events provided 30 exhibitors and dozens of other Australian exporters with the opportunity to promote their products and do business with hundreds of buyers. MLA's follow-up support involved delivering more than 100 onsite training courses and providing point-of-sale material.

With populations in countries like Vietnam and the Philippines reaching 100 million and high-end food consumption on the rise, MLA programs like the red meat banquets, retail innovation workshops, iron butcher challenges and digital campaigns will remain on the agenda for 2014.

Agricultural consultant Ken Solly told Kangaroo Island producers there is no future in being "average in agriculture".

The captivated audience at the conference.

South Australia//Kangaroo Island Conference

More than 100 producers – or 30% of the island's producers – attended the MLA-sponsored Kangaroo Island Conference, organised by Agriculture Kangaroo Island Inc. and held at the Parndana Sports Club last September.

Participants said all the speakers "hit the mark" and the event generated a lot of discussion inspired by the food for thought provided by the speakers. Here are some snapshots of what the attendees heard:

- Ken Solly – a private consultant operating South Australian based Solly Business Services who also has a regular column in the *Stock Journal* called 'Mind Your Business', spoke on 'There's no future in being average in agriculture'. He said a lack of profit is usually a people problem, not a production problem in the first instance and change is not compulsory but then neither is survival.
- Wayne Smith of Agronomic Acumen is a West Australia based cropping consultant who spoke on the huge lifts in productivity that can be achieved by addressing key constraints, soil pH, trace elements, macro nutrients and the use of rotational grazing. He challenged producers to think about what's possible ie 4.5t/ha barley on 155mm rain and to not think of "yeah but...".
- New Zealand based Dr Doug Edmeades of AgKnowledge was 'crowned' NZ Agribusiness Personality of the Year in 2012. Doug provided some great questions to ask fertiliser reps when dealing with 'muck and mystery' fertiliser products. He is a great advocate of 'getting the fertiliser right' and 'biology will look after itself' – this is based on a review of worldwide trial work.
- Mike Keogh, Chief Executive Officer of the Australian Farm Institute spoke about carbon and the Carbon Farming Initiative (CFI). Mick gave a great presentation simplifying what the CFI is about and what's in it for producers and said in the current political climate producers need to "watch this space".
- David Reilly is a Nuffield Scholar and date grower from the Riverland and he provided an inspiring after dinner speech on his personal and professional experiences from establishing his enterprise to becoming the only exporter of dates out of Australia.

Follow up activities will involve working with Wayne Smith to set up a small focus farm on Kangaroo Island to implement some of his techniques.

More information: Faye Stephenson, Agriculture Kangaroo Island Inc.– T: 0427 313 293, www.agki.com.au // Solly Business Services – T: 08 8762 0895 // Agronomic Acumen – www.agronomy.com.au // AgKnowledge – www.agknowledge.co.nz // Australian Farm Institute – www.farminstitute.org.au // David Reilly – www.gurradowns.com.au

Upcoming events

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

Hamilton Meat Profit Day

An event with topics to equip Victorian cattle and sheep producers with the tools to run productive, profitable and sustainable businesses to 2025 and beyond.

When and where:
19 February, Hamilton Vic

Bookings:
www.mla.com.au/HamiltonMPD

WA Meat Profit Day and Beyond the gate tour

Network with fellow producers and learn about the range of activities your levies are funding to improve productivity, increase demand and position red meat ahead of its competitors in domestic and international markets. If you are attending the WA Meat Profit Day, make the most of it and come to the Beyond the gate tour – a red meat supply chain tour.

When and where: Beyond the gate tour – 2 April, Geraldton WA
Meat Profit Day – 3 April, Port Denison WA

Bookings and more information:
Beyond the gate – www.mla.com.au/BTG-Geraldton
Meat Profit Day – www.mla.com.au/MPD-WA

LambEx Adelaide

A compelling two-day conference for lamb and sheep producers, featuring outstanding speakers, an extensive trade exhibition, entertainment and an opportunity to communicate with all sectors of the lamb value chain.

When and where:
9–11 July, Adelaide SA

Bookings and more information:
www.lambex.com.au

CHALLENGER UPDATE

The six diverse livestock enterprises participating in the MLA Challenge have all closely examined their business strengths and weaknesses and are putting in place strategies to improve their productivity and profitability. Here we talk to two MLA Challengers, John Ramsay and Andrew Miller, about their learnings so far. To learn more about the Challengers go to: **www.mla.com.au/challenge**

'Ratho' quick facts

Property size: 1,800ha

Herd / flock size: 14,000 head

Breeds: Merino and composite

Average annual rainfall: 500mm

Soil type: Sandy, sandy clay loams

Pasture type: Fescue, short term ryegrass, annual grasses, irrigated ryegrass

By being involved in the MLA Challenge, what areas of your business have you identified as needing work? Previously we put a lot of effort into growing the best crops and the sheep enterprises suffered a bit. Now we have a systemised approach to the sheep program through piloting a new MLA management tool. Through benchmarking with Agripath we have also identified that our costs are too high.

What strategies have you put in place already to improve this? To manage our stocking rate we have used the MLA Feed demand calculator and the Stocking rate calculator. This is all mixed with my 'gut feel calculator'.

To manage lambing percentages better we have set body condition targets for ewes throughout the year and Feed on Offer (FOO) targets for lambing. We will also be moving our lambing date later.

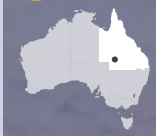
To help manage costs we are focusing on our largest cost: labour. We are moving towards larger enterprises and simpler systems in our sheep flock – we used to have three ewe joinings! We are also in an MLA study to help assess our labour efficiency.

What's one key learning that has stood out for you so far? If you put the effort in, you can get a lot out. We have spent a lot of time looking into MLA resources as well as talking with our mentor.

What are the seasonal issues you face in February and what actions do you take to respond to them? February is about making sure the ewes are going to hit condition score 3 in April, so if they are not in the paddock with the correct FOO they need to be getting the right amount of supplement. We'll be sourcing ewes to get our numbers up to our target.

We'll also be right in the middle of lamb selling season, turning out lambs to the domestic market, as well as possibly selling stores.

'Coniston Station' quick facts



Property size: 28,328ha

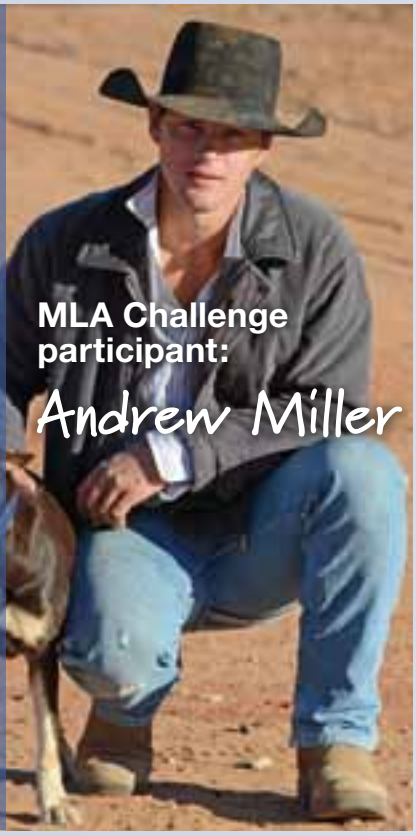
Herd / flock size: 1,000 head of cattle and 500 Merino ewes

Breeds: Droughtmaster X

Average annual rainfall: 280mm

Soil type: Black soil, sand hills

Pasture type: Mitchell grass, river grasses



By being involved in the MLA Challenge, what areas of your business have you identified as needing work? The main area we've worked on is dollars per head received for our cattle.

What strategies have you put in place already to improve this? We've implemented a number of things, including changing our calving time so we're now calving prior to summer rainfall. By doing this our calves will be at the ideal stage to take full advantage of green feed when it's available, therefore weaning weights will be heavier, which will flow onto finishing weights.

We are also changing our genetics. We've purchased nine Angus bulls with the hope of higher fertility, increased weight gains and greater market suitability.

Finally, we're attempting to market our cattle more proactively, as opposed to sending them to a saleyard and hoping for the best.

What's one key learning that has stood out for you so far? Learning to spend more time in the office working on our business in order to make better informed decisions.

What are the seasonal issues you face in February and what actions do you take to respond to them? This is a really hard question to answer. Normally by this stage we have got through a tough spring and this is our time to enjoy our summer rainfall. This year, if we get little summer rainfall again, we will have very few stock left on our property and will be doing as much off-farm work as we can get until the drought breaks. On the other hand, if we get good rain we should have stopped feeding our stock, have our agistment cattle home and could be on an island somewhere having a holiday!

mla
MEAT & LIVESTOCK AUSTRALIA

WA Meat Profit Day

Thursday 3 April 2014

'MEATING' EXPECTATIONS AND THRIVING

Irwin Recreation Centre, 1 Ridley St, Port Denison WA

The WA Meat Profit Day will have an extensive program of local and national speakers, demonstrations and displays covering topics to equip West Australian cattle and sheep producers with the tools they need to run productive, profitable and sustainable businesses.

www.mla.com.au/MPD-WA