mla Your levies at work // January/February 2016

Feedback

Going for growth

A note from the MD...

2016 is shaping up to be an eventful year if the first few weeks of January are anything to go by: the Eastern Young Cattle Indicator surpassing 600¢/kg for the first time on record, an Australia Day lamb campaign that's making headlines and getting consumers talking (page 3) and the release of the SAFEMEAT Initiatives Review which aims to maintain market access, food safety, product integrity and biosecurity while streamlining and integrating current industry programs under one banner.

Here are some things to watch in 2016. The Chinese economy has clearly slowed but the desire for safe and traceable food is still strong in China. The US economy is showing signs of recovery and this will be important to 2016 red meat prices. The decline in the Australian dollar against the US dollar will assist exports to the US but other importing nations are impacted in their buying ability of Australian red meat, by the decline in their respective currencies. I declare I am an optimist, so I believe the first quarter of 2016 will be one where importers try to draw back prices from 2015 levels, but given a normal season and low Australian dollar, export prices should return to 2015 levels by mid-year.

Following last year's release of the *Meat Industry Strategic Plan* (*MISP 2020*), MLA is well advanced in developing its own five year strategic plan which is closely aligned to the overarching *MISP 2020*. This plan (*MLA 2020*) will cover how MLA intends to invest producer levies in research, development, adoption and marketing activities to contribute to producer profitability, sustainability and global competitiveness between 2016 and 2020. At the same time, MLA is also consulting widely with industry in developing a five year strategy for marketing activities to get an even greater bang for levy funds to grow demand for Australian red meat even further.

MLA is also preparing to deliver many more activities for producers this year: a new-look *Feedback* magazine; the roll-out of a new five year plan for MSA (page 5); a further enhanced MLA website with customised information and portals; more opportunities to meet with me and MLA senior managers at regional events; and the roll-out of the regional consultation model where we welcome you to come along to events across the country and share your views about future research requirements in your local area. MLA will also continue work behind the scenes with industry to advance market access with free trade agreements with the EU, India, Indonesia and other regions (pages 10-11).

I encourage you to keep abreast with these and other activities through not just *Feedback* magazine but also MLA's weekly *Friday Feedback* e-newsletter (email info@mla.com.au to sign up), www.mla.com.au or visit us on Facebook or Twitter.

Richard Norton
MLA Managing Director

Contents

Cover: Southern NSW cattle producer Andrew MacDougall. Image by Kim Woods.

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E: info@mla.com.au
T: 1800 023 100 // **F:** 02 9463 9393
www.mla.com.au

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Australia Day campaign

Coming home to lamb

It's a well-known fact that Australia Day and sharing lamb with loved ones go hand-in-hand. And MLA's latest Australia Day campaign celebrates this, showing how lamb brings Aussies near and far together.

The aim of the annual campaign is to drive demand and sales for quality Australian lamb, to promote lamb as a national favourite dish and bring Australians together for Australia Day. Lamb is not bought as often as chicken, pork or beef so big campaigns like this are important to secure ongoing support for lamb from retailers, foodservice and consumers. This is part of our remit at MLA to invest producer levies in marketing activities and only sheep levies are invested in the Australia Day lamb campaign.

This year, Lambassador Sam Kekovich was joined by SBS newsreader Lee Lin Chin and a host of Australian identities for 'Operation Boomerang' – including popular NOVA radio hosts Fitzy & Wippa, Australian rugby captain Stephen Moore, acclaimed cricketer Mitchell Johnson, TV chef George Calomobaris and a royal princess, who may or may not be Princess Mary.

MLA's Group Marketing Manager Andrew Howie said, "The popular Australia Day Lamb campaign is now in its twelfth year, and our challenge is to evolve the campaign to ensure it remains relevant each year."

The campaign involved strong digital and social media elements, TV advertisements in metro areas, radio promotions and a competition, and point-of-sale materials, such as posters and pack stickers, distributed to butchers and Coles, IGA, Aldi and Costco supermarkets. MLA also worked with the major supermarkets to feature lamb in their catalogues.

"The reception for the Australian Day lamb campaign was overwhelmingly positive, including support from many consumers, sheep producers and the red meat industry," Andrew said.

"And while it looks like a very expensive advertisement, the entire Operation Boomerang campaign was shot in Sydney. Using some advertising and computer tricks, we've managed to keep the cost down but ultimately, it's the sales return on the marketing investment that is important and we look forward to seeing those results when they become available."

The film and teaser trailer can be seen on the We Love Our Lamb Facebook page or at: **www.youtube.com/watch?v=7i15OPuFvmA**

4.4 million views

of Operation Boomerang ad across YouTube, TV, Facebook and other channels

Clips from the Australia Day 2016 campaign.

All sausages are *not* created equal

MLA funded research has revealed that beef sausages are, on average, 30% lower in fat than previously thought, updating data which was nearly 20 years old.

MLA's Nutrition Manager Veronique Droulez said new data, which showed that low, medium and higher-fat beef sausages are available for purchase, ensures beef sausages are accurately represented in the Australian diet.

For butchers and supermarkets, the updated data offers an opportunity to appeal to health-conscious consumers by using a reduced fat claim to differentiate between lean and regular beef sausages.

Here are the facts for your next 'barbecue conversation':

- ✔ fat content varies from 18.8g/100g in regular sausages to 10g/100g in lean sausages.
- ✔ the average fat content of today's wider choice of sausages is 30% lower than in 1988, when only higher fat options were available. To be labelled "reduced fat", sausages need to be 25% lower in fat than regular choices and typically have around 10g/100g.
- ✔ lean choices can be included in the 455g/red meat/week recommended for consumption by the Australian Dietary Guidelines.
- ✔ one serve (two sausages) is a good source of protein, vitamin B12, niacin, zinc and phosphorus and is a source of vitamin A, iron and selenium.
- ✔ fat content of barbecued beef sausages is similar to that of pan-fried or boiled sausages.
- ✔ Australian fresh sausages are not fermented, cured or dried.
- ✔ sausages must contain at least 50% meat and cannot contain nitrites under Australian regulations.

Find great sausage recipes at: **www.beefandlamb.com.au**

Welcome Barnaby – a new fescue

A new summer active (continental type) tall fescue – called Barnaby – bred in Australia by the Future Farming Industries CRC, with funding from MLA, has been released.

Developed by the NSW Department of Primary Industries at Glen Innes and proven at sites in key fescue regions, five years of evaluation has shown Barnaby to be highly productive and significantly more persistent than current leading varieties.

In the trial, Barnaby established with good seedling vigour, produced the highest weight when cut in October the first year and went on to be the variety that performed most consistently across the seasons.

Final plant density and persistence measurements at the Armidale trial site, taken in November 2014, showed Barnaby was more than 13% higher than the next best variety, Dovey.

Final density and persistence measurements were also far above other entries, including benchmark varieties Demeter and Quantum II Max P, which in comparison had largely disappeared after two tough summers.

Research Scientist Carol Harris, said trials showed Barnaby was an excellent choice for growers looking for extra grazing persistence whilst maintaining production across all seasons.

Barnaby, at a glance:

- → a summer active tall fescue developed from the Future Farm Industries CRC with MLA funding
- → Australian-bred to suit local conditions
- → excellent seedling vigour with densely tillered fine leafy growth
- → selected for high yields, improved persistence and more even seasonal growth
- → suitable for all classes of livestock.

"Barnaby is highly productive, with strong disease resistance and market-leading overall persistence. Its extended life span should make the need to renovate pasture less frequent and hence, reduce pasture establishment costs over time," Carol said.

Heritage Seeds has advised Barnaby seed will be available for sowing in autumn this year.

Bred from material of East Sardinian origin, and developed across temperate Australia, Barnaby can be sown wherever continental fescue is grown.

www.heritageseeds.com.au

Providing MSA's future direction

More than 35% of adult cattle processed each year are graded through Meat Standards Australia (MSA), and this is set to grow under a five year roadmap to create more value for the whole supply chain.

MLA's Program Manager for Eating and Carcase Quality Integration, Michael Crowley, said the strong adoption of MSA in the past five years and consistent compliance, combined with the development and introduction of 'myMSA' and the MSA Index as carcase feedback tools, underpin the new MSA five-year strategic plans.

The plans have been developed in conjunction with industry through the MSA beef and sheepmeat taskforces.

Michael said the plans set out strategies to 2020 and include:

- → working with MSA brand owners to drive the integrity of the program
- → creating opportunities to use and add value to more cuts from MSA-graded carcases, with particular focus on non-loin cuts, to meet the needs of global customers
- → working with supply chains to support producers to meet company and MSA specifications and capture more value on-farm
- → positioning MSA as a quality mark that underpins beef, lamb and sheepmeat brands in domestic and global markets
- → investing in research and development to predict the eating quality of a greater percentage of the national herd
- → refining myMSA as a useful carcase feedback and benchmarking tool to guide on-farm management and marketing decisions.

Michael Crowley, MLA
E: mcrowley@mla.com.au

Meat Standards Australia:
www.mla.com.au/Marketing-beef-and-lamb/Meat-Standards-Australia

Read how producers and foodservice have benefited from the MSA program on pages 27-29.

In 2010-11 there were:

1.3 **million cattle** presented for MSA grading

15 **¢/kg HSCW** premium for MSA-compliant cattle

800,000 **lambs presented** for MSA grading

In 2014-15 there were:

3.22 **million cattle** presented for MSA grading

33 **¢/kg HSCW** premium for MSA-compliant cattle

3.5 **million lambs presented** for MSA grading

Today there are:

155 **beef brands** and

16 **lamb brands** licensed to use MSA

Gas goes down

Methane emissions from cattle in Australia are 24% lower than previously estimated, equivalent to 12.6 million tonnes of carbon dioxide a year, shows analysis of new Australian research data.

This resulted in an update of the National Greenhouse Gas Inventory (NGGI). The research was undertaken by scientists and officials from across Australia, and was based on data collected over eight years of research into ways to reduce methane emissions in Australian livestock as part of MLA's methane abatement research programs.

The new methodology also brings the NGGI in line with the estimates of the Intergovernmental Panel on Climate Change (IPCC), the leading international body on the assessment of climate change, which was established by the United Nations Environment Programme (UNEP) and the World Meteorological Organization in 1988.

CSIRO agriculture research scientist Dr Ed Charmley said the work was conducted because of concerns about the large differential between official methane emission figures for Australian cattle and doubt surrounding the accuracy of previous calculation methodologies used for cattle and particularly northern Australian cattle.

"Different methods used to calculate emissions from livestock in temperate and tropical regions were based on studies done in the 1960s and 1990s, mainly with dairy cattle," Ed said.

"Both of these past methods were found to be likely over-estimating the emissions from cattle.

"The revised method, which is based on improved ways of estimating ruminant methane emissions from forage-fed beef and dairy cattle, be they in temperate or tropical regions, has been tested against international defaults provided by the IPCC and found to give consistent methane yields."

MLA Manager, Sustainable Feedbase, Dr Tom Davison, said the latest research findings from the National Livestock Methane Program also showed there were several simple management measures producers can implement to substantially reduce methane emissions while increasing productivity.

www.mla.com.au/nlmp

Biosecurity best practice

'Biosecurity' may evoke images of international quarantine, border security and exotic diseases but it really begins on-farm.

'Think global but act local' is the message to keep in mind when managing livestock diseases. Australian livestock producers play a critical role in preventing disease outbreaks which could close international markets and cost the industry billions of dollars.

More than 65% of Australia's red meat is exported. MLA's General Manager of International Markets, Michael Finucan, said the industry's integrity systems were critical to maintaining superior market access around the world.

"Australia's livestock industry's freedom from disease and food safety systems are leading drivers for our success in many export markets," he said.

"Our freedom from bovine spongiform encephalopathy (BSE) has provided uninterrupted access to our major beef markets, Japan and Korea. In comparison, the US and Canada were banned from these markets in 2003 following BSE cases.

"Australia's foot and mouth disease (FMD) status also gives us favourable access conditions; countries like Brazil and India have restricted access to many major beef markets due to their FMD status. Australia's FMD-free status underpins our preferential access to Indonesia and we are the only supplier of live cattle to this market."

Australia's on-farm integrity systems – the National Livestock Identification System, Livestock Production Assurance and National Vendor Declarations – are supported by MLA and administrated by SAFEMEAT. These systems support Australia's internationally renowned reputation as a supplier of safe red meat and livestock.

These systems guarantee consumers around the world that when they eat Australian red meat:

- → it is safe
- → the product's integrity has been maintained
- → the meat can be traced back to the farm on which it was produced.

Australia's integrity systems are world-leading due to our dependence on export markets. Some of the largest beef producing nations are also some of the smallest exporters (for instance, the US exports only 10% of its red meat production), so their biosecurity focus is very much domestic.

"If Australia was to have a major disease outbreak (and be locked out of export markets) it would be catastrophic to our industry as there is not sufficient domestic demand to absorb all our beef and sheepmeat," Michael said.

The new Meat Industry Strategic Plan 2020 responds to the need to continually strengthen Australia's red meat industry systems to remain competitive: "Our industry's true competitive advantage lies in the quality and integrity of its products and systems," Michael said. "We must accelerate this focus, guarantee its veracity and actively pursue and differentiate markets that value, and will pay for, these credentials."

A disease outbreak would be costly. ABARES estimates an FMD outbreak could cost Australia's livestock industry between $6 billion and $52 billion (depending on the size of the outbreak) through lost export revenue, lost productivity and control measures.

MLA R&D Project Manager for Animal Health, Welfare and Biosecurity Dr Johann Schröder said a disease that was exotic to Australia required the same approach as a disease that was exotic to a property.

"From international boundaries down to an enterprise boundary, it's about looking after the health of livestock," he said.

"For example, if a sheep flock was free from lice at last year's shearing, but this year they are found to be infected, there has been a breach in that flock's biosecurity."

MLA invests in products to combat existing livestock diseases, control emerging risks and prevent exotic incursions, such as:

- → funding the development of a vaccination for barber's pole worm, BarberVax
- → improving the diagnostics and detection of disease such as sheep pox, goat pox and lumpy skin disease
- → developing good animal welfare practices to buffer livestock from infectious diseases
- → preparing the livestock industry to understand and control emerging biosecurity threats, such as FMD, capripox, bluetongue and old world screwworm fly.

Industry approach

The livestock industry, through the Cattle Council of Australia, Sheepmeat Council of Australia and Wool Producers Australia, has joined forces to create the Livestock Biosecurity Network. This initiative has led to:

- → state/territory-based regional officers appointed to provide producers with information and tools to manage disease, pest and weeds on-farm
- → industry partnerships to enhance capability in the event of an emergency animal disease incursion.

For example, the Network is working with AuctionsPlus at its national assessor training schools to enhance on-farm

Is your farm bio-secure?

Day-to-day biosecurity is not difficult or costly. It can be as simple as mending fences, keeping accurate records, monitoring stock for signs of illness or disease and using animal health statements when buying or selling livestock. It can bring big payoffs by maintaining productivity.

The Livestock Biosecurity Network regional officer in Victoria, Dr Patrick Kluver, said a good on-farm biosecurity plan included measures to reduce the risk of introducing an infectious disease, pest or weed onto the property, and measures to reduce spreading disease, pest or weeds within and from a property. His top tips include:

Buying livestock

Pre-farm-gate: Do your research

→ Buy stock from reputable and biosecurity-conscious suppliers with the same, or higher, health status as your own.

→ Request all relevant documentation such as animal health statements.

→ Inspect animals before purchase, and also check (visually and hands-on) new stock when they arrive – look for signs of lameness, tip sheep over to check for footrot and condition score stock.

At the farm-gate: Clearing treatments

→ Even healthy-looking livestock can carry parasites or diseases, so control risk with strategies such as zinc sulphate foot baths to control footrot, quarantine drench and vaccinate.

Post-farm-gate: Take precautions

→ Quarantine and monitor incoming stock for at least seven days to get rid of worms and weeds.

→ Put new stock into a quarantine paddock where they can't access or cross paths with existing animals and monitor for pests and diseases – this could be a month with cattle, and longer for footrot or lice in sheep.

→ If joining new stock during this quarantine period, use rams that are scheduled to be culled.

Ongoing biosecurity

All livestock:

→ Monitor stock regularly and, if you notice anything out of the ordinary (behaviour, lameness, increased mortality), get it checked out.

→ Maintain thorough records of vaccinations, drenches and other treatments, and stock movements and mortalities.

→ Your local vet is the first point of call for any suspicious animal health observations. If you suspect an exotic disease, call the emergency animal disease hotline 1800 675 888.

Property:

→ Ensure all boundaries are well maintained and secure.

→ Limit the movement of non-property vehicles, which can spread weeds.

→ Be vigilant with livestock transport, as manure from infected animals can spread diseases.

→ Contractors' equipment can spread diseases, such as footrot or lice, so encourage use of protective clothing and cleaning of hands and shoes.

Design your own farm biosecurity plan with this checklist: **www.lbn.org.au/farm-biosecurity-tools**

understanding of biosecurity and how best to manage it in livestock transactions, such as identifying potential diseases.

The Livestock Biosecurity Network also works with exporter OBE Beef to help organic cattle producers better manage biosecurity risks and protect and expand valuable markets, and also works with producers near urban areas to identify risks to the wider industry.

Livestock Biosecurity Network national manager John Maher said biosecurity was becoming part of everyday life for rural industries to manage and prevent endemic, emerging and exotic diseases.

"An effective approach to protecting Australia's livestock from unwanted pests and diseases requires an active involvement of the people at the coal face of production," he said.

"This is vital because, in an emergency, the time to disease detection and the speed of spread are the difference between a small and a large disease outbreak."

John said the nature of selling livestock in Australia – with large marketplaces and extensive transportation networks – meant a disease could spread incredibly quickly. For example, sheep and cattle movements into and out of Victorian saleyards in just a 24-hour period are far-reaching.

"Awareness, surveillance and reporting is fundamental to enabling a quick response to an emergency animal disease," he said.

MLA farm biosecurity information: **www.mla.com.au/reducedemissions**

Check out the Livestock Biosecurity Network website for producer case studies and videos and to see how producers and managing biosecurity at the grassroots: **www.lbn.org.au**

Farm Biosecurity toolkit:
www.farmbiosecurity.com.au/toolkit/plans-manuals/national-farm-biosecurity-reference-manual-grazing-livestock-production

Turn to page 27 to read how working with neighbours on biosecurity has reduced a problem with lice. →

Education

Putting red meat on the curriculum

With more than 70% of people in Sydney alone never having visited a farm, school students across the country are being targeted to help educate the general population on how how food and fibre is produced.

The Primary Industries Education Foundation Australia (PIEFA) is working to create a community which understands and values primary production. MLA is a founding member of PIEFA, and, along with other agricultural organisations, is funding it to help inform students, teachers and the broader community about primary industries and the career opportunities they offer.

PIEFA CEO Ben Stockwin said the Foundation supports the needs of teachers by developing resources for kindergarten to Year 10, where education research indicates it can have the greatest impact.

"We were involved in developing the Australian teaching curriculum – before our involvement the first draft included just two references to agriculture, and one was medieval farming practices," he said.

"There are now 168 examples of food and fibre in the science, technology, mathematics and geography curriculums."

PIEFA's activities include supporting educator conferences and workshops around Australia and developing teaching resources in partnership with its members.

Fast facts

- 5,000 visitors to the school resources website, Prime Zone, in 2014-15 (65% new visitors)
- 200 resources available at Prime Zone, including 34 videos
- 100% of teachers who trialled the resources reported their students found the subject matter engaging and would recommend the resources to another teacher.
- PIEFA interacted with more than 2,000 teachers at educator events in 2014-15
- PIEFA's newsletter is sent to nearly 4,000 people in 25 countries

MLA contributed to the development of 17 study guides across all year levels and learning areas, which were launched in May 2015 as part of the Federal Government's Agriculture in Education Initiative. PIEFA's activities for 2016 include relaunching its school resource website, Prime Zone.

"Teachers are particularly interested in animal welfare, environmental sustainability, and the use of technology and innovation in the farming sector, so we have developed resources which respond to these issues," Ben said.

"For example, we developed a unit for Year 7 Geography on water usage in cattle production and resources on remote livestock management for technology students."

With more than 70% of people in the Sydney area alone never having visited a farm, PIEFA and MLA have also taken teachers and students out for first-hand experiences of how red meat is produced.

"Hands-on learning is a powerful way to transfer knowledge, and it connects people with the source of their food and fibre," Ben said.

"MLA has always been a proactive supporter of getting food and fibre production information into the classrooms, and PIEFA really values the support of producers through MLA."

He said producers who want to support a school visit can register their interest with PIEFA.

Ben Stockwin
E: ceo@piefa.edu.au

PIEFA: **www.piefa.edu.au**
Prime Zone: **www.primezone.edu.au**

Check out MLA's Target 100 educational resources at: **www.target100.com.au/Hungry-for-Info/Education/National-Curriculum-Study-Guides**

Opening

Hosting 85 Year 9 students on-farm might sound overwhelming to some, but for Victorian producers Paul and Jenny O'Sullivan, it was an opportunity to showcase their animal welfare, environmental sustainability and science-backed red meat production systems.

The O'Sullivans' South Gippsland, Vic property, 'Malabar' encompasses 640ha of grazing land and 40ha of preserved remnant vegetation.

They run 2,200 cross-bred ewes and 400 Poll Hereford and Angus-cross breeders. Second-cross prime lambs are sold to Coles at 20-22kg dressed weight, while cattle have several markets, including to local store markets at 12 months of age or finished at 450kg liveweight (18 months of age) for the Gippsland Natural beef brand.

In 2012, Paul and Jenny combined their backgrounds in agricultural extension and consulting with their love of the region's food and passion for sustainable farming and launched 'Gippsland Food Adventures'. This agri-tourism venture links the environment, agriculture and people through corporate team-building, on-farm visits and regional food tours.

The O'Sullivans also share their story through MLA's Target 100 and the Virtual Farm teaching resource, so it was a logical step to open the gate to school teachers and students.

In 2014, Paul and Jenny hosted 10 high school geography teachers, as part of a Primary Industries Education Foundation

the gate

Donvale Christian College Year 9 geography students learn about herd management from Gippsland producers Paul and Jenny O'Sullivan.

Australia (PIEFA) initiative during the Geography Teachers of Victoria's Annual Conference.

Then, on 27-28 October 2015, they hosted two groups of 40–45 Year 9 geography students from Donvale Christian College, Melbourne.

"The students were studying food security and landscape sustainability so they were really interested in our production systems and the future of farming," Jenny said.

"We took them through our 'conception to consumption' system and explained the science involved."

Students had a close inspection of lambs in the yards to see where different meat cuts come from, learnt about pasture management and walked through areas of preserved bushland.

Underpinning the day was the O'Sullivans' focus on communicating how producers embrace science to run professional enterprises, committed to environmental sustainability and animal wellbeing.

"We explained how we use soil tests to monitor key nutrients and look after our soil, drench resistance tests and worm counts for animal health, and how we incorporate performance figures and EBVs to select bulls," Paul said.

"The teachers were particularly interested in the science and data we use to make decisions in our business."

The farm tour culminated in a meal featuring home-grown beef and lamb, which Jenny said encouraged students to make the connection between livestock production and food.

It was also a chance to encourage students to consider a career in agriculture.

"The community often hears about the tough times in agriculture, so we wanted the students to think of this industry as the best career choice, not their last choice," Jenny said.

"Red meat production underpins regional development and we, as an industry and as individual producers, need to promote this more proactively to attract the best and brightest."

While Paul and Jenny have been inspired to continue connecting with the next generation of red meat consumers and plan on working with schools in their region, they said producers can communicate with the wider community in other ways.

"What we, as producers, take for granted is actually really interesting to people who don't live on the land. It begins with communicating to our networks of friends and family, to share the realities of red meat production and the good work producers do, every day," Jenny said.

Paul and Jenny O'Sullivan
E: osulliva@dcsi.net.au

Target 100: **www.target100.com.au/Farmer-stories/Paul-Jenny-OSullivan**

Virtual Farm: **http://virtualfarm.mla.com.au**

Gippsland Food Adventures
Website: **www.gippslandfoodadventures.com.au**
Facebook: **https://www.facebook.com/GippslandFoodAdventures**
Twitter: **@0sullivanjenny0, #gippslandfoodadventures**

Market access

Access granted

Last year MLA welcomed progress on a number of valuable trade agreement negotiations, which have been years in the making, after working closely with peak industry councils and government negotiators to position red meat for market access success.

MLA Trade and Market Access International Business Manager Andrew McCallum said MLA had provided the information government negotiators needed to work towards trade reform for red meat products.

"With tariff barriers continuing to impede our sector's response to growing consumer demand and – in some cases – being detrimental to our international competitiveness, red meat needed to be well positioned and well represented for the negotiations," Andrew said.

"This necessitated a combined industry effort, in partnership with the Australian Government, with advocacy activities delivered both in Australia and in-market."

Andrew said highlights in 2015 included:

→ the signing of the China-Australia Free Trade Agreement (ChAFTA) in June and the agreement entering into force in December

→ the conclusion of the Trans-Pacific Partnership (TPP) negotiations in October

→ commitment by leaders in participating nations in November to undertake preparatory work for an Australia-European Union FTA.

Minister for Trade and Investment Andrew Robb and MLA's Andrew McCallum (International Business Manager – Trade and Market Access) at a round of the Trans-Pacific Partnership negotiations.

China-Australia FTA (ChAFTA) – negotiations began in 2005 and concluded in November 2014.

ChAFTA entered into force (EIF) in December 2015, delivering the first tariff cuts, with the second tariff cuts due 1 January 2016.

Outcomes:

→ Tariffs to be eliminated: 12–25% tariffs on Australian beef within nine years of the FTA entering into force; 12–25% tariffs on beef offals over 4–9 years; 5–8.4% tariffs on hides over eight years; 10% tariffs on live cattle over four years; 12–25% tariffs on sheepmeat products over eight years; 12–25% sheep offal tariffs over 5–9 years; 5–15% tariffs on sheepskins over 5–8 years.

→ Once fully implemented, ChAFTA has the potential to boost the gross value of beef production by $270 million annually by 2024, and increase the total value of Australia's sheepmeat sector by more than $150 million per annum. Analysis suggests cattle prices could increase by 8¢/kg (dw) and sheepmeat prices could increase by 13–26¢/kg (dw) above baseline levels.

Trans-Pacific Partnership (TPP) – negotiations began in 2008 and concluded in October 2015.

TPP members include: Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, the United States and Vietnam.

Outcomes which impact Australia include:

Japan

→ frozen/chilled beef tariffs for all countries supplying beef to Japan reduced to 9% over 15 years

→ a global beef safeguard provision will start at 590,000 tonnes upon the agreement EIF and grow to 725,700 tonnes in year 15. The safeguard tariff rate declines from 38.5% in year one to 18% in year 15

→ live cattle tariffs eliminated within 15 years.

Canada

→ current 35,000 tonne beef quota (0% in-quota tariff) will remain

→ the above-quota tariff of 26.5% will be eliminated within 10 years

→ 2.5% tariff on Australian sheepmeat will be eliminated on EIF.

Mexico

→ 20–25% beef tariff eliminated within 10 years

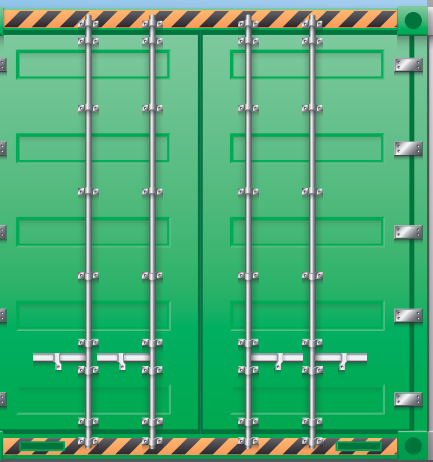
→ 10–20% tariffs on offals eliminated on EIF – except for the 20% tariff on inside/outside skirt (used for arracherra in fajitas), which will be eliminated within 15 years

→ 15% tariff on live cattle eliminated on EIF

→ 10% sheepmeat tariff eliminated within eight years

→ 20% tariffs on sheepmeat offals eliminated on EIF

→ 10% tariff on live sheep eliminated on EIF.



"The ChAFTA is a positive development for our industry, not only in terms of red meat products, but also for skins, hides and other co-products.

"About 90% of sheepskins and 80% of cattle hides go to China, so the elimination of tariffs on those two items will generate significant returns – about $6 billion to the Australian industry – following full implementation of the agreement."

Andrew said work was under way to ensure red meat would be positioned in any future FTA negotiations with the EU.

"Enhancement of the Australia-EU trading regime, especially making it easier for Australian producers, processors and exporters to service the ongoing demand for beef and sheepmeat products in the EU, would be a most advantageous outcome," he said.

"Australia's current beef and sheepmeat access to the EU is restricted by low-volume import quotas and high above-quota tariffs. A potential trade-enhancing Australia-EU FTA will provide the opportunity to establish a commercially beneficial trading regime."

Below are snapshots of trade negotiation progress in 2015.

Australia-India Comprehensive Economic Cooperation Agreement (AI-CECA) – negotiations began in 2011.

Nine rounds of negotiations have been held to date and Trade Minister Andrew Robb visited India four times in 2015 in an effort to advance negotiations.

Key points:

→ India applies a 30% tariff to Australian beef and there are currently no protocol arrangements

→ India applies a 30% tariff on Australian sheepmeat, with onerous certification requirements.

Regional Economic Comprehensive Partnership (RCEP) – negotiations began in 2012.

RCEP members: Brunei, Burma (Myanmar), Cambodia, Indonesia, Laos, Malaysia, the Philippines, Singapore, Thailand, Vietnam and the six states that the Association of Southeast Asian Nations (ASEAN) has existing FTAs with: Australia, China, India, Japan, South Korea and New Zealand.

Ten rounds of negotiations have been held to date, with Australia to host a negotiation round early this year in Perth.

As a large regional FTA, including countries that have more than half of the world's population and almost 30% of world output and trade, RCEP has significant potential to parallel the recently concluded TPP agreement as a pathway to a broader Asia-Pacific regional framework for trade and investment.

Given Australia has FTAs with all RCEP members except India; RCEP's real value is in establishing a framework to address non-tariff barriers.

Proposed Australian-European Union FTA

In November 2015, Australian and EU leaders committed to working towards the negotiation of an FTA. Australia and the EU will now undertake domestic consultation and begin bilateral discussions on the next steps to launch negotiations.

Australia's current beef access to the EU is restricted by low import quotas and high above-quota tariffs:

→ 7,150 tonne high-quality beef quota (20% in-quota tariff)

→ access to 48,200 tonne global grainfed beef quota (0% in-quota tariff); above-quota duty 12.8% plus up to €3/kg

→ importer access to frozen beef and frozen processing quotas

→ Australia's current sheepmeat access to the EU: 19,186 tonne quota (0% in-quota duty); above-quota duty 12.8% plus up to €3/kg.

Indonesia-Australia Comprehensive Economic Partnership Agreement (IA-CEPA)

The Indonesian and Australian Governments have recently committed to reinvigorating negotiations. Addressing the Indonesia-Australia Business Council Conference in November, Trade Minister Andrew Robb indicated both parties were expected to re-engage in 2016 in order to "strip away some of the barriers; not just the tariffs, but also a lot of the behind-the-border barriers that often frustrate so much of the business opportunity"

Andrew McCallum, MLA
E: amccallum@mla.com.au

Research at work

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

In this issue

Snapshot

Richard and Janet Doyle, Boggabilla, NSW.

Property:
2,300ha

Enterprise:
Cattle trading, cropping

Livestock:
1,250 yearling steers and heifers

Pasture:
Native perennials; green, Gatton and bambatsi panic, Mitchell and curly windmill grass, medics

Soil:
Alluvial and loamy grey clays, black vertisol, intermittent grey clay

Rainfall:
615mm

Genetics

Making a trade

Ten years after selling the last of their cows, Richard and Janet Doyle have no regrets about swapping breeding for cattle trading.

The decision to become traders was made in tandem with the conversion of much of their cropping country to perennial pastures, and the Doyles freely admit they're still finding the balance between a healthy, dynamic ecosystem and a financially rewarding business.

"We've learned to focus our efforts to support our vision for our property and the way we want to live our lives," Richard said.

"The grazing enterprise fits neatly with our goals, but the cropping enterprise did not."

'Malgarai' is a 2,300ha property in two blocks separated by the stock route, near the Queensland border in northern NSW. One portion of nearly 500ha has a 10km frontage to the Macintyre River and the rest is in the Whalan Creek catchment, where the Doyles crop 450ha to annual forage crops.

The conversion to cattle trading in 2005 wasn't a difficult one to make, as the Doyles already had experience in marketing cattle through supply chain alliances such as Aronui Feedlot's Pacific Pride and the Border Beef Marketing Group, which branded premium yearling beef to sell into Singapore, Malaysia and Taiwan.

"That gave us the confidence in buying and growing out young cattle, and from there it's been a matter of sticking to the fundamentals of buying and selling into the same market," Richard said.

"This country lends itself to a production grazing system, especially when the season is with us, and our proximity to feedlots in southern Queensland and saleyards in northern NSW is ideal."

They source cattle through private treaty, AuctionsPlus and saleyards to grow out for two streams: 250 yearling heifers bought in annually at 230–300kg and turned off at 400kg to Coles supermarkets; and 1,000 steers fed to 500kg to supply the feedlot export market.

Genetics

→

The majority are British breed cattle, although they will buy stock with up to 40% *Bos indicus* content.

The mobs are run together in a rotational grazing system. The Doyles have installed more than 30km of poly pipe in a new water reticulation system which results in the cattle walking no more than a maximum of 1.3km to water.

As well as renewing boundary fences and refining infrastructure, they built two new sets of cattle yards and did a stock handling course to improve their skills in working the combined mobs.

Now they can muster up to 900 head without extra labour, and the induction of new cattle into the herd is a straightforward process.

Richard undertook a marketing course based on the philosophy of the late Bud Williams, where he learned to assess what it cost to take the animal to marketable weight and identify a trading margin, then minimise inputs.

"Our cattle have little supplementation and basically the costs are marketing, tags, transport, vet products and forage crops – that's it," Richard said.

"We employ contract labour if we need it and also use the services of a cattle buyer and a marketing agent because they're far better at buying and selling cattle than we are."

The Doyles have participated in a number of education programs provided by MLA to increase their knowledge.

"We have developed a level of comfort with perennial enterprises because we recognise the benefits of perennials and biodiversity," Richard said.

"They tick all the boxes, while conventional cropping systems don't.

"We are not there yet, but we have embarked on a continuous process of improvement."

Richard and Janet Doyle
E: malgarai3@bigpond.com

The MLA producer manual, *Improving the performance of northern beef enterprises*, is available to download at: **www.mla.com.au/northern performance**

Rotational grazing is one strategy used on 'Malgarai'.

Removing

Geoff Nicol's (pictured right) commitment to educating his cattle is just one of the keys to producing more kilos of beef.

And quiet cattle have proven to be one of the contributing factors to his surprisingly high labour efficiency figures, when compared to the top 25% of beef producers in Queensland's southern inland region.

Labour efficiency calculates all labour used in the business annually, including contractors, part-time workers and unpaid farm work, such as administration, to work out the total number of full-time equivalents (FTEs) used.

It's expressed as a measure of the number of animal equivalents (AEs, or 400kg steers) that can be run per FTEs of labour.

"The average labour efficiency figure for our region is 696 AE per FTE and for the top 25% of producers it's 991, but at 'Ninderra' ours is 1,310," Geoff said.

"We normally run about 1,500–1,700 AEs."

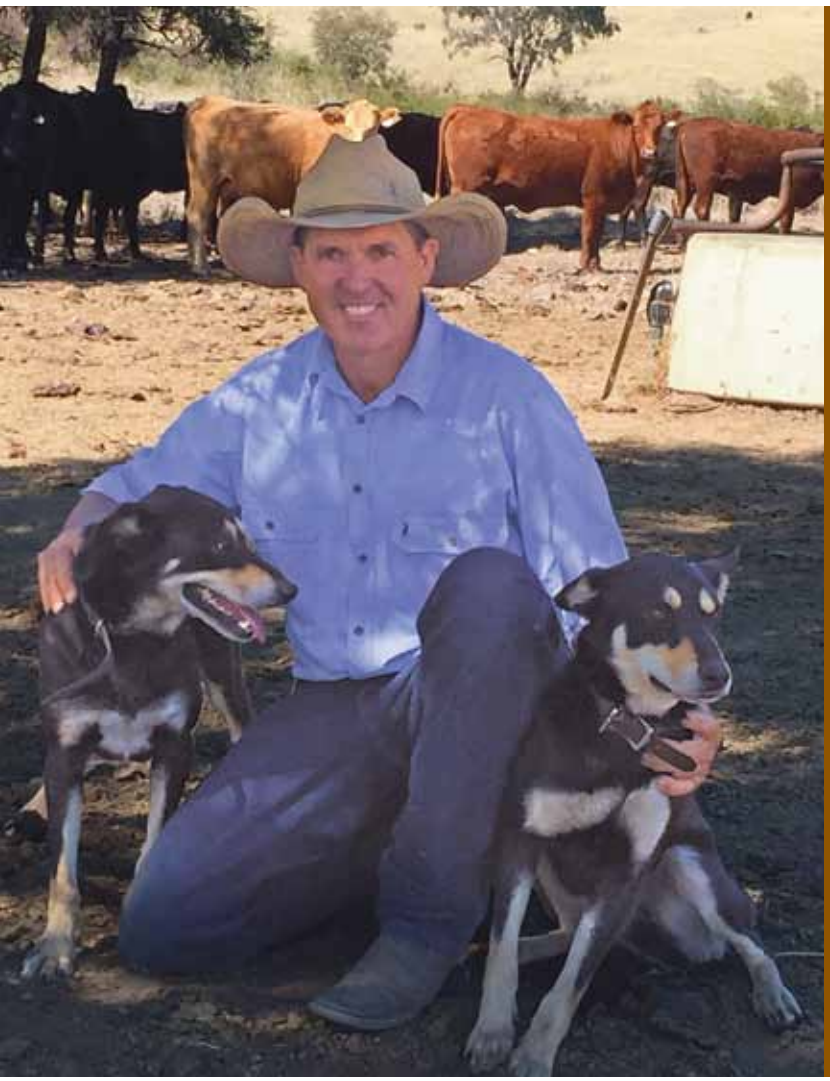
Focus on profit drivers

Geoff and his parents, Ian and June, left their cropping country near Moree, NSW, five years ago to buy Ninderra.

Since the initial settling-in year of 2010, the Nicols have invested in new fencing and watering points, and focused on reducing labour costs, increasing herd fertility through buying only bulls with good fertility EBVs and fine-tuning supplementary feeding through the use of faecal analysis.

The Nicols' businesslike approach to cattle production is paying off. Quiet, educated cattle mean Geoff can handle much of the stock work on his own or with his fiancé Lyndal Rolfe and their working dogs, reducing the need for contract labour.

the guesswork



Snapshot

Geoff, Ian and June Nicol, Injune, Queensland.

Property: 4,400ha

Enterprise: Breeding and turning off steers at 470kg to feedlots and heifers at 400-450kg to markets

Livestock: 470 Santa Gertrudis-British cross breeders and up to 1,000 feeder cattle

Pasture: Gayndah and Biloela buffel

Soil: High quality vine scrub country running through to undulating brigalow/belah.

Rainfall: 650mm

A lot of time is spent educating weaners and bought-in cattle until they're quiet and controllable, working them first in the yards and through the race each day and then regularly handling them in paddocks close to the homestead.

"It's like training a dog - cattle have to develop a memory of how to respond so that they're happy and relaxed to have me on a horse and the dogs around," Geoff said.

Working smarter also means waiting until the weekends when Lyndal finishes her off-farm working week and can help him with mustering. At peak times of the year such as branding or pregnancy testing he employs contract musterers with their own gear and insurance.

Geoff's retired parents, Ian and June, are invaluable in their assistance, with Ian spending a day a week in the office doing the books.

Knowing, not guessing

Strategic placement of fencing and reticulation of watering points from bores has also paid off in cattle which don't have so far to walk to water, and better utilisation of available feed.

Initially Geoff found the cattle overgrazed the lower country in summer, leaving the grass on the steeper slopes of the range to grow rank before they moved up there in winter. He's begun a program of fencing to enable rotational grazing rather than set stocking, to use the grass more efficiently.

Available pasture is something Geoff 'thinks about every day'. To that end, he also took part in trials of supplementary feeding through the Department of Agriculture in Roma. Using faecal analysis they measured crude protein, faecal nitrogen and forage digestibility to show whether feeder cattle benefited from a urea-based dry lick in winter.

The results were surprising. In a dry 2013, every dollar spent on lick returned $2. But in 2014, when March rain meant there was short green feed, there were no gains.

"I remember one business analyst saying that people often feed lick to make themselves feel better, and the faecal analysis certainly takes the guesswork out of it," Geoff said.

"When you have to get a return on every dollar spent, testing allows us to use supplementary feeding as a production tool, rather than a drought tool."

He tries to match stocking rates with carrying capacity, and said that's made easier by the fact that he buys in feeder cattle.

Breeders are run on Biloela buffel and Geoff aims to have them at score 3 or 3+ at calving. He's focussed on breeding for fertility, with the result that when the season crashed in 2013 the cow herd still tested 88% in calf - the result of fertile cows, body score and strategic supplementation, he says.

Santa Gertrudis bulls are strictly selected for their EBVs relating to fertility - days to calving, scrotal circumference and semen morphology - and that's cleaned up the herd very quickly, says Geoff.

Heifers are joined at 14 months for a short period of 60 days, or 90 depending on the season, and the focus on EBVs for fertility has meant a higher re-breed, or less heifers empty on their second calf.

Next year Geoff plans to put in laneways and fencing that will allow cattle to be grazed in a rotational system.

Geoff Nicol
E: gd.nicol@bigpond.com

The MLA producer manual, *Improving the performance of northern beef enterprises*, is available to download at: **www.mla.com.au/northernperformance**

Productivity

ASBV advocates

Lynley Anderson has followed in her father Alan's footsteps by embracing Australian Sheep Breeding Values (ASBVs) to determine an animal's breeding value based on pedigree and performance recordings. Alan was a pioneer of objective measurement in the 1960s, selecting rams based on clean fleece weight, fibre diameter and body weight, at a time when selection by visual assessment was the norm.

It's this long term commitment which Lynley (pictured above) believes will stand the enterprise in good stead to capture some of the benefits from the growing demand for sheep out of Western Australia.

The Andersons breeding objective is to produce robust, productive, low maintenance and fertile sheep. It starts with a nucleus flock of 450-500 Merino ewes and 120 Poll Dorset ewes.

Lynley said the benefit of using ASBVs was undeniable.

"As a result, we're running more stock, our lambing percentage has increased, we rarely drench and sheep maintain condition much more easily," Lynley said.

Here's how the Andersons do it.

Recording

When Lynley joined the enterprise in the early 2000s, she was keen to take the sheep breeding to the next level. Despite the advances in key traits across their flock, the Andersons became concerned their selection strategy was "discounting" the potential of progeny from maiden ewes and twin bearers because they were lighter and cut less.

In 2002 the Andersons jumped at the chance to contribute to a pilot project for Sheep Genetics in the development of genetic breeding values.

"We could see great advantages in using genetic information to select animals because it removed the environmental influences on an animal's appearance and its objective measurements," Lynley said.

"We would be able to select the best rams regardless of the circumstances of their birth or upbringing.

"It was also a great opportunity to be able to breed for other traits like worm resistance, fast early growth and a meatier carcass which would enable us to turn off our wether lambs earlier."

Measurement

Lambs are tagged at birth in order to record their pedigree, birthweight, birth date and whether they are born a single or twins.

More than 50 visual and objective traits are measured and recorded for each animal from birth to hogget age, to refine selection and provide accurate ASBVs for each sheep.

Objective measurements include clean fleece weight, fibre diameter, coefficient of fibre diameter, comfort factor, staple strength, worm egg count, eye muscle depth, carcass fat, birth weight and growth rates.

The visual traits assessed include body and breech wrinkle, wool colour, face cover, dags and temperament.

Snapshot

Lynley Anderson and her parents, Alan and Wendy Anderson, Kojonup, WA.

Property:
2,250ha (owned and leased)

Enterprise:
Prime lambs, wool production and 850ha of canola, barley, oats and wheat

Livestock:
4,500-5,000 Merino ewes, 120 Poll Dorset ewes, wethers are sold as weaners

Pasture:
900ha improved pasture including fodder crops and perennial pastures

Soil:
Two thirds gravel loam and one third clay loam

Rainfall:
460mm

Figure 1 Average yearling weight (YWT) by year drop

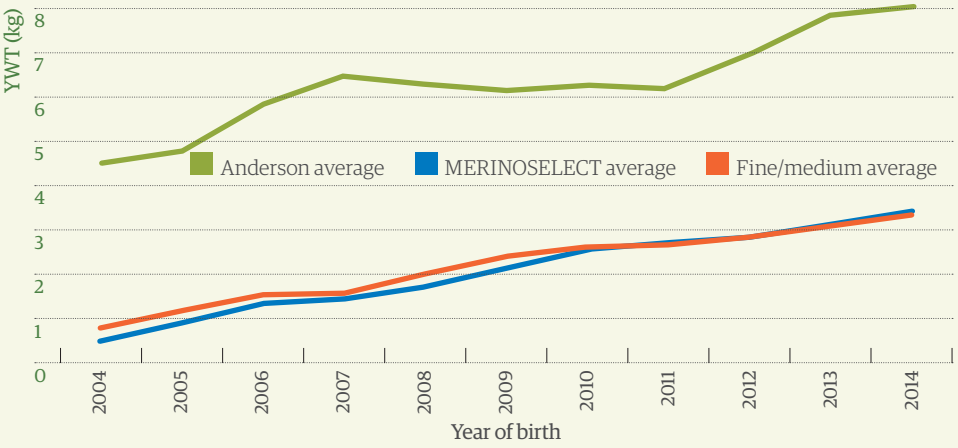
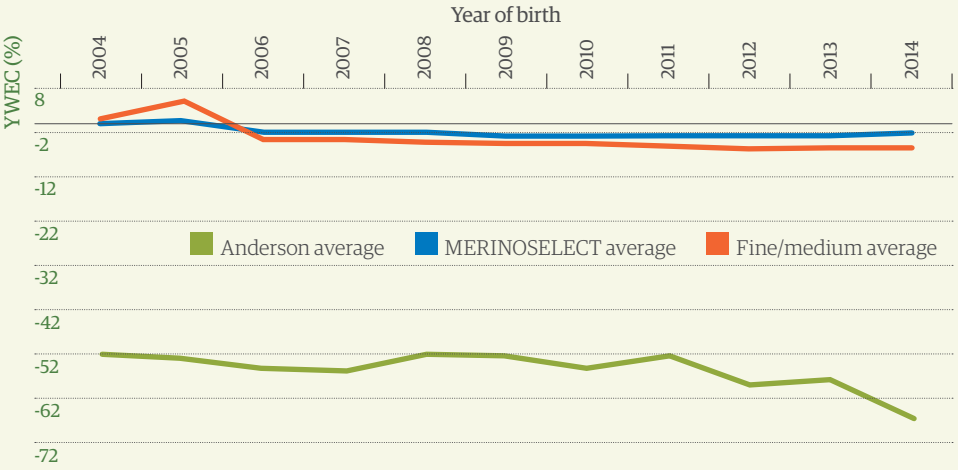


Figure 2 Average yearling worm egg count (YWEC) by year drop



Source Figure 1 and 2: Sheep Genetics

Of the meat traits, from 2003 to 2013, the average yearling weight has improved by 4kg and eye muscle depth has improved by 5mm, making the flock genetically more muscular and robust.

The average dual purpose index value of the flock is now 170 units, which is nearly 32 index points higher than the Merino ram breeding industry average, and about 34 index points higher than it was 10 years ago.

Low maintenance

The Andersons decided early on to focus on producing low maintenance sheep and started selecting for low faecal worm egg counts.

"It was clear that the effectiveness of drenches was fast declining and that any new drenches were going to be expensive so we wanted to do away with drenching altogether," Lynley said.

To assist the process, the Andersons sourced semen from the Department of Agriculture and Food's Rylington Merino Flock, which was dedicated to breeding sheep with resistance to worms.

The Andersons now have some of the most worm-resistant sheep in the country, with many ranking in the top 1% in the MERINOSELECT database for this trait.

The Andersons haven't drenched their adult sheep for six years and only about 10% of weaners now require a drench.

Selecting for worm resistance is one trait Lynley does not compromise on.

"An ASBV of -50 is my benchmark," she said.

"When selecting rams there is always a compromise, as there is no such thing as a perfect ram, however, I won't compromise on the worm egg count as it can limit the overall performance of the animal."

Lynley Anderson
E: lynleya@westnet.com.au

Sheep Genetics and MERINOSELECT: **www.sheepgenetics.org.au/Breeding-services/MERINOSELECT-Home**

Read Module 9: *Gain from Genetics* from **www.makingmorefromsheep.com.au**

Grazing management

Stocking rates – no more trial and error

Working out stock numbers and striking the right balance with northern Australia's highly variable rainfall has always been a challenge. Producers can feel torn between the notion of running high stocking rates to drive profit and the need to keep pastures sustainable long-term.

Now, after 18 years of work on the MLA-funded Wambiana grazing trial, the most significant project of its kind in northern Australia, the guesswork has been taken out of what is the best grazing strategy to achieve both profitability and sustainability.

The ongoing trial is being conducted on the Lyons' family cattle property 'Wambiana', 70km south of Charters Towers, where the long-term average rainfall is 630mm but can range anywhere from 207mm to 1,409mm.

Right road

Project leader Dr Peter O'Reagain, from the Queensland Department of Agriculture and Fisheries (DAF) said the good news was that, long-term, the most profitable road is also the most environmentally sustainable.

"The long-term results from the trial, over a range of some of the wettest and driest years on record, clearly show the commonly-held perception, that you need to stock relatively heavily to be financially viable, is wrong," he said.

"This is particularly apparent this year with the 2014-15 season (204mm) the fourth driest in 105 years."

The research team compared five grazing strategies:

- → heavy stocking rate – constant stocking at about twice the long-term carrying capacity (4ha/adult equivalent)
- → moderate stocking rate – constant stocking at about the long-term carrying capacity (8ha/AE)
- → rotational wet season spelling – constant moderate stocking at about 8ha/AE with a third of the area wet-season spelled each year
- → variable stocking – stocking rates adjusted annually in May based on pasture availability at the end of the wet season (range 3–12ha/AE)
- → Southern Oscillation Index (SOI)-variable stocking – stocking rates adjusted in November based on available pasture and SOI seasonal forecasts (range 4–12ha/AE).

John Bushell, the trial's senior technician, said the objective was to test how these different strategies coped with rainfall variability in terms of their effects on animal production, profitability and land condition and to determine which strategies were best for managing this challenging environment.

"We found that the heavy stocking rate strategy made the least profit overall, caused the most severe pasture degradation and led to a major loss of resilience," he said.

"It certainly made a profit in individual wet years but this was well and truly undermined in dry years by drought-feeding costs, higher interest costs on livestock capital and reduced product value through poorer animal condition.

"In contrast, moderately stocked strategies or those that cut stocking rates with the onset of drought (ie the variable and SOI strategies) largely avoided these costs and were far more profitable over the long term."

John said this was dramatically illustrated at the start of the present drought with cattle in the heavy stocking rate paddocks requiring feeding far earlier than in previous droughts.

Over-grazing

The project also revealed the decade-long consequences of over-grazing palatable, perennial and productive (3P) grasses leading into drought.

In the heavily-stocked paddocks, desert bluegrass, black speargrass and Queensland bluegrass were three to four times less than in moderately stocked paddocks

Peter said this also occurred when the variable and SOI strategies were heavily stocked immediately prior to the 2002-07 drought.

"Although we destocked rapidly, it was too late to prevent significant damage to the 3P species," he said.

"While recovery has occurred, pasture condition in these strategies is still poorer

Moderate stocking

In 2000 the site was in good condition and dominated by 3P grasses.

The site is still dominated by 3P grasses in 2014.

In May 2015 following the fourth driest year on record and 3P grasses are still present.

than in the moderate stocking or wet season spelling strategies.

"This experience clearly shows the risks associated with variable stocking and taught us the need to set upper limits to stocking rates in even the best seasons and to be risk averse when varying stock numbers."

Peter said during the past 18 years of the trial the heavy stocking strategy was definitely the least profitable and unsustainable, however, the remaining strategies all had shortcomings.

"The optimum strategy should involve flexible stocking around long-term carrying capacity, as seasons vary, with periodic wet-season spelling," he said.

"We are presently testing this flexible stocking strategy in the latest phase of the Wambiana project."

Where to go for more help

To help producers accurately assess a property's long term carrying capacity, Peter recommends completing the MLA EDGE Network's Grazing Land Management course (**www.mla.com.au/Extension-training-and-tools/EDGEnetwork**).

The Stocktake Plus program (**www.stocktakeplus.com.au**) also provides training as well as an app for calculating forage budgets.

Animal production facts

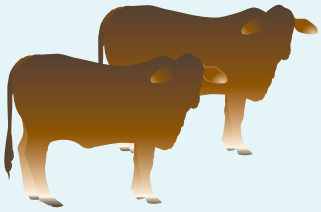
Heavy stocking

Total animal production (kg/ha) was highest under heavy stocking, but this required

drought feeding in five of 18 years

whereas the other strategies required none.

Moderate stocking



After two years in the trial the Brahman-cross steers in moderately stocked strategies were

30–70kg heavier

than under heavy stocking.

Steers from moderately stocked strategies generally received

10–20¢/kg more

at the processors and had a higher carcase value than heavier stocked steers.

Economic facts

- Heavy stocking was initially very profitable but lost money in dry years due to high costs, poorer processor grades and reduced production.
- Under moderate stocking gross margins were positive in nearly all years due to lower costs and higher returns per animal.
- The variable and Southern Oscillation Index-variable strategies were also profitable but lost money at the start of the 2002–07 drought due to the sale of animals in poor condition.
- After 18 years, accumulated gross margins in the moderate, wet season spelling, Southern Oscillation Index and variable stocking rates were three times greater than in the heavy stocking rates.

Dr Peter O'Reagain // T: 07 4761 5164
E: Peter.O'Reagain@daf.qld.gov.au

To read more on the ongoing Wambiana trial visit: **www.futurebeef.com.au/resources/projects/wambiana-grazing-trial/**

Heavy stocking

The site in 2000 with dense 3P grasses.

In 2014 3P grasses had disappeared and Indian couch was dominant.

In May 2015 all that remained was Indian couch and tree litter.

Pasture management

A sensory experience

The benefits of involving producers in research are clearly on show in a pasture mass estimation project connecting producer groups from Victoria, NSW, Tasmania and WA with researchers involved in a project run by the CRC for Spatial Information. The researchers are from the University of New England (UNE), NSW Department of Primary Industries and New Zealand's University of Canterbury.

UNE researcher Dr Mark Trotter is part of the MLA Producer Research Sites project run under MLA's Feedbase Investment Plan, which aims to evaluate a hand-held active optical sensor device and a smartphone app to determine if they can be applied to accurately estimate pasture biomass.

"Biomass sensing technologies offer significant opportunities for livestock producers to improve the management and productivity of their pasture, through both improved feed allocation and optimal pasture production," Mark said.

"The challenge for us has been to develop technologies that are low cost, reliable and can be easily deployed from a vehicle or farm bike."

While biomass sensors already exist in other industries, such as the dairy industry, Mark said they cost about $5,000 each, were calibrated to measure uniform pastures such as perennial ryegrass, and in some cases were not designed for the terrain common in red meat production systems.

The UNE team is working with producers in five regions across four states to trial a number of different active optical sensor devices including a Trimble GreenSeeker®, which currently costs about $600.

"So far we have focused on assessing the calibration accuracy of the biomass sensors," Mark said.

"The producers are taking pasture measurements with the sensor, and physical pasture cuts and measurements at key times throughout the year.

"Before this project began, we focused our research on the Northern Tablelands of NSW, where we are based, but this project has really opened our eyes to the different needs of producers across other regions of Australia.

"It has also helped us understand the critical times of year when the sensor has to work accurately and reliably to help grazing

Groups keeping research relevant

WA's Muchas Gracias Group and the Virtual Group from Victoria are among five producer organisations working with researchers to test the efficacy of the GreenSeeker® active optical sensor. The groups are part of MLA's Producer Research Group program, which relies on Producer Research Sites to test if and how new research fits within farming systems.

Out west

Muchas Gracias leader Paul Omodei, from Planfarm, said the group applied to host a research site to ensure any technology developed during the project would be relevant to WA producers.

He said the effort involved in collecting physical pasture measurements for the researchers underscored the value of a GreenSeeker-phone app alternative for making accurate feed on offer assessments.

"In 2015, Muchas has done a total of 56 pasture cuts and we're pleased to say that across all samples the correlation between NDVI (sensor results) and biomass has been excellent," Paul said.

"The cut and sort is very time consuming – about eight hours per cut. If anyone doesn't appreciate the magnitude of the app and its implications in pasture feed on offer estimation, please join us on the next cut. After eight hours you will be a convert!"

Down south

The Virtual Group, led by Meridian Agriculture consultant Jim Shovelton, has six sites across the high-rainfall areas of Victoria's North-East and Western District, where correlations between NDVI (sensor) measures and green dry matter have ranged from 20% to 90%.

"On our sites, we found the NDVI value was affected by things like weeds, high clover and high fertility pastures, growth stages and time of year," Jim said.

"The key learning was that we can't have one generic algorithm for all pastures and all times of the year, and some self-calibration by the operator would be needed. The researchers are now working on more specific formulas.

"Recognising these issues early in the research process is the benefit of having producers involved from the beginning."

Jim said his group saw multiple potential benefits from the technology, such as allowing better accuracy and consistency of pasture measurement among employees, and reassuring producers they were 'eyeballing' pasture correctly. In fact, this assumption that producers are generally successful at visually assessing pasture biomass has been challenged by the researchers, who have run visual assessment exercises with most of the groups.

Project leader Dr Mark Trotter reported that results at a recent field day varied by 1,200kg DM/ha between the highest and lowest estimation in the same test quadrant.

For Jim's group, the results saw consistent underestimation of total pasture biomass in late spring, by up to half of what was actually there. "There was variation," Jim said.

"Everyone underestimated feed in spring, but some producers were very good at assessing feed on offer in winter. Those who were not so good at assessing would benefit greatly from a simple assessment method."

Paul Omodei
E: paul@planfarm.com.au
Jim Shovelton
E: jshovelton@meridian-ag.com.au

decisions, and has made us consider pastures with a much greater diversity of species."

Results have shown that no single formula is suitable for measurements throughout the growing season. Specific formulas have been developed that support a higher accuracy of predictions for different species, regions and times of the year.

New Zealand's University of Canterbury HitLab has used the algorithms to develop a trial version of the smartphone app. The app contains a self-calibration process that enables producers to input their data to develop more relevant, farm-specific calibrations.

The app is being trialled at all sites except Hamilton in Victoria, where there are still issues marrying the sensor data and the physical pasture cut measurements.

"The technology has been very successful in the more Mediterranean pastures of Western Australia, with some of the results coming out of Victoria still a challenge," Mark said.

"We've now developed a laser sensor to work in combination with the GreenSeeker and we're hoping that will help improve the accuracy in some of the pastures that are proving more difficult."

In areas where the sensor is working well, Mark said a commercial version could be available in two years, if everything went to plan. Producers would then need to buy a sensor and download the smartphone app. Internet connectivity would not be necessary in the paddock as the app has been designed to run offline.

The four-year project began in 2014.

The Cooperative Research Centre for Spatial Information collaboratively solves complex problems of national significance for Australia and New Zealand through a focus on research infrastructure that delivers commercially applicable end-user outcomes.

How does an active optical sensor work and what does it measure?

Active optical sensors measure the light reflected from plants. Only specific wavelengths of light (infrared and visible red) are measured and these relate to the amount of green biomass on the ground.

A plot set up at Hamilton for biomass estimation.

Mark Trotter // T: 02 6773 2465
E: mtrotte3@une.edu.au

Going to ground in pasture measurement

Western Australia producers Brad (pictured left) and Tracy Wooldridge are no strangers to technology and were keen to be part of the MLA Feedbase Investment Plan project, which is testing a hand-held pasture biomass estimation device.

Brad and Tracy have used the Pastures from Space satellite remote sensing technology for more than 15 years. The technology allows them to measure and analyse pasture growth rates and feed on offer and plan their stocking rates accordingly.

The couple run a composite ewe flock and a cropping rotation of cereals, canola and legumes on 500ha at 'Warialda', Arthur River, about halfway between Perth and Albany in WA.

Brad said he was happy to become involved in the MLA-supported pasture biomass estimation project, testing the GreenSeeker® active optical sensor and mobile phone app on Warialda.

"I think this technology is very exciting and I see it as complementing the information I already get from Pastures from Space," Brad said.

"I use the GreenSeeker on the days when we can't get a satellite reading because of cloud cover, and I can use it to investigate variations in growth on the ground, when the satellite shows areas of high and low growth in a paddock.

"I can also use the sensor to more closely manage stock rotations and ground-truth my feed budget estimates. If I've had stock in a paddock for a couple of days, I can go in and get an impartial feed on offer reading with no emotion or guesswork involved."

The Wooldridges have been working with the Pastures from Space project since 2000 and their property was one of five in WA used to calibrate the first satellite.

Brad said the main pasture challenge he faced was rainfall variation.

"We're supposed to be a 450mm rainfall zone but this year we got 200mm and the long-term data show we get this low rainfall about one year in five," he said.

"Our strategy focuses on how to make money in the good years, how to recognise if it's going to be a good year, and how to recognise when a bad year is coming and respond quickly.

"We now have data that allow us to estimate within a fortnight of the season's first rain how much feed we're going to grow for the year - plus or minus a tonne in total dry matter production - and then we change our stocking rate accordingly."

Brad Wooldridge
E: btwool@esat.net.au

Snapshot

Brad and Tracy Wooldridge, Arthur River, WA.

Property: 500ha

Livestock: 2,000 ewes

Enterprise: Composite ewe flock, cropping rotation of cereals, canola and legumes

Pasture: Clover, ryegrass

Soil: Sandy loams and gravels

Rainfall: Average 450mm

Nutrition

Getting supplementation right

One of the most frustrating challenges for producers is figuring out which supplement is going to do the best job for their cattle.

by **Désirée Jackson**
Livestock Management and MLA's Nutrition Edge program presenter

And one of the biggest costs in running a northern cattle enterprise is the feed bill. Therefore, every time a supplementation program is implemented, it has to be a winner. Inappropriate supplements or insufficient intake of nutrients costs a lot of money in feed and worse, a loss of productivity.

Here are the factors to be considered in selecting a supplement or formulating a customized supplement.

1. What animals are being fed and why?

Establish the objective of the feeding program. Have a clear goal in mind and determine whether it is achievable by examining how the diet quality in the paddock matches the target animal nutrient requirements.

Do you need to:

- → hold condition
- → production feed for early turn-off
- → bring heifers to a joining weight, or
- → maintain breeders and heifers at optimum condition scores at calving to ensure they resume cycling soon after calving?

Focus on one paddock or group of animals at a time. Determine what their protein, energy and phosphorus requirements are as a starting point. These are the "big three" nutrients that are usually the first to become deficient.

Different classes of animals have vastly different requirements, depending on their weight, stage of growth or stage of productivity – one supplement is usually not appropriate for all animals. Couple this with land system and diet quality differences between paddocks and it complicates things further.

2. What is the pasture situation?

How much pasture is available? How long will it last and is a supplement being fed? The increased grazing pressure needs to be accounted for in the forage budget at the start of the dry season.

Firstly, we always need to make sure there is sufficient roughage available to the animal. Cattle are ruminants; roughage provides carbohydrates and some nitrogen which the rumen microbes convert to energy and microbial protein that the animal can use for their own maintenance or production. Without enough roughage in the diet, the rumen microbial population diminishes rapidly, which is extremely limiting to livestock production.

Disasters with supplementary feeding, such as urea poisoning, molasses toxicity, grain poisoning or ammonia poisoning, can happen when available pasture is low and cattle are struggling to consume enough roughage from the paddock, or if the diet quality is poor and cattle are starving for nutrients, particularly energy, causing them to gorge on available supplements.

3. Are there any endemic deficiencies in the paddock?

Are there nutrients, in particular minerals that are deficient in the diet all year round? The most common of these across northern Australia is phosphorus, but other minerals such as sulphur, salt, copper, cobalt and selenium, for example, have been identified in some regions. These nutrients must be supplied or the efficiency with which the cattle can utilise other nutrients is greatly diminished. However, it is important to ensure that trace elements are not over-supplemented as a deficiency can soon turn into a toxicity.

The effectiveness of supplementing minerals is greatly diminished if protein and energy are deficient in the diet.

4. What is the most limiting nutrient in the diet?

This is the nutrient that must be supplied first. For example, early in the dry season, protein is often the nutrient that becomes deficient first, followed by energy. In the wet season on P-deficient country, phosphorus is the most limiting nutrient.

The class of cattle that is fed will also influence which nutrient is most limiting, because of variable requirements so this must also be considered.

5. Balance of nutrients

There is often too much focus on balancing nutrients, or minerals in a supplement. The supplement provided must always be balanced with what the animals are receiving from the pasture. Care must be taken that nutrients in the supplement are balanced with the pasture nutrients to ensure that the target nutrients that are supplemented are fully absorbed. For example, where cattle are running on P-deficient country, if too much calcium is provided in the supplement, this can interfere with phosphorus absorption because on tropical grass pastures, calcium levels tend to be much higher than phosphorus levels. This can not only cause wasted dollars spent on supplementation but significant losses in productivity.

Another example where supplementation can be ineffective is when a urea-based lick is being supplemented, but energy is much more deficient in the diet relative to protein. This is why ongoing monitoring of diet quality is so important – because as the diet quality changes, the most limiting nutrient

in the diet will also change. This means that the supplement also must change over time to be the most effective.

6. Correct intake

This is probably the most difficult aspect of supplementation to monitor – due to multiple watering points and cattle being nomadic in the paddock or calves consuming lick put out for breeders, etc. However, it is critical that not only should the supplement contain adequate levels of the desired nutrients, but also that cattle are consuming enough. Just because a supplement contains phosphorus for example, does not mean that the cattle are consuming enough phosphorus. The lick may be too low in phosphorus or the consumption rate is too low. The lick may need to be modified to maybe increase the phosphorus level.

Sometimes lick intakes are too low but not because cattle don't require specific nutrients – they may just be too unpalatable. Where lick intakes are excessively high, this can be due either to lick palatability or a deficiency that hasn't been addressed. This commonly occurs with urea-based licks where consumption may become excessive because the diet has become energy-deficient because animal nutrient requirements have increased (eg. breeders start calving) or pasture has become low in quality and cattle start compensating by increasing lick consumption.

Ingredients such as salt and sulphate of ammonia are used to control lick intake. Care should be taken when using sulphate of ammonia that it does not cause overconsumption of sulphur or a nutritionally unsound low nitrogen:sulphur ratio in the diet.

Désirée Jackson
E: desireejackson@bigpond.com

Want to attend a Nutrition Edge workshop or organise one in your area? Go to: **www.mla.com.au/Extension-training-and-tools/EDGEnetwork**

Download MLA's free publication *Phosphorus management of beef cattle in northern Australia* at: **www.mla.com.au/News-and-resources/Publication-details?pubid=6024**

Nutritional know-how

Producer Glenn Walker (pictured below) believes understanding the nutritional needs of his livestock is essential to running an efficient, profitable business.

Snapshot

Glenn Walker and Sandi Middleton, Coonabarabran, NSW.

Property: 1,000ha

Enterprise: Self-replacing Brangus herd focused on weaner production; farm supplies business including manufacturing nutritional supplements; seed production

Livestock: 300 Brangus cows

Pasture: 75% introduced (Consul love grass, premier digit, yellow serradella, woolly pod vetch); 25% native

Soil: 30% clay loam; 70% sandy loam

Rainfall: 625mm

Glenn has always been interested in the most economic ways to achieve optimum weight gains in his livestock.

"It's why I've always fed supplements to my own cattle, based on our soil tests, it's the cheapest way of overcoming deficiencies," he said

"In later years, I started manufacturing custom commercial licks for others."

Traditionally Glenn and his wife, Sandi Middleton, have turned off feeder steers at 450kg at 18 months of age but have recently decided to change their approach.

"We're moving to selling off all our steer calves as 320kg weaners at 12 months which will give us more room for breeders or to further drought-proof ourselves by preserving feed," Glenn said.

As a commercial lick supplier, Glenn already had a good understanding of ruminant nutrition.

However, after reading a *Feedback* story by livestock nutritionist Désirée Jackson, he felt there was much more he could learn and achieve on his own farm.

"We run a multi-enterprise business, part of which is seed production," he said.

"This means our cattle are often grazing pastures past their optimum, cleaning up bulk, so I was very interested in how to optimise weight gains, particularly in view of our new target market - selling weaners.

"I was also hoping to lift our conception rate, through improved nutrition, from 94% to 97%, which is about as good as we can hope for."

Taking a lesson

So when the opportunity arose for Glenn's local Urabrible Landcare Group to host a three-day MLA Nutrition EDGE workshop, run by Désirée, he jumped at it.

"It was three, very intense days but we came away with a really good understanding of nutrition and feed budgeting," he said.

The group covered what supplements to feed, how to understand feed labels, how to save money on supplementary and drought feeding and how to make better management decisions for a range of seasonal conditions.

"The workshop had a great practical segment where we all went out into the field to learn feed budgeting and dry matter analysis of native and introduced pasture species," Glenn said.

"The last day was spent analysing various licks, loose, wet and blocks.

"We subjected many brands and claims to hard economic scrutiny, some of which fell far short of animal requirements.

"Besides the workshop covering the nutritional requirements of various classes of stock, we also covered how each class of stock impacted on the ecological and economic performance of the farms landscape given different scenarios and feeding regimes."

Glenn Walker
E: farmer.glen1@gmail.com

Read the earlier *Feedback* features by Désirée on cattle nutrition at: **www.mla.com.au/feedback**. See pages 10-11, June 2013 edition; pages 26-27 July, 2013 edition; and page 14, March 2014 edition.

Business management

Business growth through realignment

Andrew and Eve MacDougall with their children, Alice (2 years) and Edward (1 year).

Snapshot

Andrew and Eve MacDougall, Adelong, NSW.

Property: 1,200ha

Enterprise: Turning off feeder steers for the EU market and prime lambs

Livestock: 750 breeding cows

Pasture: Sub-clover, phalaris, perennial ryegrass with areas of red grass and weeping grass

Soil: Granite and basalt

Rainfall: 875mm

Andrew and Eve MacDougall wanted to lift the productivity and profitability of their property, 'Green Hills', near Adelong in NSW, without increasing labour requirements or having to rely on supplementary feeding.

Originally, their business was based on a Poll Hereford autumn-calving herd, turning off young cattle the following January as weaners.

However, a move towards cross-breeding and improved feed budgeting has allowed Andrew and Eve to increase stocking rates, improve pasture utilisation and target the premium EU feeder steer market.

Here are the steps they took to improve their business.

1. It starts with the timing

Andrew and Eve worked with MLA's More Beef from Pastures (MBfP) NSW State Coordinator John Francis, from Holmes Sackett, who highlighted the importance of matching feed demand and supply.

Further investigations revealed that in their area, peak pasture production was more reliable in spring than autumn. On this basis, it made more sense that the cows' peak requirements at calving and during early lactation would be better timed to coincide with spring, rather than the traditional calving period of autumn.

In addition, the EU market was identified as a potentially more profitable market for white-faced cattle than the standard mid-fed two market.

Spring calving would also be better suited to the EU feeder steer market than autumn calving, as it allowed steers to reach their optimum weight at a younger age.

While moving from autumn calving to spring calving required mating to be delayed for six months and involved a production loss, it did allow the calving period to be reset and more clearly defined.

The change to spring calving also allowed the MacDougalls to increase stocking rates by at least 20%, which they achieved by purchasing additional cows and turning off steers at higher weights than they had done under an autumn calving regime.

Andrew and Eve have implemented a tight six-week joining period starting in early November. Heifers and cows are pregnancy tested in February and any empties are sold, mostly as 'over-the-hook' sales.

2. Then the breeding

First-cross yearling weights have been dramatically improved by introducing Shorthorn genetics and hybrid vigour by crossing Shorthorn bulls to Poll Hereford cows, and vice versa.

The first-cross yearlings are 9% heavier than the purebreds at the same age and the females are about 5% more fertile.

This means cross-bred heifers achieve joining weights faster and the steer portion of the herd reaches marketable weights at a younger age.

The result of the improved traits, coupled with hybrid vigour and spring calving, has meant the MacDougalls can now turn-off steers at 14 months old and about 450kg liveweight into JBS Australia's mid-fed 1 grid for the EU market.

3. Now for pasture management

"As we have increased the breeding herd and are keeping steers for longer – 14–15 months rather than eight months – we needed to better utilise the pasture we have without having to rely on supplementary feed," Andrew said.

"Feed budgeting gives us more comfort in running these higher stocking rates."

The critical times for feed budgeting are from early spring until late autumn, which are the most important seasons for pasture and cattle growth.

According to Andrew, once late autumn comes, feed budgeting to target cattle growth is too late; however, this can be a critical time to sell aged or unsound cows if the stocking rate needs to be adjusted.

"If we can get cows through spring and summer at condition score four, we are prepared for them to lose one condition score and drop down to three, and we save on supplementary feed," Andrew said.

The MacDougalls prioritise grazing areas based on stock class, favouring better pastures for younger stock. For example, in mid-winter, pregnant cows are grazed in paddocks with the least amount of pasture, at about 1,000kg dry matter/hectare (DM/ha), while steers are provided with the highest pasture yields (up to 2,500kg DM/ha).

Most paddocks are about 30ha and the overall carrying capacity is 14 DSE/ha.

4. And at the same time...

Andrew and Eve have achieved higher stocking rates and improved profitability without significant capital expenditure other than the investment in additional breeding cows.

They have implemented the following strategies to improve production and efficiency:

- → installing a laneway to help move large mobs to and from the furthermost paddocks
- → applying single superphosphate fertiliser at rates of 80–250kg/ha annually, depending on pasture and soil types
- → yard-weaning calves in February.

5. Underpinning it all

The MacDougalls have been involved with the MBfP program since 2014 through their participation in the South West Slopes Adelong group.

Andrew said this involvement has helped them learn an enormous amount and, while not everything has been directly applicable to their enterprise, it has increased their capacity to think about other production and management strategies.

"I really appreciate that all of the information presented through MBfP is based on facts, and we are able to pick up the parts that most suit our business," Andrew said.

Andrew and Eve MacDougall
E: greenhillsherefords@bigpond.com

Learn more about MBfP at: **www.mla.com.au/mbfp**

John Francis // T: 02 6931 7110
E: john@holmessackett.com.au

Pasture management

Growing opportunities to cut fertiliser costs

French (aka pink) serradella, one of the stand-out pasture legume species. In pure stands in field experiments in the Yass district (NSW), this species yielded as well as subterranean clover, and did so at a lower soil test P level.

While global supplies of phosphorus from high-quality phosphate rock deposits are finite, demand for nutrients to support higher food production is rising. The challenge for Australian agriculture is to use phosphorus more efficiently to remain globally competitive.

Research focused on improving phosphorus efficiency – through better pasture species selection and identifying optimum phosphorus application rates – is showing promise for producers.

Dr Richard Simpson, from CSIRO Agriculture, is leading an MLA- and AWI-funded national project investigating alternative legumes that use significantly less phosphorus than subterranean clover, but produce similar yields.

Their findings have highlighted research and development opportunities that could create on-farm benefits and cost savings within the next five years.

"Globally, there is increasing demand for food," Richard said.

"The known high-grade rock phosphate reserves – from which fertiliser is made – are finite; estimates suggest there is about 300 to 400 years supply at the current rates of use.

"The global cost of phosphorus fertiliser has been rising and has doubled since 2000. Consequently, this research will have important implications for other continents such as Africa and South America where soils are also very phosphorus deficient.

"It is highly profitable to apply phosphorus fertiliser to Australian pastures to drive high production, but even best practice phosphorus management of legume-based pastures in Australia is technically inefficient."

Richard said beef and sheep pastures in southern Australia typically required 5–10kg of phosphorus to be applied as fertiliser to produce 1kg of phosphorus in animal products.

This is mainly the result of the high phosphorus-sorbing nature of most Australian soils, which causes them to accumulate phosphorus when they are fertilised.

Producers learn about research outcomes from CSIRO's Dr Richard Simpson at a field day at 'Werong' near Yass, NSW, in 2014.

Pasture and soil samples being collected at a field trial near Yass (October 2014) where phosphorus requirements of a range of alternative legumes and subterranean were under investigation. A stand of French serradella is in the immediate foreground.

"This is not all bad news," Richard said.

"Current 'inefficiency' represents a major opportunity to reduce the input costs of pasture production.

"We now have good evidence that improved efficiency can be captured using pasture legumes that yield well at lower soil test phosphorus concentrations."

Phosphorus-efficient pastures

The research team involves scientists from CSIRO, NSW Department of Primary Industries (DPI) and the University of Western Australia. They are hopeful more widely adapted serradellas could offer a real alternative for producers looking to cut fertiliser costs without sacrificing yields.

"We have field and laboratory evidence that shows serradellas can have comparable yields and will require substantially less phosphorus fertiliser than sub-terranean clovers," Richard said.

The reason is in the root system (see picture right).

"Serradellas have finer roots and longer root hairs than clovers," Richard said.

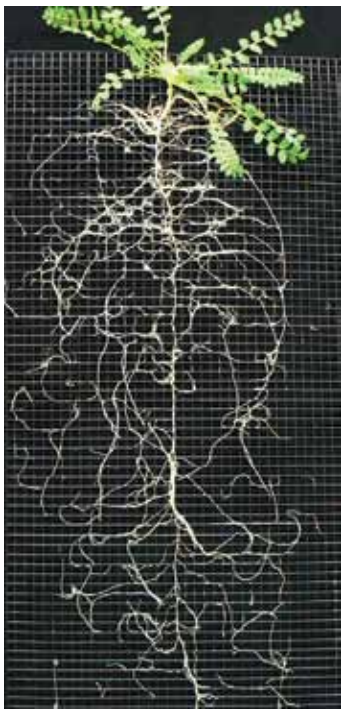
"They can explore the soil more efficiently and take up phosphorus more effectively at lower soil test concentrations.

"We now know what sort of root system we need in sub-clover to make it more phosphorus efficient, but it is still too early in our research to know whether breeding a more efficient cultivar will be feasible."

On the horizon

The more immediate option is to further investigate and trial serradellas.

NSW DPI's Graeme Sandral, who is leading the field trial component of the research, said French and yellow serradellas were already used in crop rotations in Western Australia and the NSW Riverina and in some permanent pastures.



"They are particularly suited to acid, sandy soils, but French serradella has also grown well in experiments on the Southern Tablelands of NSW," he said.

"We have an immediate opportunity to reduce phosphorus costs in the areas where serradella is already used; however, the next big question is how the serradellas will perform and persist in permanent pastures that are traditionally based on sub-clover.

"If we can find suitable cultivars and identify what attributes for seed survival are required, we could have potential to develop a lower-cost, high-yield pasture system that would be a serious alternative pasture option for producers."

Taking action now

Richard said there was plenty producers could do now to improve their phosphorus-use efficiency, with the bonus of reducing costs.

"Know the critical soil test phosphorus values of your soil-pasture system, use soil testing to guide fertiliser use and don't over-fertilise," he said.

"As part of the MLA-AWI national research project, we are benchmarking the critical phosphorus requirements of a range of legumes so that the phosphorus fertility of pastures based on those legumes can be better managed."

Dr Richard Simpson
T: 02 6246 5364
E: richard.simpson@csiro.au

Graeme Sandral
T: 02 6938 1807
E: graeme.sandral@industry.nsw.gov.au

Tools and resources

- Read *Five Easy Steps* to help you make money from superphosphate at **www.mla.com.au/fiveeasysteps**
- *Better Fertiliser Decisions* at **www.asris.csiro.au/downloads/BFD/Making Better Fertiliser Decisions for Grazed Pastures in Australia.pdf**

Biosecurity

Bio beware

Snapshot

Geoff Power, Orroroo, SA.

Property: 5,240ha

Enterprise: Merino sheep and crop growing – rotation wheat, barley, vetch

Livestock: Joins annually 1,900 ewes and 900 ewe hoggets

Pasture: Native clovers, spear grass, bluebush and bindi

Soil: Sandy loam to heavy clay-based flats

Rainfall: 250-400mm

Actively working with his neighbours on biosecurity has come close to eradicating a costly lice problem for Geoff Power of South Australia.

Geoff runs a self-replacing Merino flock east of Orooroo in South Australia's rangelands 270km north of Adelaide, as well as a cropping property near Jamestown.

Some years ago, he and his neighbours were suffering from a bad lice problem that Geoff believed was costing him up to 10% of his clip while impacting on the wellbeing of his livestock.

"Biosecurity has always been important to our operation because it's about profitability, productivity and the wellbeing of our sheep. Working with our neighbours to get a proactive plan in place to tackle lice was a logical next step," Geoff said.

"First you have to create the relationships. We held a meeting and we put our heads together to work out a strategy to solve our problem. We all agreed to shear at about the same time each year and we put a gentleman's agreement in place about maintaining fencing.

"We no longer just return neighbour's sheep straight over the fence. Now if we find stray sheep we put them in a yard so the owner can come and pick them up. He can then use a dip on them and keep them isolated to make sure there is no risk to his mob.

"Since we have been doing this we haven't eliminated the problem but we are really on top of it."

Geoff also uses a crutching trailer and portable yards to avoid moving mobs of sheep over long distances through the property, to avoid picking up stray sheep and to isolate each mob within the property.

He believes building relationships and having biosecurity strategies in place between neighbours is a good first step in building awareness of the importance of biosecurity.

"I became interested in biosecurity because I have been in advocacy roles with the South Australian Farmers Federation and Livestock SA for the past 15 years and I have seen a lot of gaps in biosecurity right throughout our system," he said.

"I recently had the opportunity to go on a study trip to Nepal and saw the effects of foot and mouth disease there and it really drove home for me the importance of having good biosecurity on farm.

"My advice to other people in this situation is to be proactive rather than reactive. Talk to your neighbours; don't be frightened to let your neighbours know if you've got a problem. These things will occur, so you're better off to sit down with your neighbours and nut out a strategy to actually become proactive about a problem."

Watch Geoff explain how working with neighbours has reduced the lice problem on his farm: **www.lbn.org.au/2015/11/02/working-with-neighbours-is-key-to-combatting-lice/**

Geoff Power
E: sambasbb@dodo.com.au

Market compliance

Seeing red

The MSA cattle producer

Good food is a vital ingredient at a memorable wedding, but the tasty beef at James and Sarah Bjorksten's reception was the start of something much bigger for the NSW producers.

Snapshot

James and Sarah Bjorksten, Yeoval and Cumnock, NSW.

Property: 4,000ha owned, 750ha leased

Enterprise: Beef breeding, cattle trading and Hereford Red Beef brand

Livestock: 1,100–1,200 breeders, 500–1,000 trade steers

Pasture: Improved temperate and sub-tropical species

Soil: Granite and sandy loam

Rainfall: 650mm

Top right: James Bjorksten with Hereford cattle. Image courtesy of The Land.

The enthusiastic response from friends and family to the home-grown scotch fillet on their wedding menu in 2010 inspired James to develop a beef brand of their own.

The Bjorkstens launched Hereford Red Beef in 2011 and have expanded the Meat Standards Australia brand to supply restaurants and caterers in the central west, feed loyal locals at the Orange farmers' markets and even feature at a Sydney restaurant.

Sarah, James and his parents, Ian and Jenny, run the breeding herd Wandong Herefords at their 3,000ha home property, 'Wandoo Wandong', at Yeoval, and are assisted by John and Natalie Cox.

About 350–400 steers are selected for the brand each year and remain at this property, in keeping with Hereford Red Beef's selling point of home-grown, fully traceable, low-stress cattle.

"Natural, pasture-fed, MSA beef produced by a third-generation farming family is important to our brand," James said.

"We require our restaurant and retail partners to identify our beef on the menu and on the shelf."

In 2013, the family purchased 1,000ha and leased a further 750ha at nearby Cumnock to spread seasonal risk, secure brand supply and create enterprise flexibility. Here, they run heifers, surplus Wandong steers and 500–1,000 trade steers.

Systems

James brought his background as an agronomist and animal nutritionist to the business, providing a strong focus on pastures nutrition, which complements Ian's livestock and management experience.

"We used to only get five to seven years out of our pastures, so we changed the grazing program to focus on permanency of our 'shotgun' pasture mix with 14 or 15 different varieties," James said.

"This allows us to graze pastures year round according to species and maturity."

Herbs such as chicory and plantain dominate young pastures and are used to finish steers. As pastures age and grass species become dominate, they are grazed by cows and calves.

The Bjorkstens implement a strict rotational grazing system, which maintains ground cover and supports their belief that the secret to good meat is a rising plane of nutrition, so cattle never have a nutritional set-back.

James said regular assessment of pasture conditions and animal signals determined paddock rotations.

Adequate nutrition is an important ingredient for MSA compliance, as is low-stress management. At Wandoo Wandong, this begins at weaning.

The Bjorkstens yard wean for five days and walk through calves daily to create a positive association with people and yards and establish flight zones.

Weaners are run in the same social group for six weeks to avoid stress from separation. After animal health treatments (such as 5-in-1 to prevent pulpy kidney from grazing high quality pastures), steers and heifers are separated and directed to the relevant property.

The environment is another important factor in securing a consistent turnoff, and the family leveraged their even rainfall and mild summer/winter temperatures to move from an autumn and spring calving to three calvings a year (winter, autumn and spring) for even supply into the brand.

Processing

Steers destined for Hereford Red are turned off at 16–19 months at an average of 335kg dressed weight, direct to Bindaree Beef at Inverell.

The family achieves 96.5% MSA compliance and, on average, their brand sits in the top 5% of national

Watch James's presentation at MLA's AGM Producer Forum **www.mla.com.au/agm2015**

Hereford Red – behind the logo

James Bjorksten designed the Hereford Red Beef logo to reflect his production philosophies. It features:

- 'Hereford', to champion the Hereford breed
- The colour red, to represent passion for their cattle and their beef
- Clover, to connect with natural, pasture-raised and finished beef

herd for eating quality based on the MSA Index.

"Compliance is important economically, as it means fewer cattle are discounted during processing," he said.

"MSA compliance is also important for consistent supply for Hereford Red. Every animal we direct into the brand is MSA graded, as it underpins our brand quality and means we can sell our beef with confidence."

Strong supply chain relationships also underpin the brand. James works closely with Bindaree Beef to oversee each kill and boning, and has taken food service customers to Wandoo Wandong to showcase production systems.

James said his five-year plan included expanding landholdings to spread climatic risk, fine-tuning their breeding program to focus on eating quality, utilising more cuts off each beast by targeting innovative outlets, and exploring export opportunities.

James Bjorksten
E: james@herefordredbeef.com.au
www.herefordredbeef.com.au

Make mine MSA

When Roman Tepes wanted to know more about the steaks being served in the restaurant chain he oversees, he decided to learn more about every step in the supply chain, which included visiting a feedlot earlier this year and spending more time in the cool room.

Roman is the chief of operations for Rashay's, a chain of 11 restaurants and three food court outlets across NSW (with plans for another four to open by early 2016), which serves around 35,000 diners a week and now sells about 100,000 Meat Standards Australia (MSA) steaks a year. Founded in 1998, the restaurants have an average seating capacity of 200 people.

Rashay's switched to buying MSA-graded meat around three years ago in a quest for guaranteed eating quality, but initially experienced problems with inconsistency.

"We didn't really understand the MSA ageing process, so we were buying meat that should have been aged for 28 days and serving it at 14 or 21 days, well before the optimal time of eating," Roman said.

Roman dug deeper and contacted MSA in February 2015 to find out more about the grading systems and how to leverage them to deliver a better dining experience.

Since then, all Rashay's stores have become MSA licensed, all store managers are trained to improve their product knowledge, and staff have access to e-learning programs to better understand MSA systems and attributes.

Roman has also developed stronger relationships with members of his supply chain. He uses Australian Agricultural Company (AACo) beef and his supplier holds MSA product until the optimal time of eating, to free up restaurant refrigeration space.

"I'm passionate about the whole fresh produce supply chain and where food comes from," Roman said.

This food philosophy underpinned his visit in May – along with Rashay's owner Rami Ykmour – to AACo's Goonoo feedlot at Comet, Queensland, to better understand the paddock-to-plate experience.

"It was an amazing experience to meet the people on the land and see how they treat the cattle," Roman said.

The company has invested in custom-made automatic conveyer chargrills in all restaurants and only serves sirloins (180g and 300g), to reduce cooking variation.

Rashay's serves five MSA steaks, such as a 120-day grain-fed 300g New York cut with Rashay's signature creamy mushroom sauce. Steaks are promoted as MSA-certified on the menu and identified by steak stabbers that describe the 'degree of doneness' along with the message 'eating quality excellence'.

"Systems are important to our business, so it gives us confidence to use MSA, which is also backed by strong systems that underpin the product quality," Roman said.

Roman Tepes
E: roman@rashays.com
www.rashays.com

The MSA-licensed restaurant chain

Rashay's owner Rami Ykmour (right) during a visit to the AACo Goonoo feedlot at Comet in Queensland with an AACo employee. Image courtesy of Roman Tepes.

Hello, China

Urban Chinese consumers love beef – and Australian beef gets a big mention. That was the key finding from MLA's annual consumer survey conducted in four major Chinese cities in 2015.

Chinese consumers gave beef the top rating among all meat proteins for offering the highest nutritional value, and considered it an "essential part of a healthy diet for growing children". It also rated highest on being "my favourite meat" and "is the most superior meat".

According to MLA's General Manager International Markets, Michael Finucan, the survey provided a high-level snapshot of how beef was perceived in China compared to other proteins, and how Australian beef stacked up against competitor countries' products.

"When asked to think of the country of origin of beef available to them, 55% of those surveyed spontaneously thought of Australian beef, an increase of 6% compared with 2014," Michael said.

Almost half (49%) said they ate Australian beef in the past year, with 20% saying they chose to eat it "most often" – 5% more than in 2014.

While local Chinese beef continued to be rated higher for price and freshness, Australian beef was the most strongly associated with "delicious taste", "consistent quality standards", "am willing to pay a bit more for", is "guaranteed safe to eat" and is "the most superior beef".

Serving it fresh

Michael said 10 Australian chilled beef plants were approved to export product to China in 2014, which should help improve perceptions of freshness of Australian product.

"Market access is still our number one challenge in the Chinese market," he said.

"At this stage, we have 44 Australian plants approved to export beef to China, but only 10 are chilled plants, so the majority of the product is still frozen.

Segmenting the market

While Australian beef was seen as expensive, Michael said this was consistent with its reputation for safety and quality, and these attributes would be crucial in driving refinement of marketing strategies in the future.

"In the past, we have talked about China's 'middle class' but, while that group has about 300 million people, many of them wouldn't be able to afford our product," he said.

"The survey highlighted the fact that we need to further segment that market and target the more affluent, upper-middle-class consumers living in major cities."

Keeping the supply chain flowing

For now, though, MLA's major role in the very new Chinese beef market is a more hands-on one.

"The Chinese beef market shot up in 2013 with a growing demand for imported beef on the back of local food safety concerns. It's now a stable market taking about 148,000 tonnes of Australian beef per year," Michael said.

"At the moment, our main focus is still getting the product through the supply chain to the retail shelf, providing education on cold chain and product management, and working with end users such as chefs and retailers on how to present and prepare the meat."

Michael Finucan, MLA
E: mfinucan@mla.com.au

Fast facts

- MLA's first annual consumer survey of Chinese consumers was in 2013.
- For the 2015 survey, 1,020 18–64-year-old residents of Shanghai, Beijing, Guangzhou and Shenzhen were interviewed.
- Interviewees were the main grocery buyers for their households, with 84% living in upper-income households, earning 100,000+ Yuan (A$22,200+) per year.

Associations with beef by country of origin (2015)

- Australian beef is strongly associated with important dimensions such as safety, quality and taste,which are also very important in this market.
- Local Chinese beef is associated with freshness, cheapness and versatility.

Highest endorsement
Lowest endorsement
★ Top 3 most important attributes

	Local Chinese beef	Australian beef	New Zealand beef	Canadian beef	Japanese beef	Argentinian beef
	%	%	%	%	%	%
★ Tastes delicious	35	49	43	27	38	26
Consistent quality standards	29	48	42	30	35	28
I am willing to pay a bit more for this beef	23	47	40	24	29	23
Can be used in many different meals	48	46	39	36	34	33
★ Guaranteed safe to eat	29	46	42	29	33	23
Is the most superior beef	20	46	41	19	36	21
Is becoming more popular	27	45	40	27	29	24
Is my favourite beef	35	43	33	19	29	21
★ Low in fat	31	40	34	26	32	25
Freshness	50	36	36	24	26	24
The industry is environmentally sustainable	26	34	35	25	23	20
The animal is well-cared for	20	34	30	23	23	20
Cheaper	63	14	12	13	13	15

Sample size: 512
Question: *"Here are some things which people have said about beef. We would like to know which of the following statements apply to beef from different countries of origin. You may mention as many or as few countries of origin as you wish."*
Research conducted for MLA by Millward Brown.

In profile

Craig Willis // *Cook, Shanghai, China*

Born in Scone, NSW, raised in Kyogle and Casino and trained in Sydney – and while having cooked at iconic Australian restaurants including Bilson's at Circular Quay, Bennelong at the Sydney Opera House and The Summit in Australia Square – Craig Willis considers himself a knockabout Aussie cook.

Craig has taken his enthusiasm for cooking to China, where he now has five restaurants and shares his passion for Australian food, particularly Australian beef and lamb.

How did you end up working in Shanghai?
My first Shanghai job was in 2000, at M on the Bund. I worked for Michelle Garnaut, who was the first person to open a high-quality, western-style restaurant on the Bund.

After working at M I returned to Australia, but I really missed the excitement and opportunities that Shanghai had to offer. I returned in 2005 to join Wagas, an Australian/Danish coffee shop. At that time, there were two stores; now there are more than 30 Wagas stores and they also have 11 Baker & Spice bakeries.

In 2009, we opened the Mr Willis restaurant. My team now manages five restaurants: Mr Willis, Henkes, Bang and two La Strada pizzerias. Our next restaurant will be called Butch and will have a heavy accent on beef.

What type of food are you serving and how do you use beef and lamb?
We serve rustic, honest, Mediterranean/Australian, bistro-style food, with a focus on roasted meats, grilled seafood and loads of vegetables.

In our restaurants we serve a range of steaks, and 800g rib-eye, 500g T-bone and Wagyu flank are very popular. Lamb rack, leg and rump are great sellers, too.

I love to grill meat – the simplicity lets the flavour stand out and I love the barbecue flavour. In winter, we often have a braised dish, such as beef cheek or lamb shanks.

How do Chinese diners perceive Australian products, particularly beef and lamb?
Australian beef and lamb are recognised for their high quality and sell very well. Australia is seen to have a clean environment and to be a trustworthy producer of beef and lamb. China does not have comparable products, although there are improvements being made all the time.

How do you market your Australian cuisine?
Our primary marketing is word of mouth, so we work hard to be consistent in quality and value and, of course, we always label our beef as Australian.

What have you learned about running a business in China?
It involves many steps and rules, just like in Australia. If you follow those steps and work within the rules, you can succeed. Chinese culture is very different to western culture; if you begin with that understanding, you are more likely to succeed.

Do you need to speak the language?
I learnt Mandarin on the job, so I can only speak enough to make trouble. I run the restaurant and the kitchen mostly in Mandarin and talk to builders about jobs but, as far as conversational Chinese goes, I'm far behind where I should be. Most young Chinese now speak English and really want to use it.

What are the food trends in Shanghai?
Just as in Sydney, London and New York, there are two main trends: the traditional, rustic cooking style and the more science-based, multi-sensory, Heston Blumenthal style.

Personally, I prefer the former – food that fills the stomach – and it works well in an international city like Shanghai, where our customers come from many different countries but are not necessarily 'fine diners'.

What is your involvement with MLA?
At present, we source most of our beef from Barcoo Beef, which is processed at Casino, so I came up with the idea for a 'Beef Week at Bang', promoting both our restaurant and Australian beef. I hope to make it an annual event and perhaps expand it across all of our restaurants.

We promoted a special menu, offering eight different beef cuts cooked in different ways across a range of prices to suit our range of customers. We decorated the restaurant with images from Casino Beef Week and cattle prize ribbons, and the waiters wore check shirts – unfortunately I could not find any hay bales!

MLA's focus in China is on retail promotion, but they were really supportive of the event providing marketing materials for the night and MLA staff were on hand to talk Australian beef and lamb with the guests which included media personalities, butchers, importers and diplomatic staff.

I hadn't met the MLA staff on the ground in China before, so this was a good opportunity. I've been here for 15 years and have a pretty good reputation now, so I'm happy to support MLA in representing the Australian meat industry in Shanghai.

Beer-braised beef shank with parsley salad – one of the dishes served during the Beef Week at Bang promotion.

Craig Willis
E: craig@mrwillis.com.cn

Trade marketing turning 'intent' into sales

Australian shoppers represent the largest single market for Australian beef and sheepmeat, and the MLA domestic trade marketing team's goal is to increase local sales.

National Accounts Manager Garry McAlister said the core premise of trade marketing was to "connect the dots" between MLA's domestic, consumer-focused brand campaigns and the product at the point of purchase.

"The consumer brand campaigns are designed to create awareness, desirability and intent to purchase," Garry said.

Here Garry explains how the trade marketing team works closely with major quick service restaurant (QSR) chains, butchers, supermarkets and national foodservice accounts to convert intent into sales by focusing on four tasks:

1. Working with retailers to activate campaign point-of-sale (POS)
This ensures our product messages are communicated to their shoppers through a variety of means, including catalogues, recipe cards, pack stickers and shelf wobblers. These POS materials remind people about brand campaigns at key times of the year, such as when our 'spring lamb' campaign is under way.

For example, the weekly catalogues of the two major supermarket chains are viewed by about seven million people a week, so we work hard to influence those. They are an incredibly influential tool as to where people will shop and what they will buy on a weekly basis.

2. Providing new product innovation ideas and inspiration
Ideas based on new cut and cook methods, or new recipe ideas we've seen trending overseas, are pitched to major QSR chains and retailers including Oporto.

MLA's international offices keep us up to date with what's trending in places such as Europe, North America, Japan and Korea. These trends eventually influence what and how Australian consumers will be eating.

One area we're focusing on this year is 'snacking', which is the largest growth area in global QSR. We have pitched a couple of product concepts to QSR chains based on the global growth in snacking.

3. Assisting individual retailers and brand owners to launch new products
If we give retailers an idea for a new product, or they come up with a product themselves, we can help them develop POS material. We also collaborate with brand owners to launch new products, and that's often done through MLA's CoMarketing Program (see page 29 in the November/December 2015 issue of *Feedback*).

4. Coordinating the rollout of supply chain projects
These projects aim to improve the competitiveness of beef and lamb by either improving quality or reducing costs along the supply chain. The rollout of Meat Standards Australia at Woolworths in 2012 was an example of a supply chain project.

Garry McAlister, MLA // T: 0411 680 500
E: gmcalister@mla.com.au

Talking lamb with Red Rooster

MLA's foodservice trade team meets at least once a year with product development teams from the major national quick service restaurants (QSR), presenting beef and lamb product concepts designed to keep Australian red meat strongly positioned on their menus.

The concepts are based on international and local food trends and the changing needs of Australian consumers.

MLA presented product concepts, including a lamb souvlaki and cabbage coleslaw, to the product development chef at Oporto, the sister company of Red Rooster, in late 2014.

MLA's business manager for foodservice, Sam Burke, said the concepts were developed after an initial meeting with the Oporto/Red Rooster chef, during which a number of product ideas were discussed.

"We also took a look at their production processes to ensure our ideas could be replicated through their kitchen facilities," Sam said.

"We then came up with some menu solutions and invited the Oporto/Red Rooster chef to our corporate kitchen at North Sydney to take a look.

"They took the concepts away, tweaked and perfected them, and – lo and behold – in July this year we saw the inclusion of lamb on the menu at Red Rooster."

***Feedback* caught up with Red Rooster CEO Chris Green to find out how the lamb menu addition went:**

Why did Red Rooster decide to add lamb to the menu? We are always looking how we can add variety to the menu for our loyal customers. Our Aussie Lamb promotion featured lamb shanks with mash, peas and gravy which was a great for dinner, and for lunch we had the lamb roll which was more lunch orientated and drive-thru friendly. We are lucky that we have a unique oven cooking platform that gives us many more options than traditional QSR for menu innovation.

What was the response from customers? Unbelievable. We had our busiest quarter in recent history. They loved that we were doing something different and uniquely Australian.

How long did the promotion run for? Our Aussie Lamb campaign ran over winter for 12 weeks starting 1 July.

Would you consider adding beef or lamb to the menu again? Yes. Lamb is definitely a great addition as a limited time offer a couple of times a year.

Sam Burke, MLA // T: 0413 150 808
E: sburke@mla.com.au

www.redrooster.com.au

In profile

Sam Burke // *Red meat innovator*

If Sam Burke's (pictured below) role with MLA could be summed up in a few words, they would be "trying to keep a step ahead of the trend". As MLA's business manager for foodservice and also its corporate chef, Sam works to match the latest food trends with creations for beef, lamb and goatmeat.

With 20 years in the foodservice sector, including eight years as food development manager with Australia's largest catering company, Spotless, Sam joined MLA in 2014, initially as a product development chef.

Here we learn more about Sam and his work.

What does your role involve?
Marketing Australian beef, lamb, veal and goatmeat to all touchpoints in foodservice, including cafes, catering companies, aged-care facilities, pubs, clubs, restaurants and casual dining restaurants, and working with them on ideas for menu innovation and product placement in their businesses.

I provide master classes and immersion sessions for chefs and foodservice professionals and participate in foodservice trade and industry shows.

I also work on product development with quick service restaurants and foodservice companies to promote our proteins. For example, when a condiments manufacturer is promoting their products to foodservice, I will develop red meat dishes with their product development teams to accompany those condiments.

My role as MLA corporate chef involves being the chef ambassador to producers, peak industry councils and consumers; providing internal MLA training; and acting as an Australian red meat global ambassador for our international offices, working with their local chefs and wholesalers.

MLA's Foodservice Business Manager, Sam Burke.

It also means I sometimes find myself in charge of catering for visiting dignitaries at Australian embassies overseas.

How do you educate the foodservice industry about beef and lamb?
With increased pressure from rising domestic prices, we educate chefs on how to use non-loin cuts. We want chefs to be confident with the protein, get a great result for their customers and also achieve their desired cost of goods, so they can keep our meats on the menu.

What trends are you noticing with beef and lamb?
We're starting to see a trend in snacking. People are increasingly health conscious and, rather than having three big meals a day, they are having more frequent, smaller meals.

How do you come up with product concepts?
Every night I research different food websites around the world. I subscribe to email newsletters and trade publications, get out in the marketplace to see what cafes and restaurants are doing, and go to trade shows.

I also talk to chefs in all different market segments each week – both young and experienced – about what they're doing. You have to be entrenched in their businesses to understand how best to help them with red meat innovation.

How do you like to eat beef and lamb?
I'm a big fella – 115kg – so I reinvest a lot of my salary back into meat. I love a big steak and one of my favourites is the sirloin.

To be honest though, I love all the different cuts and one of the great things about my role is that I have learned so much about all of the animal – all the primal and non-primal cuts – and how to best help people in my industry use them with success.

Sam Burke, MLA
T: 0413 150 808
E: sburke@mla.com.au

Sam's tips on his favourite cut:

- Sirloin steaks are sometimes called porterhouse or New York steaks. An all-time favourite, sirloin steaks have a fine, yet firm texture and are rich in flavour.
- Best beef cuts for barbecuing: fillet/tenderloin, rib eye/scotch fillet, sirloin/porterhouse/New York, T-bone, rump.
- Lightly oil the steaks and not the barbecue. Do this and your steaks won't stick, and you won't have the problem of the oil burning as the steaks cook, or flare-ups on the barbecue. It also helps the steaks to colour well, and that in turn adds to the flavour.

See page 34 for some sirloin inspiration for your summer dining. →

Recipe

Serving up sirloin

Barbecued steaks with peppercorn and herb seasoning

Serves: 4
Preparation time: 5 minutes
Cooking time: 10 minutes

Ingredients

4 sirloin or T-bone steaks

1 tbsp olive oil

1 tbsp dried Italian herb mix or dried oregano

1 tbsp green peppercorns, drained, crushed

1 cloves garlic, crushed

Method

1. Season the steaks with the combined oil, oregano, peppercorns and garlic, and a little sea salt and freshly ground pepper. Preheat the barbecue char-grill to hot before adding the steaks.
2. Cook on one side until the first sign of moisture appears. Turn steaks once only. Test the steaks for degree of doneness with tongs. Rare is soft, medium feels springy and well done is very firm.
3. Remove steaks from heat, loosely cover with foil and rest steaks for two to four minutes before serving. Serve the steaks with your favourite salad or vegetables.

Grilled sirloin, quinoa and pistachio salad

Serves: 4
Preparation time: 10 minutes
Cooking time: 4 minutes

Ingredients

600g sirloin steak, trimmed

2 tsp smoky barbeque seasoning

2 cups cooked quinoa

½ cup mint leaves

1 cup flat-leaf parsley leaves

2 tbsp pistachio nuts, roughly chopped

1½ tbsp lemon juice, plus zest of one lemon

2 tbsp olive oil

Dressed watercress or salad greens, to serve

Method

1. Preheat a ridged chargrill or barbeque to moderately high. Brush the steaks with some olive oil and rub well with the barbeque seasoning. Cook for 2 minutes on each side or until cooked to your liking. Set aside to rest on a plate for 5 minutes, covering loosely with foil.
2. Mix the quinoa with the herbs, nuts, lemon juice, zest and olive oil and season with salt and pepper. Slice the steaks and serve with the quinoa and some dressed watercress or greens.

Around the globe

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

1 INDONESIA

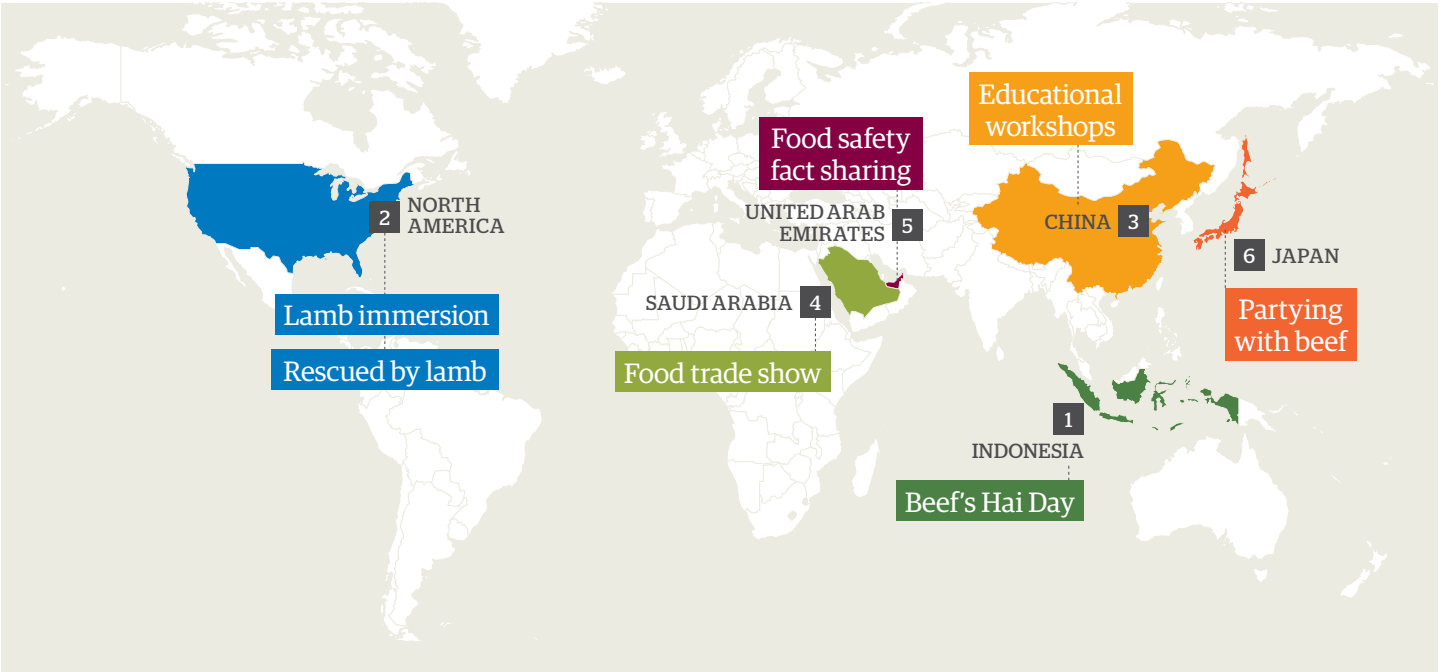
Beef introduction

More than 60,000 teenagers from across Jakarta were exposed to 'True Aussie' beef at the Hai Day event. Supported by MLA, this event was based on the concept of 'Youth Collaboration'. MLA, together with Meat Me Meat Shop, introduced 'True Aussie' beef through samples of 100% 'True Aussie' beef homemade sausage. There were rave responses, with the event going viral through Instagram postings with the hashtags: #TrueAussieBeef #steakhour #HaiDay.

2 NORTH AMERICA

Inspiring chefs

Significant leads have emerged for grassfed beef and lamb with a regional retail chain, two universities and a regional foodservice chain after MLA North America hosted 16 leading chefs at a one-day culinary educational immersion at the Johnson & Wales Culinary School in Providence, Rhode Island. The immersion formed a part of the broader Aussie Lamb 'Winter Wonderlamb' campaign in the Boston/New England region.



Information from a recent DataEssential study, funded by MLA, showed lamb's presence continues to grow steadily with a presence of 20% on menus from 100,000 restaurants monitored in the US.

20%
of menus from 100,000 restaurants monitored in the US now feature lamb

Saved by lamb

Thousands of entries were received in the Aussie Lamb Rescue Me competition, which targeted US consumers in the busy turkey-focused thanksgiving period by explaining how lamb provided impressive meal solutions with minimal stress. The prize was a chef-catered holiday dinner party for up to 10 people.

The campaign was run on a Massachusetts local television network program called The Dining Playbook. Supporting the competition was www.aussielambrescueme.com, which includes recipes and cooking demonstration videos.

3 CHINA

Upskilled on lamb and beef

All 100% of the 221 people representing 115 companies who participated in recent MLA beef and lamb educational workshops in either Beijing, Shanghai or Shenzhen reported the training as worthwhile and said they would like to do more.

The workshops aimed to educate purchasers and people selling lamb and beef in the trade, food service and retail sectors on systems, grading, cut utilisation and proper handling of chilled and frozen products.

4 SAUDI ARABIA

Putting on a show

More than 20,000 visitors were exposed to Australian beef and lamb when MLA hosted a stand, along with three Australian exporters at HORECA KSA, the premier food trade show in Saudi Arabia. A highlight of the event was Salon Culinaire, where 100 chefs competed in 19 categories, which included the MLA-sponsored beef and lamb categories.

A showcase beef and lamb dinner was also hosted by MLA for 55 guests representing government, trade and foodservice at the Australian Ambassador's residence during the event.

20,000
visitors attend Saudi Arabian trade show

5 UNITED ARAB EMIRATES

Safety talk

Australia's beef and lamb industry has engaged directly with Dubai's food safety industry, including policy makers, regulators and academics, by sponsoring and giving presentations at the 10th Dubai International Food Safety Conference.

Food safety expert Ian Jenson from MLA and Dr Rob Williams from the Australian Meat Processor Corporation spoke on shelf life, eating quality and red meat production systems and were two of more than 200 presenters talking to the 2,000 delegates.

6 JAPAN

Celebrating with Aussie beef

An online and media campaign by MLA encouraging Japanese consumers to 'Let's Party with Aussie Beef' by using beef dishes in Christmas and New Year party menus was a success. The campaign led an additional 30,000 users to the Japan office's Aussie beef recipe website. The campaign involved point-of-sale promotions and advertising on public transport.

Cattle and sheep projections

The road ahead

The future for Australia's cattle and sheep industries continues to look bright, with MLA forecasts predicting continued strong demand and production gains into 2016. Here MLA's Manager of Market Information Ben Thomas gives an insight into 2016.

Sheep

The 2016 sheep and lamb projections highlight the ongoing productivity improvements in the Australian sheepmeat industry.

Flock: The national sheep flock appears to have stabilised at approximately 70 million head, with a breeding base of 40 million ewes. From these ewes the number of lambs slaughtered each year has been increasing, and through improved lifetime management, average carcase weights continue to rise. This was particularly evident in 2015, when, despite many of the large sheep producing regions enduring 'below average' rainfall for the majority of the year, average carcase weights increased across the country.

Production: The post-drought decline in national lamb slaughter forecast in 2016 is only expected to be small (down 3.4% year-on-year to 21.5 million head), and the fall in lamb production even more modest (down 2.2% year-on-year to 482,000 tonnes carcase weight (cwt) due to further increases in average lamb carcase weights.

On-farm productivity: Improvements in lamb marking rates (Figure 1) and small gains in average carcase weights are expected to drive lamb production forward from 2017 onwards - to reach 552,000 tonnes cwt in 2019.

Factors impacting sheep markets in 2016 include:

- → lower than expected impact of drought and fall in lamb production
- → longer term gains through increased weaning rates and improved weight gains
- → favourable international trading conditions.

Demand: The demand for Australian lamb in 2016 will continue to be heavily influenced by international customers, with the A$ tipped to hover below the US70¢ mark, which will assist trade and Australian lamb prices considerably. That is not to discredit the domestic market, where per capita consumption is forecast to hold steady at 9kg and remain the largest lamb market on both a value and volume basis.

Prices: Nationally, the past three years have seen a small reduction in the volatility in Australian lamb prices, with the most noticeable improvement being the typical October/November low, which has been finding a higher level each year since 2012 (Figure 2) - the national trade lamb indicator has ranged between 500-600¢/kg cwt for the majority of 2015, rather than 400-600¢/kg cwt which occurred in the two years prior. Considering the forecast lower New Zealand lamb production and exports, combined with the anticipated lower $A, the higher 2015 trade lamb price trend may occur again next year.

Cattle

The cattle industry saw a phenomenal year in 2015, with record high cattle prices at a time of record sell-off - two records that are rarely in the same sentence. While prices across the board kept getting higher (the EYCI reached 600¢ in January 2016), and producers capitalised on the continuous increases, marring the news was the ongoing, widespread drought across large swathes of the key cattle producing regions of Australia.

The herd: The result of two consecutive years with adult cattle turn-off exceeding 10 million head will have a significant impact on the size of the Australian cattle herd, and the availability of cattle from 2016 onwards.

Availability: Adult cattle slaughter in 2016 is forecast to decline 16% year-on-year, to 7.6 million head (Figure 3). However, offsetting this decline will be a rise in average carcase weights (Figure 4), assuming a greater proportion of light cattle will be live exported, a greater proportion of cattle on feed, lower stocking rates and lower female kills. Therefore, beef production is forecast to fall less significantly (13%) than slaughter, to 2.2 million tonnes cwt.

Factors impacting cattle markets in 2016 include:

- → the high turn-off of 2014 and 2015
- → declining adult cattle numbers
- → favourable international trading conditions.

Demand: Australia is anticipated to remain the largest market on a value and volume basis, yet a modest fall in per capita consumption is predicted in 2016, to 27.5kg/capita.

Global pull: Exports will account for 70% of production, and sit above 1 million tonnes swt, with the traditional markets of the US, Japan and Korea, along with the emerging powerhouse of China, likely to take the majority of shipments. Live export demand will also play an influential role in Australian cattle prices, where an estimated 1 million head are destined - down 17% from the 2015 total.

Competitors: The outlook for the Australian cattle industry in 2016 remains positive, especially considering the lower A$ and tighter cattle supplies, however the expansion of beef production in Brazil and the US will need to be closely monitored.

Ben Thomas, MLA // E: bthomas@mla.com.au

Read more of the latest projections at: **www.mla.com.au/Prices-markets/Trends-analysis** and look for videos outlining the latest projections on MLA's YouTube channel.

Figure 1 Lamb marking rates

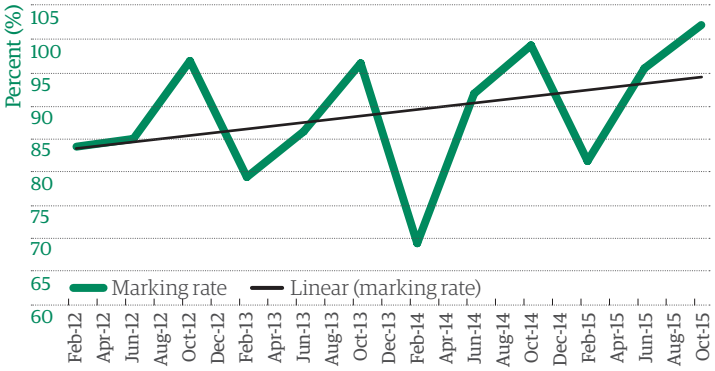


Figure 2 National saleyard lamb prices

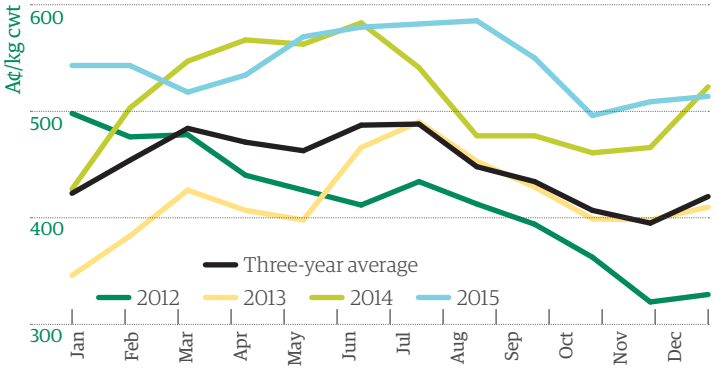


Figure 3 Cattle slaughter

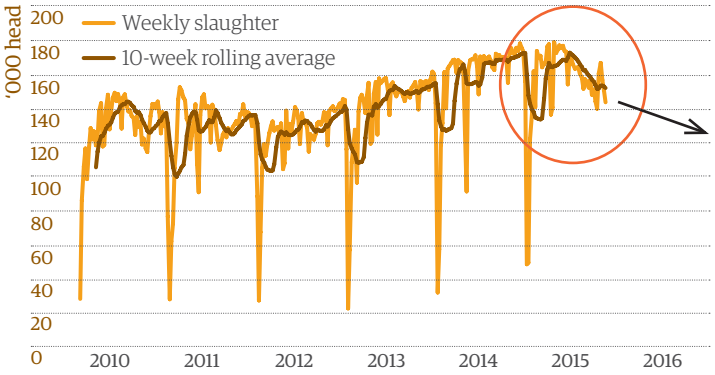
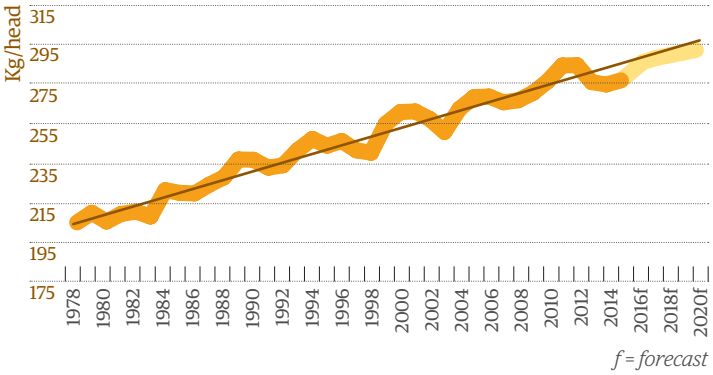


Figure 4 Adult cattle carcase weights



f = forecast

Source: Figures 1-4: Australian Bureau of Statistics, MLA forecasts

In the field

Central Queensland//AgForce and Cattle Council Tour with MLA

MLA's Managing Director Richard Norton was invited by AgForce Queensland to finish off 2015 with a visit to Central Queensland for a series of producer forums. Accompanied by MLA's General Manager - Central Marketing and Industry Insights, Lisa Sharp, Richard met with producers at St Lawrence, Nebo, Middlemount, Clermont and Alpha.

Throughout the week, Richard and Lisa spoke with 250 producers and answered questions about the beef language review, Meat Standards Australia, the current state of the cattle market and the continuing demand for Australian beef in the global market. Producers also raised issues including foreign investment, biosecurity, impacts of mining, international marketing, the National Livestock Identification System and National Vendor Declarations.

The presenters on the tour included (L to R, rear) Bim Struss, AgForce Qld, Lisa Sharp, MLA, David Hill, CCA, Richard Norton, MLA, Michael Taylor, AgForce, (L to R, front) Jim Lacey, Stock and Rural Crime Investigation Squad, Carl Moller, AgForce Qld.

Information: www.agforce.com.au

Upcoming MLA events

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

Business EDGE

During the two days of The Business EDGE you will acquire the knowledge and skills to:

- determine if all the family needs and aspirations can be funded by the business
- prepare and understand key financial information on your business
- assess and manage agricultural business risk
- understand and manage enterprise performance, including understanding what the key profit drivers are, how to influence them and what effect they have on overall business performance.

When and where:

18-19 February: Mt Isa
22-23 February: Richmond
3-4 March: Charters Towers
2-3 June: Emerald
6-7 June: Toowoomba

Bookings and more information:

Ian McLean: 0401 118 191 or Joanne Herley: 0427 118 699
E: admin@babusiness.com.au

www.babusiness.com.au

Where in the world (have we been promoting your beef, lamb and goatmeat)?

MLA's six regional offices, dotted around the globe, had a busy 2015 and found themselves undertaking a diverse range of tasks in the name of improving red meat export opportunities and growing markets. Here we touch base with each of the International Business Managers to hear the challenges and good news from 2015 and find out what lies ahead for 2016.

North America

David Pietsch //
E: dpietsch@mla.com.au

What were some highlights of your activities in 2015?

Our focus has been on promotional activities, building awareness and business development activities that support suppliers to obtain more sales accounts and grow the value of existing accounts in North America. We conducted three geographically targeted, seasonal promotions in Miami (Winter WonderLamb) and Boston (spring lamb and summer grassfed beef). In all regions we ran educational activities, including culinary immersions with chefs and social media campaigns. Awareness of Aussie beef and lamb in the target regions went up, and sales increased with participating retailers and restaurants.

What were the main challenges?

The large volume of supply from Australia meant our beef quota was reached for the first time in over 10 years. This created some instability in the market, as did large volumes of beef in cold storage, but these issues should settle down somewhat in 2016. The typical US consumer does not eat lamb, so we continue to grow awareness and encourage people to try Australian lamb.

What lies ahead in 2016?

US domestic beef production is rebounding, so while Aussie grassfed beef exports to the US have grown strongly in recent times, maintaining loyalty and continuing to generate excitement for our grassfed beef will be an important focus for MLA, exporters and importers.

MLA's International Business Manager in North America David Pietsch (second from left), with representatives from international beef industry trade groups in Washington DC to discuss beef trade issues, including the Trans Pacific Partnership.

General Manager International Markets Michael Finucan with EU International Business Manager Joshua Anderson.

North Asia

Michael Finucan //
E: mfinucan@mla.com.au

What were some highlights in 2015?

The 'True Aussie' brand was launched in Korea in March. The logo had huge uptake from local retailers with 100% of the Seoul hypermarkets, where most Australian beef is sold, using it within the first three months. The logo has now been rolled out across the country and is building recognition with Korean consumers. The China office continued to deliver incredible events with two major trade shows, SIAL and FHC, held in 2015, with 26 Australian exporter participants. We hosted a high-level workshop with senior Chinese quarantine officials, which successfully delivered messages about Australia's cold chain capabilities.

What were the main challenges?

Market access for Australian product into China continues to be the main challenge. Increasing the number of abattoirs approved for China is a key focus – especially increasing access for chilled product.

What lies ahead in 2016?

We're looking at another busy year for the team in North Asia, building the position of 'True Aussie' across the region. Supply of beef from Australia is on everyone's mind in Asia at the moment, with loyal customers concerned about the availability and price challenges ahead.

European Union

Joshua Anderson //
E: janderson@mla.com.au

What were some highlights of your activities in 2015?

- → MLA, with the support of importers in Europe, coordinated the entry of a number of Australian brands in the inaugural World Steak Challenge. Australian entries dominated the gold and silver winners' group, with four of the 11 Australian finalists winning gold standard awards. Australian Jack's Creek Wagyu was named world's best steak producer.
- → ANUGA tradeshow is a key event in Europe and MLA hosted 16 Australian participants.
- → MLA, in collaboration with the Australian Embassy Brussels, hosted an Australian BBQ-style event to engage importers and government on current barriers to trade. MLA chef Sam Burke prepared Australian beef and lamb dishes and more than 250 industry, government and European Union representatives attended.

What were the main challenges?

Australia's current market access to Europe is restricted by low import quotas and high above-quota tariffs. Importing Australian beef and lamb outside these quotas, for the large majority, is not economically viable.

What lies ahead in 2016?

Maintaining and improving Australia's red meat access into Europe is a top priority. MLA will assist industry and the Australian Government to pursue liberalised trade access for Australian red meat products via the recently announced FTA. We will continue efforts to increase awareness and loyalty to the quality of Australian beef and lamb at a trade level and through the supply chain.

Middle East/North Africa

Dr David Beatty //
E: dbeatty@mla.com.au

What were some highlights of your activities in 2015?

- → Over 25 Australian exhibitors attended trade show Gulfood in Dubai in February.
- → MLA-sponsored Chef Tarek's TV shows reached an audience of 5 million Arabic

MLA's International Business Manager David Beatty speaking at the Tenth Dubai International Food Safety Conference.

households, engaging consumers at key times (barbecue season and Ramadan).

→ Implementation of strategic trade and retail education and training , delivered to more than 2,000 chefs and butchers.

→ The largest retailer in the UAE confirmed growth in retail market share for both beef and lamb.

What were the main challenges?
Fluctuations in beef prices impacting on supply consistency, along with technical market access barriers – in particular trying to achieve greater consistency on standards such as shelf life and labelling. Global instability and lower oil prices resulted in slower tourism and consumer spending.

What lies ahead in 2016?
Our new trade and retail business development manager will focus on market opportunities and engagement, such as the potential to grow high-end beef and lamb in the growing foodservice/hotel sector. There is the possibility of political sanctions being lifted in Iran which could result in beef and lamb export opportunities. Chef Tarek will film in Australia for an Arabic TV special focusing on Australian producers, Halal integrity, produce, chefs and Australia as a tourist destination.

South-East Asia

Andrew Simpson //
E: asimpson@mla.com.au

What were some highlights of your activities in 2015?
Hosting the ASEAN Chefs' Tour and on-farm activities during Beef Australia 2015 at Rockhampton, provided a wonderful knowledge exchange between chefs and producers. Training more than 200 young chefs at Culinaire Asia and Food & Hotel Malaysia since, has helped embed Australian red meat variety and loyalty across the region. MLA provided new trade show platforms into Myanmar and Vietnam, with six lamb exporters also exhibiting in New Delhi, India, for the first time.

What were the main challenges?
Southern Asia consists of 12 countries that import a range of Australian red meat between high-end foodservice and retail sectors in Singapore, to the traditional markets of Jakarta. Prioritisation of marketing resources across the region remains key to ensuring industry maximises opportunity.

What lies ahead in 2016?
The 'True Aussie' profile is now across 12 retail chains in Malaysia, Philippines and Jakarta. Increased investment in Vietnam and Thailand will assist a much broader uptake during 2016. Although supply and price pressures will test emerging markets, MLA will continue directing profile and resources into the niche layers of Southern Asia.

Japan

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

What were some highlights of your activities in 2015?

→ Commencement of the Japan Australia Economic Partnership Agreement, which has already seen tariffs fall from 38.5% to 28.5% for frozen beef and 38.5% to 31.5% for chilled beef.

→ Our 'Let's Barbie' campaign saw retail partners observe strong increases in sales and value during the summer period.

Andrew Cox (IBM Japan) being interviewed by Japanese media at the launch of the 'Let's Barbie' campaign for Aussie beef, at the Australian embassy in Tokyo.

MLA Japan International Business Manager Andrew Cox, his wife Jo and sons Jasper and Theo (obscured) promoting the Let's Barbie campaign. The promotion successfully captured consumer attention and motivated purchase of Australian beef in 2015.

→ Proliferation of the 'True Aussie' beef logo, with more than 50% of Australian beef sold in Japan now bearing the logo. We targeted distributing more than 50 million pack stickers in retailers in 2015, alongside representation at more than 11,000 foodservice outlets.

→ We partnered with McDonald's Japan, which saw 32 million Aussie beef-focused tray mats distributed via their 3,000+ stores.

→ Our new Lambassadors program, where we built a team of nine food industry professionals to promote lamb.

What were the main challenges?
The Japanese economy remains a little uncertain, narrowly avoiding a technical recession in the two quarters since 1 April. Beef is higher priced than other food items such as pork, so when consumer confidence is weaker, beef sales tend to follow.

What lies ahead in 2016?
It could be a challenging year with reduced Australian beef supplies and increased competition.

We will continue embedding a strong, consumer-focused position for Aussie beef built around family enjoyment of a healthy and natural food, with more focus on consumer education and nutrition.

We will also continue to look for innovative retail and foodservice tie-ups to leverage our budget and help strengthen our voice.

Keep up to date with MLA's international marketing activities with regular videos posted at: **www.youtube.com/meatandlivestock**

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