

Feedback

Going grassfed

28// **Targeting a niche market**

03// **Spring into lamb**

MLA's latest consumer campaign

06// **From the grassroots**

Why joining a producer group is good for business

15// **Genetic progress**

The benefits of LAMBPLAN

22// **Counter attack**

The latest in wild dog control research

A note from the MD...



I was pleased to visit MLA's regional offices in China, Japan and Korea last month, where I saw first-hand the demand for Australian beef, lamb and sheepmeat, and the opportunities for our industry into the future.

Our new office in Beijing was officially opened by Agriculture Minister Barnaby Joyce who was leading a delegation to China, meeting with industry and government counterparts to learn about the Chinese industry, and discuss future partnerships. Australia's beef, lamb and sheepmeat exports to the Chinese market have experienced significant growth recently, and are now valued at over \$1.4 billion. The opening of the new office demonstrates our industry's commitment to China and the potential it holds.

Last month also saw the launch of our latest lamb campaign - You never lamb alone - which is centred on lamb bringing people together for all occasions. It's a

fresh approach with the development of one consistent message for the lamb brand. Retailer feedback has told us that more generic marketing collateral, tailored to the season by cuts, would be of greater use to them.

With MLA's annual general meeting fast approaching, I urge you to get involved by submitting your questions on notice, returning your proxy form and consider attending the AGM and producer forum in Chatswood, Sydney on 13 November. MLA is your company and I encourage you to have a say.

Please contact me if you wish to provide your feedback:

managingdirector@mlla.com.au

Richard Norton
MLA Managing Director

Contents

COVER STORY

28 Going for it with grassfed

UP-FRONT

03 Find a friend with lamb

IN-BRIEF

04 Videos showcase MBfP benefits

04 Little heroes

04 Serving more *Rare Medium*

05 Boosting productivity with protein-packed algae

05 Taking action on grass seeds

INSIGHT

06 From the grassroots

07 In profile: Kate Joseph

ENVIRONMENT

08 Wastewater: from problem to profit

INDUSTRY

10 Taking stock of the flock

ON-FARM

13 Making the most of it

15 It's as simple as ASBV

16 Figuring it out

17 Putting traits to the test

03
Spring into
lamb

06
From the
grassroots

15
Genetic
progress

22
Counter attack

18 Ground swell

20 The CRC's findings on fertility

22 New approaches to wild dog control

23 Disease carrying dogs

24 Guardian angels

25 Sharing our story

26 Join the campaign...

26 Advocacy from the Alice

GROWING DEMAND

30 Branding time

30 Growing great

32 The natural way

32 Aussie beef - Mexican style

33 Recipes: Spiced lamb and pistachio
koftas // Sticky hoisin and sesame
lamb ribs

MARKETS

34 Around the globe

35 On the ground: Australia

36 Why are US cattle prices so high?

IN THE FIELD

38 Past and upcoming events

Feedback is produced and published by Meat & Livestock Australia Ltd (ABN 39 081 678 364).

The magazine is free to MLA members and available on subscription to non-MLA members at an annual rate of \$100 (including GST) within Australia and \$150 overseas.

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

Feedback Reply Paid 906, Locked Bag 991, North Sydney NSW 2059
E: info@mlla.com.au
T: 1800 023 100 // F: 02 9463 9393
www.mlla.com.au

This magazine was printed on Sumo Offset Laser, an environmentally responsible paper manufactured under the environmental management system ISO 14001 using Elemental Chlorine Free (ECF) pulp sourced from sustainable forests. Sumo Offset Laser is FSC Chain of Custody (CoC) certified (mixed sources).

Disclaimer: The views expressed in *Feedback* are not necessarily those of MLA, its employees or agents. *Feedback* content is provided as information not as advice and you should make your own enquiries before making decisions concerning your interests. All material in *Feedback* is copyright. Reproduction of the material is encouraged, however due acknowledgement to *Feedback* is required.

Lamb campaign

Find a friend with lamb

'You never lamb alone' is the message behind MLA's latest lamb marketing campaign.

L launched in late September to coincide with peak spring lamb production, the new campaign focuses on the notion that lamb brings people together for all occasions.

MLA Central Marketing and Industry Insights General Manager Michael Edmonds said the new theme was developed to be used year-round, with the aim of moving away from traditionally seasonal focused themes like 'spring' racing fashion and 'spring' romance.

"Changing to a more generic marketing campaign that can be tweaked during periods where lamb production is at a peak, like spring, will ensure we're getting the most leverage out of our campaign and the maximum return on investment for Australia's lamb producers," Michael said.

"Our research showed that seasonal and tactical marketing activities were losing effectiveness, so we want to create one consistent message for the lamb brand that has the ability to resonate with consumers all year round.

"It's also a move towards better aligning our campaigns with retailers' needs, especially independent retailers.

"Having their support is a vital component to a campaign's success, as that's where the most consumer impact on sales can be gained."

Michael said while MLA had recently consolidated domestic marketing activities to be managed centrally, the major retailer support activities would continue. This includes consumer marketing programs and point-of-sale support for retailers.

"Our retailers have indicated that more generic marketing collateral tailored to the season by cuts will make them more likely to support the campaign and for a longer period," he said.

"We've taken that on board with this campaign to lift the presence of, and demand for lamb - not just for spring but throughout the rest of the year."

Running for four weeks, the campaign was launched during the AFL grand final coverage with a television advertisement, and is supported by ad screenings in selected metropolitan cinemas, online through social media channels, and outdoor advertising poster panels in high foot traffic areas such as malls and grocery stores.

Several foodservice venues are running seasonal 'lamb sharing' dish menu promotions in conjunction with the campaign, while four major retailers will support the campaign with point-of-sale promotional posters and recipe cards with a targeted push of both loin and non-loin lamb cuts to main grocery buyers.

To coincide with the launch and new direction of MLA's lamb marketing campaigns, a study will be conducted by social demographer Bernard Salt, charting the history of lamb, its multicultural role in cooking and its bond with the Australian public.



Clips from the television commercial and an in-store poster.



Michael Edmonds, MLA
E: medmonds@mla.com.au



View the advertisement at www.youtube.com
and search for 'You never lamb alone'.

Videos showcase MBfP benefits

More than 10,000 producers have taken part in the More Beef from Pastures program and more than half of those have made changes to their business. The result? Increased production, profitability and confidence.



Three new videos produced by MLA showcase what two producers have gained from the program and outline why other producers in southern Australia should consider getting involved.

Michael Cobiac, a producer from Robe, South Australia said his biggest learning was using body condition score targets at mating, calving and rejoining. Within a year, the conception rate of his Angus breeders increased by 10%.

West Australian producers Kim and Kerrie Dunnet from Nannup share the changes in their operation, including rotational grazing, multiple bull matings and larger herd sizes. The results have been improved pastures, more content cows and faster growing calves.



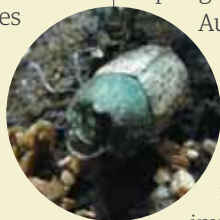
View the videos at www.mla.com.au/mbfp and www.mla.com.au/mbfp-giveitago

Little heroes

Two new species of spring-active dung beetles have been released in Western Australia as part of an MLA-funded project to complement Australia's existing summer- and winter-active beetles, and provide additional benefits to southern livestock producers.

The *Bubas bubalas* and *Onthophagus vacca* (pictured right) dung beetle species were sourced from France and Spain in 2012 by CSIRO, following a review that identified a gap in beetle activity during early spring.

The beetles were selected from areas with climates closely resembling target zones of southern Australia, and underwent climate matching to enhance the success of establishment in Australia. The lack of spring beetles has caused large areas of pasture in southern Australia to become unproductive in what would normally be a time of prime pasture growth. By doing their job in removing dung, the new beetle species improve the soil and water infiltration, add nutrients to root



zones and assist pasture growth at this critical time of year.

MLA project coordinator Cameron Allan said the release location was determined as part of a two-year dung beetle survey and monitoring research project undertaken by the Department of Agriculture and Food Western Australia.

"The first release coincided with the early spring activity of the beetles, with South Australia and southern NSW due to follow when seasonal conditions are more suitable," he said.

"The dung beetle project is about assisting pasture, soil and nutrient management, but it is important to note that the beetles will also contribute to tackling bush fly numbers.

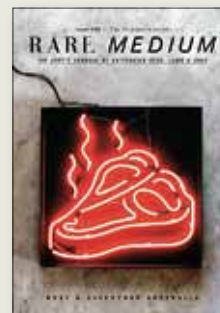
"The beetles will not only reduce the nutrient runoff from dung into waterways, but they will also assist producers by improving soil fertility and structure and pasture growth."

Image courtesy of CSIRO.



www.agric.wa.gov.au/news/new-dung-beetle-tackle-flies-great-southern

Serving more Rare Medium



The latest edition of *Rare Medium*, MLA's foodservice industry journal, is now available.

The journal aims to help chefs stay at the forefront of dining trends and remain relevant by inspiring and educating them and other foodservice professionals.

Volume eight explored 'the semipermanent' business model used by innovative chefs and restaurateurs. Semipermanent establishments last longer than the popular short-running 'pop-up' restaurants, but still have a finite lifespan.

Lamb ribs were the magazine's featured cut, giving chefs a visual breakdown on how to prepare ribs from the lamb breast, along with recipes including ribs with corn and red onion slaw and pretzel crusted lamb ribs.

It also took a journey to the Northern Territory to meet Steve Cadzow, who talked about his Poll Hereford enterprise at Alice Springs. (See the story on the Cadzows on page 26 of this edition).

The journal aims to bridge the gap between farm gate and kitchen with an insight into what goes into producing the quality beef, lamb and goat being served up on a daily basis.

4,000

subscribers to *Rare Medium*



Find *Rare Medium* at:
www.raremedium.com.au

Boosting productivity with protein-packed algae

With funding from MLA, the University of Queensland (UQ) has established an Algae Energy Farm to cultivate and harvest microalgae for a range of uses, including as a feed supplement for beef cattle.

The farm is an off-grid 250,000-litre demonstration farm at UQ's Pinjarra Hills campus in Brisbane.

The project findings offer an opportunity to close the gap in dry season protein availability using an economically sustainable feed source.

Lead researcher Professor Peer Schenk said the farm demonstrated that algae could be grown easily in Australian conditions as feed and fuel without competing for arable land.

"We are working closely with producers to produce protein-rich feed to meet the nutritional needs of cattle and other livestock," Peer said

Such a feed source would help mitigate large seasonal variations in pasture nutritive value and boost cattle growth.

UQ Vice-Chancellor and President Professor Peter Høj said the University was delighted

to target its research to a project with potential benefits for producers, the industry and the economy.

"Being able to work with MLA and use Xstrata technology (a water treatment system) enabled the researchers to work towards a farm-ready solution suitable for the tough conditions faced by so many Australian producers," Peter said.

He said the fact that dry season pasture in northern Australia was typically low in protein and energy acted as a constraint on beef production.

"Microalgae would help with management of prolonged dry conditions," Peter said.

"The challenge is to develop technology that can be readily and cost-effectively applied on beef properties as a 'home-grown' source of high-quality protein feed."

The technology used at UQ is farm-ready and can use virtually any type of water, which means that cultivation of microalgae offered a cost-effective way of producing feed and fuel all year round with minimal use of land and water.

The Pinjarra Hills farm can produce about 50 tonnes of algal biomass and 60 barrels (about 12,480 litres) of biodiesel /ha/year.

When the likely costs of producing algal protein on farm are finalised, and these confirm its potential value for beef producers, a large pond system will be trialled on a northern Australia beef property to test the technology on a commercial scale.



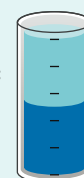
www.uq.edu.au



Professor Peter Høj, UQ, and Dr. John McVeigh, Queensland Minister for Agriculture, Fisheries and Forestry, inoculating the final pond at the official opening of the Algae Energy Farm.

Project dashboard: Algal ponds as a source of protein supplementation

Financial contributions to the project:
\$445,617



MLA levies: 50%

Government: 50%

Length of project:
Start date: 30/03/2012
Finish date: 31/12/2015



The project is part of MLA's objective to:

Create opportunities to increase productivity across the supply chain.

Taking action on grass seeds

Four short video tutorials have been produced showcasing common practices to manage grass seeds: premature shearing, spray grazing, spray topping and winter cleaning. Agronomist Derek Mason talks producers through each strategy including when it should be used.

The videos were funded by MLA and the South Australian Sheep Advisory Group.



View the videos at:
www.mla.com.au/grasseedmanagement

Producer groups

From the grassroots

Producer groups not only benefit their members, but also industry organisations. MLA is increasingly looking to producer group networks to provide a direct conduit between research and development and on-farm practice.

Working with established producer groups ensures MLA-funded research is relevant and responsive, allows researchers to refine and road test their work in the field, and increases the rate of practice change among producers.

MLA's research/producer partnerships include Producer Demonstration Sites, Producer Research Sites and events and workshops.

"These groups are a fantastic mechanism for like-minded producers to be able to identify RD&E (research, development and extension) priorities and needs at a local level," MLA's R&D Communications and Adoption Manager Dr Jane Weatherley said.

"We can access direct feedback on those priorities, making our research even more relevant. The timeliness of that mechanism also means our research can be more responsive to emerging or seasonal issues, such as drought, weed infestations and grass seeds."

Jane said producer groups also help MLA take broad RD&E priority themes, such as increasing productivity and sustainability, and refine them to ensure the relevant components are addressed at a local level.

"They also make really solid sounding boards for ground-truthing different R&D concepts or tools and workshop programs," she said.

Adoption rates

As well as supporting industry's research aims via MLA, working with groups improves extension outcomes, with studies indicating the rate of practice change by producers is often accelerated when they're part of a group.

"Producer groups already have a membership of active, information-seeking producers looking to learn new skills and knowledge to improve their business performance - they're already motivated to learn and explore options for change," Jane said.

"From the producers' point of view, existing groups tend to have a strong network and trust between the members and that helps them build confidence and implement practice change and innovation."

The recent evaluation of the southern extension programs More Beef from Pastures (MBfP) and Making More from Sheep (MMfS) supported this view.

Rather than relying purely on the knowledge gained at the MBfP and MMfS events, the results showed being a member of an ongoing group (32%) and discussions with other farmers (37%) were among the most frequently cited resources or activities that helped to implement practice change.



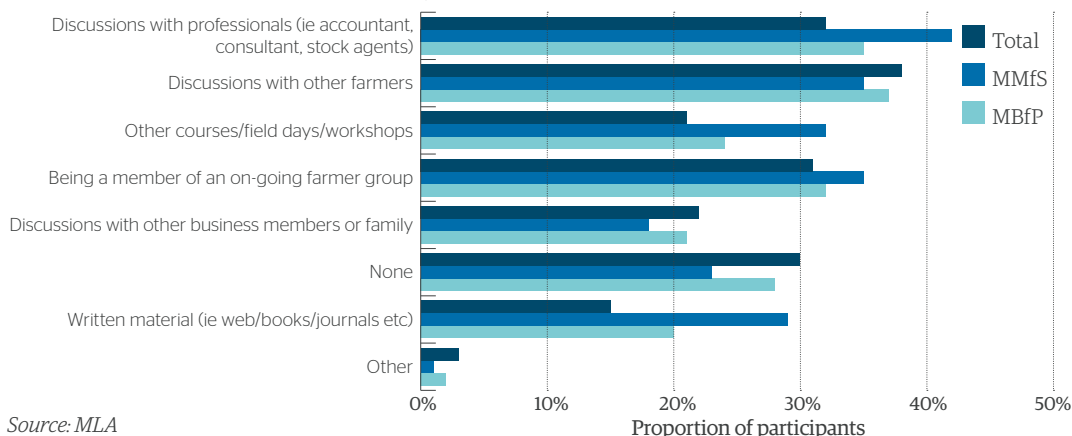
Dr Jane Weatherley, MLA

E: jweatherley@mla.com.au



Read more about producer groups on pages 18-19. See the feature on MLA's Producer Research Site program on pages 12-13 of the August 2014 edition of *Feedback*.
www.mla.com.au/feedback

Figure 1 Influences that assisted the implementation of practice change after attending More Beef from Pastures (MBfP) and Making More from Sheep (MMfS) events.



Source: MLA

In profile

Kate Joseph // Coordinator, South Prime Lamb Group



South West Prime Lamb Group member and

Kate Joseph and her partner Trevor Smith turn off 1,600 heavy trade lambs each year from their farm in south-west Victoria. Kate returned to the family farm in 1991 after attending university, completing a Masters in Sheep Nutrition and taking on a number of jobs in her field. She is also a Councillor and a past President of the Sheepmeat Council of Australia.

In 1994 the South West Prime Lamb Group was formed and Kate became the coordinator, as well as an active member.

Feedback spoke to Kate about what she considered the benefits to be of being in a producer group.

What motivates you to be so connected to a producer group?
My philosophy is you can always

Producer groups

West



coordinator Kate Joseph at work with mate Kuta.

do things better and the best way to do better is learn from others.

The group's members are all livestock producers, predominantly from the far south-west. We're not far from Hamilton, but Hamilton is mainly recognised as a wool growing area. Rather than go to events there and hear speakers who aren't necessarily relevant to us, we can engage our own expert speakers who can tailor information to focus on particular issues affecting our meat-focused businesses.

The group can also respond rapidly to seasons. For example, five years ago we had a very dry autumn and I was able to quickly mobilise speakers to come and share ideas on different finishing options. Last year it happened again so we

had a speaker explain how to assess ewes' feed requirements to get them through to lambing.

What are some changes you have made on your farm as a result of what you've learned in the group?

Better genetics: We've lifted our average carcase weight from about 15.5kg in the late '80s to about 22kg by using ASBVs and focusing on genetic traits that suited our enterprise.

Increased lambing percentage through better management: Our lambing percentage to ewes joined is about 135% now, up from about 120% 10 years ago, but our best year has been 148% and I'm aiming to average 150%, including ewe lambs.

Our improved management includes separating twinning ewes and singles, which we've

been doing for the past few years. We did it to better target feeding but have found other benefits, because most of our lambing problems are with young single-bearing ewes. When you're catching one to help it, it's much better if you're not disturbing all the multiple-rearing ewes.

We also have a better understanding of pasture management now and we've reduced our paddock sizes for ease of management. That's a lot easier for me to do than for others because my place is small, but it's been great for the ewes to lamb in small mobs. It's documented that you get better percentages when running lambing ewes in smaller mobs.

What are the other benefits of being in such a group?

Back in the old days everyone

Snapshot

Kate Joseph and Trevor Smith, Portland, Vic.



Property:
133ha

Enterprise:
Prime lambs - turn off over 1,600 heavy trade lambs, mostly as suckers, each year

Livestock:
1,200 first-cross ewes. Poll Dorset rams

Pasture:
Predominantly perennial ryegrass and sub-clover

Soil:
Sandy loam

Rainfall:
800mm

went to pubs to socialise, but drink driving laws have limited that. The group is a way of bringing together people with shared interests. When I organise functions I always allow plenty of social time because I think people learn as much from talking amongst themselves as they do from the speaker.

In terms of economic benefits we've never measured them, but our members are always striving to improve their businesses.

We don't have many environmental issues in the south-west, but a few members further north have had erosion problems and they've put in plantations and done earthworks, which we've all been to see. Our next session is on establishing tree plantations, which will help address the issue of shelter for lambing ewes.



Kate Joseph
E: primeag@westvic.com.au

Reducing emissions

Wastewater: from problem to profit

Greenhouse gas reduction is a hot topic for the sheep and cattle industry, but producers aren't the only ones targeting emissions. Processors are also putting their money where their emissions are.

A new wastewater management pond project at Oakey Abattoir is a step towards future-proofing the Darling Downs plant against rising energy costs and meeting market demands for 'clean, green' product.

The project will use covered, high-rate anaerobic lagoon (COHREAL™) technology from Europe - a first in Australian meat processing - to harness methane-rich biogas from the facility's wastewater in the existing anaerobic lagoon system.

Unlike other covered lagoon technology, it has a sub-surface membrane to prevent methane leaks and a unique wastewater distribution and settling system that reduces water retention from 25 to 15 days.

A storage system reserves biogas for peak operating demand. This biogas will fire the abattoir's boiler to heat water for sterilisation and rendering.

The system could generate a megawatt of energy each day, slashing the abattoir's reliance on natural gas by 42%, reducing odour to negligible levels and further refining treated wastewater for irrigation and cropping.

Plant owner Nippon Meat Packers Australia (NMPA) has invested more than \$4 million in capital works. The system is being installed by CST Wastewater Solutions.

Knowledge sharing

The project attracted additional research funding from the Australian Meat Processor Corporation (AMPC) and the MLA Donor Company as a Plant Initiated Project to assess the benefits of the technology for the whole processing sector.

AMPC R&D Program Manager Doug McNicholl said the technology created an opportunity to capture and reuse methane that would otherwise be released into the atmosphere.

"Methane capture and reuse technology has significant scope for adoption at abattoirs across Australia," he said.

"If implemented correctly, it can provide a number of direct and indirect economic, social and environmental benefits to abattoirs, the processing industry and the broader community."



Return on investment

Oakey Abattoir General Manager Pat Gleeson said they were looking closely at the plant's costs and environmental impact, as all meat processors were.

"Energy is a significant operating cost and energy prices are only going one way, so this waste treatment project makes good business sense," Pat said.

"But it's not just about energy cost savings - there is also a huge environmental management perspective. It demonstrates Oakey's commitment to the environment and its customers, employees, neighbours and the broader community, to ensure the plant remains a strong and sustainable manufacturer for years to come."

All eyes will be on the new system when it starts operating in late 2015. Pat said that if it ticked all the boxes, it could be duplicated across the NMPA group.

MLA is managing the project to assess the benefits.

"It helps showcase how processors can reduce their environmental impact and play a role in ensuring a more sustainable red meat supply chain," MLA project manager Irene Sobotta said.

Turning the sod at the new waste-to-energy technology project at Oakey Abattoir: Michael Bambridge, Managing Director of CST Wastewater Solutions, Pat Gleeson, General Manager of Oakey Abattoir and Federal Minister for Industry, Ian Macfarlane.

Uncovering COHRAL™

World first: Although it is used in reactor tanks around the world, this is the first time anaerobic technology will be used in a covered lagoon.

Hungry bugs: Wastewater from the abattoir will run into a covered pond system, where concentrated anaerobic bacteria will digest 70% of the organic matter to produce methane biogas.

Cover up: The ponds are a closed installation, with a membrane just below the pond surface trapping biogas. As well as preventing leaks, the cover ensures the biogas is higher quality than that produced by open lagoons.

Show me the money: The system will earn its keep with savings from reduced gas, electricity and diesel purchases anticipated to repay construction costs within five years. Methane production will offset the site's dependency on natural gas by 42%.

Odour eater: Oakey abattoir will smell better - a plus for residents in the nearby town - as the process helps curb odours that emanate from open lagoons in processing plants.

So predictable: Anaerobic digestion produces reliable base-load power. Unlike other green energies, it is not dependent on wind or sun.

Bright spark: The project has potential to collect methane that equates to about a megawatt of electricity.

Close watch: It will require extra diligence from plant staff, as washing the wrong chemical down the drain could compromise the system.

Good for growing: The system reduces sludge disposal issues and will deliver better quality water for use in irrigation adjacent to the Oakey plant.

MLA Donor Company (MDC) research is funded through private investment and matching government dollars. No producer levies are invested in MDC research projects.

MDC Plant Initiated Projects are funded by individual processing companies who can invest a portion of their levies through AMPC and their own contributions in MDC projects with matching federal government funds.



Irene Sobotta, MLA // E: isobotta@mla.com.au

Doug McNicholl // E: d.mcnicholl@ampc.com.au



Pat Gleeson // E: pgleeson@oakeyabattoir.com.au

Plant Initiated Projects Program:

www.ampc.com.au/pip-program



Sheep stocktake

Taking stock of the flock

Western Australian researcher Kimbal Curtis has counted a lot of sheep in the past 12 months – not to cure insomnia, but to take stock of how many sheep there are in Australia. As a result he found out many things about the current flock, including just how much scope still remains for increasing the national lamb marking rate.

The MLA-funded 'Stocktake of the Australian sheep flock' project gave the sheep industry a detailed breakdown of the number of sheep and sheep farms by region, farm flock size and reproductive performance.

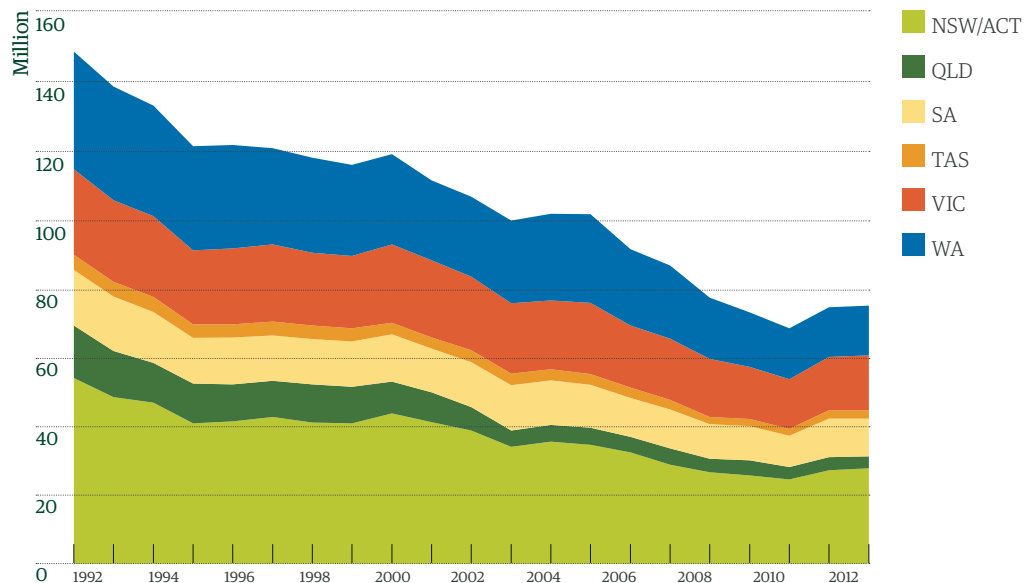
Kimbal Curtis, a Senior Research Officer from the Department of Agriculture and Food WA, said the project had two objectives:

- Provide baseline data of the demographics of the flock.
- Analyse the data to establish target groups for improvement in the marking rate and model development of the optimum flock composition and breed mix to meet demand.

This information will, in turn, underpin investment decisions in accordance with the 'RD&E Priorities and Investment Plan for Sheep Reproduction', which targets lifting reproductive performance by 10% in five years from 2013.

Kimbal used data from the Australian Bureau of Statistics Agricultural Census 2011, and MLA and Australian Wool Innovation sheepmeat and wool surveys (see figure 1).

Figure 1 Number of sheep and lambs



Source: Australian Bureau of Statistics

Figure 2 The estimated current composition of the flock (72.9 million head)

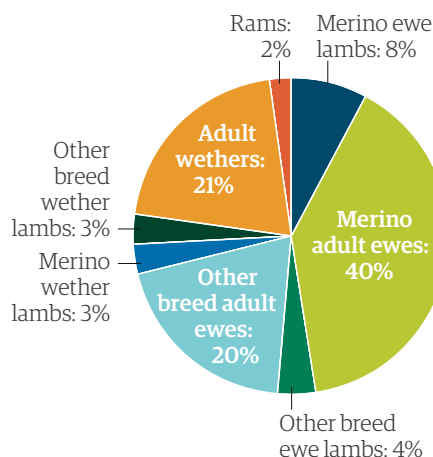
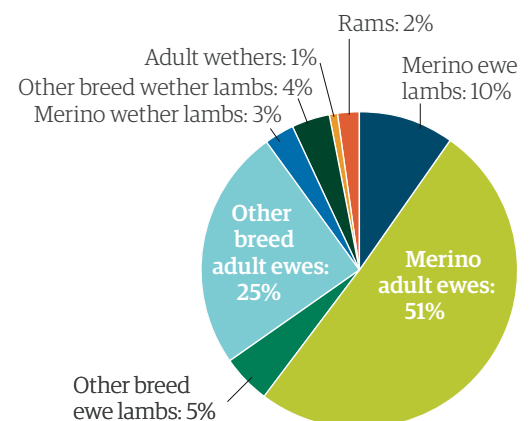


Figure 3 Flock composition to maximise turn off (flock size 59.4 million head)



Kimbal Curtis

E: kimbal.curtis@agric.wa.gov.au

Want to increase your marking rate?

Participate in a Bred Well Fed Well event: www.sheepcra.org.au/education/producer-training/bred-well-fed-well-workshop.php

Use the Making More from Sheep program: www.makingmorefromsheep.com.au



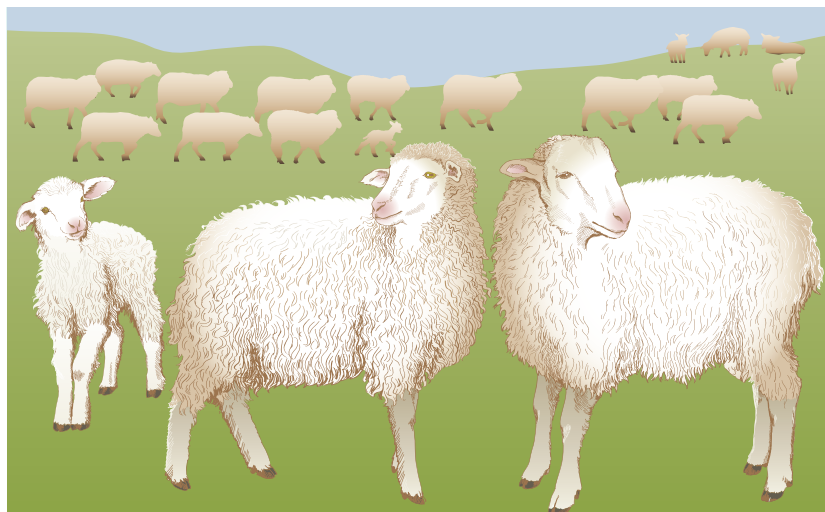
The 'so whats' from the stocktake?

- **Prime lamb production:** The sheep industry today is clearly focused on both wool and sheepmeat production. In the past two decades, the breeding ewe component of the flock has risen from 41% to 57% in 2011. While the total flock size has declined significantly, the increase in the proportion of breeding ewes has driven an increase in lamb production.
- **Merinos still hold the majority:** While the industry has moved toward more prime lamb production, Merino ewes still account for nearly 75% of all breeding ewes. More than half of all farms were producing both pure Merino and other breed lambs. Until recently, pure Merino operations were the mainstay of the Australian sheep industry, but today, as producers have diversified their income options, they account for only a fifth of all farms.
- **Scope to improve marking rates:** The analysis found significant opportunities to increase lamb production. Of all breeding ewes, 38% were on farms with average marking rates of less than 80% compared to a national average of around 90%. And they weren't just Merino operations.

Lifting numbers

Apart from increasing marking rate, Kimbal identified the changes in the flock composition (see figure 2) and management that have the greatest impact on national sheep and lamb turn-off (in order):

1. Increase the proportion of all ewes joined (in 2010-11, the ratio of ewes mated to opening number of breeding ewes was just 88%).
2. Increase the proportion of ewes in the flock.
3. Decrease the Merino ewes and increase the number of other breed ewes in the flock.
4. Only join Merino ewes to Merino rams to exactly match the number of replacement ewe lambs required.



Here is a snapshot of the flock (as recorded by the Australian Bureau of Statistics Agricultural Census 30 June 2011 - the latest available census data):

Who's in the flock?

38,900 farms breed ewes and, of those, 30% had flocks of more than 2,000 sheep and lambs and accounted for 72% of all breeding ewes in the national flock.

72% of breeding ewes are Merinos, with Victoria having the lowest Merino ewe portion of 61% and Western Australia the highest with 84%.

Population

72.9 million sheep on 42,100 farms. There were 163 million sheep in 1991 and 68 million in 2008.

56% of sheep are breeding ewes (up from 41% in 1991).

72% of sheep enterprises have flocks smaller than 2,000, but account for only 27% of the total flock.

The maternity suite

90% was the marking rate across all ewes in 2011-12 (up from 80% in 2006-07).

82% was the average marking rate for pure-bred Merino lambs in 2011-12.

88% was the average marking rate for Merino cross-bred lambs.

98% was the average marking rate for other breed lambs.

11% of farms, with 6% of all ewes, had farm marking rates of more than 120%.

35% of farms, with 38% of all ewes, had average farm marking rates of less than 80%.

Match making

88% of all ewes were joined.

47% of all joinings were Merino ewes to Merino rams.

Research at work

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

In this issue

18// People power

Snapshots of producer groups helping to accelerate R&D uptake.

20// Research reality

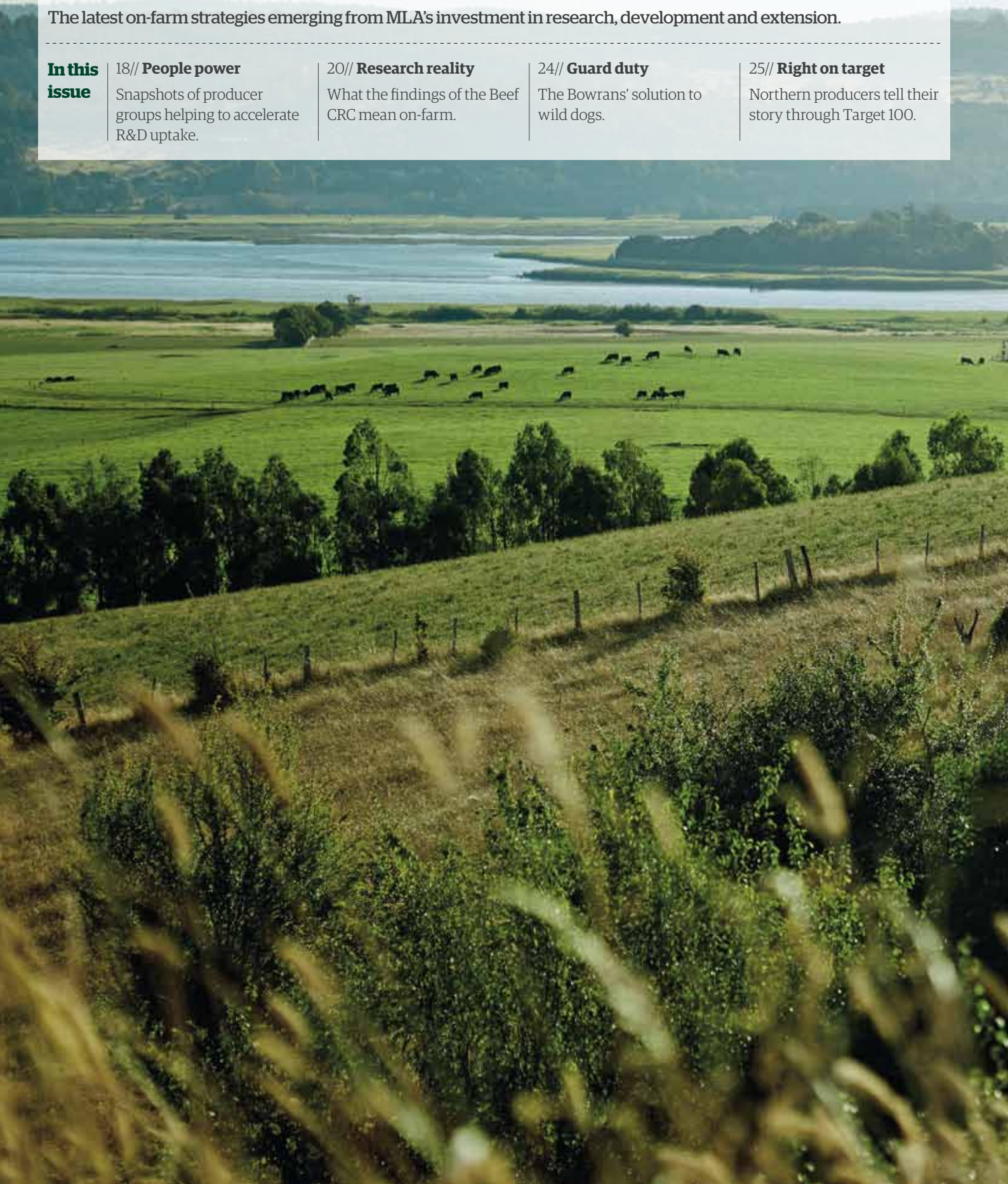
What the findings of the Beef CRC mean on-farm.

24// Guard duty

The Bowrans' solution to wild dogs.

25// Right on target

Northern producers tell their story through Target 100.



Pasture efficiency

Making the most of it

When producers want to expand their businesses, often the first response is to buy or lease more land, completely overlooking the potential of what's underfoot.

The Archers, of Landfall Angus, in Tasmania are a case in point of how an enterprise can grow by better pasture and grazing management of the existing resource.

To Tasmanians, Archer is not just a name, it represents a pastoral dynasty, connected with some of northern Tasmania's most historic holdings including Brickendon, Palmerston, Woolmers, Panshanger and Woodside. The Archer family also value add to their enterprise with Landfall Farm Fresh, a retail butcher store in nearby Launceston.

The family's passion for the land has continued but created its own challenges for one branch with a present generation of five siblings having to not only enact a succession plan, but lift their productivity to fund it.

To achieve this the Archer family narrowed their options down to three: purchase more land, grow more productive pastures or make better use of the existing pasture resource.

With their properties - Landfall, Greenhythe, Thorp, Redwood and Bayview (leased) - close together, the family was reluctant to buy land further afield and their prime location in the Tamar Valley, near Launceston, meant strong competition for any prospective purchases.

Co-principal and Landfall Manager Frank Archer said after seeking advice from Tasmanian More Beef from Pastures (MBfP) coordinators, agricultural consultants Macquarie Franklin, and components of the MBfP program (including feed budgeting tools), the answer was clear - up-skill their workforce of six to improve their pasture and grazing management.

"We calculated that if we could increase the carrying capacity of our pastures by a minimum of 2-3 DSE/ha, we could run an additional 250 to 375 breeders," he said.

To ensure family and staff were on the same page, they completed a Pasture Principles course with Macquarie Franklin to develop an understanding of how pastures grow, best management practices, feed budgeting and grazing principles.

The aim was to transform a set-stocking regime to rotational grazing to maximise pasture utilisation.

"Firstly, we learnt how to look after what we had better," Frank said.

"A large proportion of our pastures had already been improved with species such as ryegrass, white clover, red clover, fescue and cocksfoot. We learnt the optimum times to graze it, how to feed budget and calculate rotation lengths."

Bigger mobs, smaller paddocks

Mob sizes expanded from 30 to 200 and paddock sizes reduced from (some as large as) 150ha down to as small as 5ha.

"We use temporary electric fencing to maximise grazing rotations based on ryegrass leaf emergence," Frank said.

"We graze the plant at the three-leaf stage and we endeavour to reduce the grazing time per block to three days or less. If we put 200 cattle into a paddock where there is enough feed for 18 days, we divide the paddock into six and move them every three days.

"This prevents them from overgrazing plants, pugging up the paddocks and wasting feed."



Pasture efficiency



Snapshot

Frank Archer,
Launceston, Tas.



Property:
4,250ha

Enterprise:
Landfall Angus
Stud, beef and
prime lamb
production

Livestock:
1,100 stud Angus
females, 200
commercial Angus
females, 5,500
Suffolk-Coopworth
cross ewes

Pasture:
Ryegrass, clover,
fescue, cocksfoot,
some native
grasses (kangaroo
grass, and brassica
feed crops)

Soil:
Sandy loam to loam

Rainfall:
650-750mm

→

To calculate the amount of feed available in kg of DM/ha, the Archers use a pasture plate meter which measures the average height and density of the pasture and converts it to DM reading.

"We usually take about 30 readings across the paddock for an average pasture cover figure and use a GPS on a smartphone to work out the size of the block to judge the kg of DM/ha available," Frank said.

He also uses the Evergraze Feed Budget and Rotation Tool intermittently but would like to be using it at least once a week.

Pain for gain

Frank said increased labour inputs were needed to manage rotational grazing, along with capital investment in fencing and extending watering points. However, the family has done the maths and know increased carrying capacity has improved their return on investment.

Since implementing the new grazing and pasture strategy, stocking rates have increased beyond their initial estimates and the next target is now being set after further analysis.

During the past four years the carrying capacity of their enterprise has increased by as much as 30% through winter.

"Our next challenge is to bring 500ha of semi-improved country into our rotation, but we've got a few issues to address such as varied pasture species including natives, large paddocks, rough country and a feral animal problem," Frank said.

The Archers are also keen to extend their irrigation system which improves their carrying capacity from 28 DSE/ha (dry land) to 55 DSE/ha.

Low lying country is also being targeted with drainage works underway.

"We have large areas of low lying river flats, which give us minimal production, so we are investigating methods of better draining those areas to increase pasture production," Frank said.



Frank Archer

E: frank@landfall.com.au or visit www.landfall.com.au and www.landfallfarmfresh.com.au



View MLA's *More Beef from Pastures* producer manual www.mla.com.au/mbfp

For more information on MBfP events in Tasmania contact the state co-ordinator Mel Rae // E: mbfp.tas@macfrank.com.au

Feed Budget and Rotation Planner tool: www.mla.com.au/tools

Genetics

It's as simple as ASBV

Most livestock industries use breeding values to improve their genetic selection and the quality of their end product. Sheep Genetics' Hamish Chandler said it's a brave producer who ignores the benefits of technology.



The Schulz's 2013-drop first-cross Superborder/Centre Plus ewe lambs. See page 16 for their story. Image courtesy Michael Oakes, Stock Journal.

Australian Sheep Breeding Values (ASBVs) are the ultimate comparison tool, enabling producers to evaluate animals on their genetic potential and to assess their value to an enterprise, free of environmental distortions.

Hamish Chandler, manager of Sheep Genetics, which oversees genetic analysis systems LAMBPLAN and MERINOSELECT, said years of research and development had proven producers should be using a combination of ASBVs and visual assessment to select rams.

Hamish said using ASBVs allowed:

- Direct comparison of sires based on genetic merit and how they will affect production.
- Long-term, cost-effective planning for a flock, with an impact to be felt for generations.
- Greater predictability. You have to make sure the genetics you bring in have a predictable impact on your breeding program and will match your environment and production systems.
- Producers to account for important environmental or non-genetic factors,

such as age, nutrition, twinning and age of dam (whether the ram is out of a maiden or older ewe). Non-genetic factors can have a big impact on appearance but tell you nothing about how that sire's lambs will perform. For example, even with a normal spread in lambing dates, the oldest ram in a sale catalogue is going to be six weeks older than the youngest ram. This is likely to lead to a 10kg difference in weight purely because of age, but this difference will not be passed on to their lambs.

"It's also very important to continue visual appraisal to ensure a sire is structurally sound and is of the correct type to suit your production system and district," Hamish said.

With the inclusion of genomics into genetic evaluation for the sheep industry now a reality, Hamish said sheep producers could look forward to ASBVs becoming more accurate, particularly for the hard-to-measure traits.

"Genomics also means we can assess the genetic merit of rams far earlier in their lifetime, without having to wait for progeny to collect information," he said.

Resources

The Sheep Genetics website has step-by-step information to help users understand which traits are important to different enterprises and how to apply ASBVs and indexes to select the best rams. www.sheepgenetics.org.au

Producers can also attend:

RamSelect workshops: contact Lu Hogan T: 0427 687 432 or visit www.sheepcrc.org.au/education/producer-training/ramselect-workshops.php

Bred Well Fed Well workshops: contact Dr Serina Hancock // T: 0403 570 823 or visit www.makingmorefromsheep.com.au/bred-well-fed-well

Lifetime Ewe Management course: contact Darren Gordon // T: 0408 114 656 www.rist.com.au/lifetime-ewe-management.php

All these advances, however, don't mean sheep genetics were becoming more complex or more difficult to understand - quite the contrary.

Hamish said there was plenty of assistance available for producers to help them apply the science in a practical, cost-effective and beneficial way.

"If you haven't had any experience using ASBVs, it's important not to be daunted by the figures," he said.

"You only need to consider what traits are important to you and what traits you need to improve to better satisfy your target market specifications.

"The industry already provides quick selection tools in the form of indexes, such as Carcase Plus or Lamb 2020.

"These indexes summarise the value of the most important traits for each of the target markets to help sheep producers decide which animal will have a higher trait or dollar value to their flock."



Hamish Chandler, MLA
E: hchandler@sheepgenetics.org.au

Genetics



Figuring it out

Third generation sheep producer Jason Schulz believes LAMBPLAN and MERINOSELECT were the genetic catapults that improved his flock fertility and his market compliance for the domestic trade.

Snapshot

Joanne, Jason and Penny Schulz, Meningie, SA.



Property:
900ha

Enterprise:
Domestic trade lambs; first-cross ewe lambs off shears; Raven Limousin and Lim Flex cattle stud

Livestock:

700-800 breeding ewes and 120 breeding cows

Pasture:

Winter-active 6-7 lucerne, naturalised veldt grass, evening primrose

Soil:

Grey sandy loam over clay

Rainfall:

450mm

Left: Jason and Penny with their two-year-old son, Heston.

Jason, his wife, Penny, and his mother, Joanne, operate in a challenging climate near Meningie, South Australia. Having to deal with the area's unpredictable growing seasons, deficient soils and low rainfall, they are looking for any edge to create profit.

"We always buy in our replacement Merino ewes but it wasn't until Penny and I completed a Bred Well Fed Well workshop that we realised we didn't know enough about them," Jason said.

"We knew everything about our maternals but only the age, bloodline and micron of our replacements and nothing about their growth, carcase or reproduction potential."

The Schulzes set themselves a challenge: to produce the ultimate first-cross ewe using Australian Sheep Breeding Values (ASBVs) and visual assessment.

"We put \$uperBorder rams (Border Leicesters of high genetic merit) over Centre Plus-bred Merino ewes to produce highly fertile, fast finishing animals with positive fat, good eye muscle and natural worm resistance," Jason said.

Their progeny must perform, with the females sold off shears at eight months ready to be joined and at an average of 50kg-plus liveweight. They are offered annually at the Naracoorte first-cross ewe lamb sale, where they are usually bought by repeat buyers. Last year they averaged \$166/head.

The male portion are weaned and turned off at five to six months, weighing 48-50kg, for the domestic trade market.

Jason knew he couldn't just rely on ram genetics to produce the ultimate first cross ewe, he needed to source Merino ewes with superior growth and reproduction traits.

"I used MERINOSELECT to find a stud producing the type of high fertility, early maturing Merino ewes we needed," he said.

"I like to buy middle-aged ewes; they're a proven breeding proposition and not someone's culls."

The trait chase

Jason's shopping list of traits included: weaning weight, post-weaning weight, eye muscle depth, fat, number of lambs weaned (NLW%) and worm egg count (WEC).

"I also consider the Maternal \$ Index in the rams because that encompasses most of the traits I'm interested in," he said.

Positive eye muscle depth and positive fat are important, allowing the Schulz family to be competitive in the domestic trade with first cross wethers.

The positive fat ASBV, combined with NLW%, helps ensure ewe lambs reach maturity earlier.

Jason has been using ASBVs in combination with visual assessment to select rams for the past 10 years and aims to buy animals in the top 10% of their breed for genetic merit.

"It pays off. Our \$uperBorder ram average eye muscle depth is 1.1mm; the national average is 0.1mm," he said.

"The post weaning weight average for our rams is 9.5kg; the national average is 5.4kg - that translates into more kilograms of lamb to sell."

Going shopping

Jason's advice when drawing up the ram shopping list is to consider your target market and identify the five most important traits that will help you meet your target market specifications.

"When it comes down to the nitty gritty, aim for animals in the top 10-20% of the breed in the traits you want, assess them visually and don't be scared to shop around," he said.

Jason said while everyone has to work to a budget, it's important not to skimp on ram purchases as rams have the biggest influence on a flock.

"I have a basic rule of thumb that if my prime lambs make \$106, I can spend \$1,060 on a ram," he said.

"Good rams are out there and your seedstock producer should be listening to you about what you want for your enterprise. If you can't buy what you require within your budget, be prepared to look elsewhere."



Jason Schulz

E: jason@ravenlimousin.com.au



Visit www.sheepgenetics.org.au to learn more about ASBVs

Putting traits to the test

Most producers want their lambs to have a high growth rate, but focusing on just one profit driver can be counter-productive.

NSW Department of Primary Industries Sheep Breeding Specialist Brent McLeod showed, through two on-farm trials, how using Australian Sheep Breeding Values (ASBVs) could make a prime lamb enterprise more profitable.

"Successful lamb producers near Glen Innes approached me with a problem," he said.

"They had no trouble forward contracting their lambs and meeting target weights of 24-28kg HSCW (hot standard carcase weight); however, for four years in a row they were assisting 10% of their ewes during lambing and this was having a major impact on profits."

Brent said most good operators in the New England aimed to keep their ewe losses to less than 3%.

"After some discussion we decided on two trials. The first aimed to minimise ewe and lamb losses due to dystocia and the second investigated the difference in the value of lambs sired by rams with breeding values in the top 10% PWT (growth - post weaning weight) compared to rams with industry average PWT," he said.

Birthweight trial

Brent said mature ewes were randomly split into two groups. The first group was joined to rams with moderate birthweight ASBVs, while the second group was joined to rams from flocks that do not participate in LAMBPLAN. All sires were visually assessed and selected on the same structural criteria.

The ewes were lambed in August/September and lambs marked late September. Records were kept of ewe assistance and lambing losses (see table 1).

Brent said a replacement ewe was worth \$200/head and a weaned lamb about \$80/head (using the 2011 values at the time).

"This meant the cost of losing ewes and lambs from dystocia was about \$320/ewe when the trial achieved close to 150% weaning rates," he said.

"A difference in 2% in death rate between the groups represented a loss of 20 ewes or \$4,000/1,000 ewes joined without allowing for lamb losses."

Growth rate trial

To investigate what impact selecting rams with high growth rate ASBVs had on profitability, Brent and the Glen Innes producers designed a simple on-farm trial. It compared two sire groups with LAMBPLAN breeding values. Both groups had moderate birthweight figures; however, one had high growth rate ASBVs while the other had only average.

They were joined to separate groups of randomly selected mature-age crossbred ewes from the same mob (see table 2).

Brent said the results showed clearly why selecting rams with high growth ASBVs paid off.

"Their lambs were 5.1kg (liveweight) heavier at sale time which earned an extra \$15 plus/lamb compared to the average growth-rate-sired lambs," he said.

Table 1 Records of ewe assistance and lambing losses

Sire group	Ewes assisted and survived	Ewe deaths at lambing	Marking %
In LAMBPLAN with moderate birthweight (average 0.36)	0.7%	0.7%	149%
Not in LAMBPLAN	2.6%	2.7%	148%

Table 2 The average ASBVs for each of the two sire groups

Sire group	Birthweight (BWT - kg)	Growth (PWT - kg)	Fat (PFAT - mm)	Eye Muscle (PEMD - mm)
High PWT	0.36	14.2	-0.2	1.4
Average PWT	0.22	7.7	-0.7	1.0

Table 3 Average liveweight of lambs at different growth points

Sire group	Weaning first week of January	First week of February	Selling second week in March
High PWT	39.0kg	43.2kg	57.1kg
Average PWT	36.8kg	39.0kg	52.0kg

"The trial averaged 100 lambs/ram joined which returned an extra \$1,500 per ram in the first year. I think the message is fairly clear," (see table 3).

Brent said the trials not only solved the Glen Innes producers' problems with dystocia, but showed them how to use ASBVs to easily improve their profitability.

"The simplest way for producers to increase their returns from lamb production is to minimise ewe losses through buying terminal sires with moderate ASBVs for birthweight, visually correct shoulder/brisket structure and good ASBVs for PWT, so lambs are heavier at the same age of turnoff," he said.



Brent McLeod

E: brent.mcleod@dpi.nsw.gov.au

Dystocia is the term for an abnormal or difficult birth, typically caused by a large or awkwardly positioned foetus, smallness of the maternal pelvis, or failure of the uterus and cervix to contract and expand normally.

Producer groups

Groundswell



Michael Lamond of Eurofins Agrisearch, addresses the 2103 Field Day. The annual event covers a variety of topics.

Name: Southern DIRT (Dollars, Information, Research and Technology)

Location: The office is based in Kojonup, but we have members from Williams in the north to Mt Barker in the south, west to Boyup Brook and Manjimup, and east to Katanning.

Membership: 80 farming businesses.

How did the group develop? It was formed by a group of producers who saw a need for a grower group servicing mixed farming businesses in the high rainfall zone of Western Australia. As it developed, the high rainfall focus was removed. A focus group of farmers developed the initial structure and Southern DIRT was incorporated in June 2010. The group has grown from information and extension activities to running its own trials and research projects.

What areas of research/issues are the members interested in?

Cropping and livestock production systems, as well as business management issues. Members are interested in making efficient use of inputs to maximise production across the whole farm system.

How does the group operate? The group is governed by a board of growers and industry professionals who set the group's strategic direction. They meet five to six times a year. Southern DIRT has a staff of three, with an Executive Officer, Project Officer and Administration Officer.

What have been some of the outcomes to date? High quality events, such as Crop Updates and Spring Field Days, as well as playing a pivotal role in MLA's Meat Profit Day in Albany. Collaboration with researchers, extension officers and other grower groups on statewide projects has raised the profile and capacity of Southern DIRT, and increased the information available to members. The group is also running WA's first Cropping Challenge.

What advice would you give others looking to start a producer group? Have a clear focus of what you want to achieve, make sure you remain relevant to your members and maintain the integrity of the group.

More information: www.southerndirt.com.au
Pip Crook // T: 08 9831 1074 // E: eo@southerndirt.com.au



South West Prime Lamb Group members inspecting a plantain pasture on Derek Dyers' property, 'Pleasant Hills', at Digby.

Name: South West Prime Lamb Group

Location: South-west Victoria

Membership: 38 // **When formed:** 20 years ago

How did the group develop? The group was formed as an initiative of the Victorian Department of Agriculture.

What areas of research/issues are the members interested in?

The group philosophy is you're never too old to learn and the day you stop learning is the day you die. We cover anything to do with prime lamb production, particularly timely and topical issues.

How does the group operate? We have a voluntary chairman, a paid coordinator and a committee of five or six members who come up with project ideas. Membership costs \$110/year.

What have been some of the outcomes to date? We've run more than 100 events over the past 20 years, including field days, seminars and on-farm walks and trials. Our events are about providing information to meat producers.

We ran a self-funded focus farm for a year looking at different issues and we also set up a lamb marketing cooperative which we ran as a commercial business for 10 years.

We produce a newsletter two to four times a year, and in 2011 the group agreed to join the BESTWOOL/BESTLAMB statewide network.

What advice would you give others looking to start a producer group? You have to have someone to drive it. You need a reasonably strong committee that want to make things happen, and you need to maintain momentum, holding regular events that are topical and relevant to members.

More information: South West Prime Lamb Group Coordinator - Kate Joseph // T: 0428 541 158 // E: primeag@westvic.com.au

See the profile on South West Prime Lamb Group's Kate Joseph on pages 6-7 of this edition.

Producer groups across Australia are tackling local production issues head on. MLA has been tapping into the local knowledge of many of these groups to road test and extend research in a production environment through its Producer Research Sites and Producer Demonstration Sites programs.

Here, *Feedback* finds out from four groups across the country how they got started, what issues they're investigating, the outcomes to date and their advice on how producers can form their own group.



Producers attending the Southern Farming Systems AgriFocus Technical Cropping event in 2013.

Name: Southern Farming Systems

Location: Head office in Inverleigh, Victoria, with branches in Geelong, Hamilton, Streatham, Gippsland and Tasmania

Membership: About 450 // **When formed:** 1995

How did the group develop? A small discussion group of six farmers founded Southern Farming Systems (SFS) in an effort to make farming in the higher rainfall zone more profitable. Their problems were often different from other areas, particularly the issue of sodic soils and waterlogging, and they wanted to direct research into these specific issues.

What areas of research/issues are the members interested in? Each branch has its own R&D priorities and these currently include:

- Integration of cropping and livestock systems
- Effective management strategies for slugs
- How to manage heavy crop stubble residues
- Herbicide resistance
- Introducing legume crops or pastures as an alternative break crop to canola
- Subsoil constraints
- Nitrogen management
- Soil acidity
- Summer cover cropping into stubble

How does the group operate? There is a board of producers, five branch committees plus branch R&D advisory committees, part-time local coordinators in the Victorian branches and a full-time manager in Tasmania. The CEO, trials team and administration staff are based at head office.

What have been some of the outcomes to date? SFS is well known for adapting raised bed technology to broadacre cropping, but it has been involved in many other research areas as well. These include using organic amendments to improve hostile subsoils, tailoring nitrogen applications to manage canopy growth, and using foliar fungicide and disease-resistant varieties for rust control. They've also established better links between cropping and livestock systems through work looking at grazing cereals and canola.

What advice would you give others looking to start a producer group? You need to have the right people. That means people with a common focus on questions they want answered, who also have energy and enthusiasm. Everyone must be willing to chip in, particularly at the start when you don't have much money or many resources.

More information: www.sfs.org.au
Jon Midwood // T: 03 5265 1666 // E: jmidwood@sfs.org.au



Rod Cockrem from Gallagher, Flinders Beef Challenge secretary Terressa Ford and group member Tenille Atherton recording and checking data while fellow members observe cattle being weighed.

Name: Flinders Beef Challenge Group

Location: Flinders Shire, surrounding the town of Hughenden

Membership: Core group of 30 producers and families

How did the group develop? The group began after the 2007 Hughenden Show had a poor showing of cattle. The goal was to showcase the clean, green pasture-fed beef of north-west Queensland, with the first Flinders Beef Challenge held in November 2007.

What areas of research/issues are the members interested in?

- How to achieve a greater percentage of our tropical northern herd meeting MSA criteria
- HGP versus non-HGP
- Crossbreeding and highbred vigour versus purebred bloodlines
- New technologies to assist in herd and business management

The group also used fat scanning technology to compare the visual liveweight appraisal of an animal with how it grades on the abattoir floor, a particularly valuable exercise as some breeds did not meet the minimum fat cover specifications of the abattoir.

Our focus now is on supporting each other through the issues and pressures associated with drought.

How does the group operate? We have a group spokesperson/ chairman and a group secretary. Everyone is encouraged to bring forward ideas for discussion, then we vote on how to proceed.

What have been some of the outcomes to date? Individuals have changed the way they manage their herds, with some moving away from HGPs, some looking more closely at their breeding programs and how they purchase bulls, and others changing their pasture management. Some producers are also doing more data recording in relation to slaughter data. The sharing of knowledge has been powerful in helping group members tackle problems in their own operations and also make contacts with other industry stakeholders, sales reps and services they may not have engaged without the group's supportive environment.

What advice would you give others looking to start a producer group? Be open-minded to ideas brought to the group. Encourage sharing between men and women, young and old - the younger members are the future of our industry and its sustainability.

More information: Terressa Ford // T: 07 4741 1546
E: greg.terressa.ford@bigpond.com

Reproductive efficiency

The CRC's findings on fertility

Following seven years of research, many of the findings from the Beef Cooperative Research Centre (CRC) III can be implemented by seedstock and commercial operations right now to improve herd fertility and profitability.

Researcher and research and development extension consultant John Bertram said fertility was a key profit driver for northern cattle producers and was an area seeing huge variation between enterprises, meaning there was plenty of scope for improvement.

"By applying the outcomes and principles of the CRC III research, producers can plan their breeding program (including for Brahman) to calve every 365 days," he said.

"Tightening up calving intervals can be achieved by selecting sires that will pass on desirable reproduction traits to their daughters and, in most cases, producers will improve their herd's reproductive performance."



John Bertram // E: commpark8@skymesh.com.au



Top tips to boost reproduction rates

For commercial producers

1. Buy replacement bulls with better than breed (or herd) average estimated breeding values (EBVs) for days-to-calving.
2. Don't retain replacement heifers or bulls from cows that missed calving as a maiden heifer, a first calver or that have bottle teats.
3. Over-mate replacement heifers and select those that conceive earlier in the joining period.

For stud operators

1. The benefits of these CRC findings can be captured immediately by recording male and female reproductive performance in the herd.
2. Start by recording the reproductive performance (mating group, mating outcome, lactation status etc) of maiden heifers and first-calf heifers and cull empty cows in these age groups.
3. Use stud sires with better-than-average EBVs for days-to-calving and scrotal circumference. Also use polled if available.
4. Utilise all genetic information available with visual appraisal to select young replacement bulls and heifers.
5. Brahman breeders should record scrotal circumference at 12 months of age.
6. Tropical Composite breeders should collect data on percentage of normal sperm for bulls at 12 months of age.
7. Breeds without reproduction EBVs should aim to work together and collect mating and calving data to ensure future development and good genetic progress of the breed.

Resources:

- The Breeding EDGE course is designed to assist northern producers to develop a breeding program or improve the existing one. It uses reproductive and genetic knowledge and technologies to achieve production targets. Go to www.futurebeef.com.au for event details.
- *Heifer management in northern beef herds manual* www.mla.com.au/heifermanual
- *Weaner management in northern beef herds manual* www.mla.com.au/weanermanual
- *Managing the breeder herd - Practical steps to breeding livestock in northern Australia* www.mla.com.au/breederherd
- *Tips & Tools - The accuracy and success of EBVs* www.mla.com.au/EBVaccuracy

Table 1 How the Beef CRC III findings can impact a cattle business

Topic	Research finding	Impact	Explanation
Early in life traits	Lifetime reproduction was lowly heritable in Brahmans and Tropical Composites but the project established that several traits measured early in life were highly genetically heritable.	Measuring certain traits early in life can pinpoint lifetime reproduction performance.	Traits such as age of puberty in females and scrotal size in males, along with % normal sperm, were valuable measures early in life and should be measured routinely.
Paternal traits	Male reproduction traits, especially measures of semen quality, have been identified as genetic indicator traits for improving reproduction.	Sires drive genetic improvement in the herd as they produce many more offspring than a single female.	<p>There is a strong relationship between bull fertility and the performance of his offspring.</p> <p>Brahman bulls with a larger scrotal circumference at 12 months of age tend to have higher sperm motility at two years of age.</p> <p>There is a moderate genetic correlation between bulls' scrotal circumference and the age at puberty in heifers.</p> <p>The relationship is slightly stronger in Brahmans than it is in Tropical Composites.</p> <p>Ensuring sires are not selected from dams that have failed to conceive as a first calf breeder and by using measures of scrotal circumference, % normal sperm analysis and a bull breeders' evaluation exam can go a long way to significantly improving a cow herd's fertility.</p>
Maturity	For Brahmans, the genetic variation in maiden heifer reproduction was highly correlated with differences in age of puberty.	Heifers that mature earlier will produce more calves during a cow's lifetime.	<p>Brahman heifers that reach puberty earlier will generally be more fertile and more productive during their lifetime.</p> <p>Age of puberty has important implications for farm management and establishing calving patterns for the breeding that suit the seasonal conditions and maximise weaner output.</p>
Cycling while raising a calf	Lactation anoestrus in first lactation Brahman cows is moderately heritable.	Failure to cull breeders who don't cycle while raising their calves can produce generations of poorly performing cows.	<p>First calvers who conceive early in their lactation are more likely to maintain a regular annual calving pattern.</p> <p>A Brahman first calver who fails to cycle while raising her calf is likely to have inherited this trait and is also likely to pass it on to her daughters. Bulls should not be retained from these dams.</p> <p>Failure to cull such cows increases the risk of developing a less productive and less profitable breeding herd over time.</p> <p>The greatest genetic gains for the herd are made by pregnancy testing (with foetal ageing) and culling breeders that fail to perform in their first two lactations.</p> <p>Principal Researcher for CRCIII David Johnston is hopeful this single finding will provide the foundation of a Brahman fertility EBV as more seedstock operators start recording fertility traits.</p>
Extended cycles	Extended lactation anoestrus intervals were the primary cause of reduced reproductive performance.	Cows with extended cycles produce less calves, fewer even lines and delayed weaning periods.	<p>Cows that fail to cycle while raising a calf are less productive during their lifetimes. Their longer calving intervals result in extended weaning periods.</p> <p>Calving out of season may also compromise cow-calf survival.</p> <p>Ultimately this can mean less calves weaned, uneven lines of steers and heifers for sale, more heifers not reaching puberty at joining and increased labour costs, if producers need to wean twice.</p>
Breed	Tropical Composite cows had less lactation anoestrus and higher early and lifetime reproduction rates compared to Brahmans.	Genotypic selection to improve reproductive rates is beneficial.	The CRC-developed Tropical Composites (containing combinations of Charolais, Senepol, Santa Gertrudis, Brahman and Belmont Red) are more fertile than pure Brahmans and offer cross-breeding opportunities for producers looking to improve their herd reproduction traits.

Invasive animals

New approaches to wild dog control

Australia's armoury for wild dog control is becoming more effective, targeted and humane with the development of better strategies and tools to minimise stock attacks.

National Wild Dog Facilitator Greg Mifsud, of the Invasive Animals CRC, which is part-funded by MLA, said producers were gaining ground, with more communities embracing broad-scale control strategies hinging on how dogs use the environment, rather than on who owns the land or whose stock are being attacked.

"The 'nil tenure' message is spreading and more farm communities are using control strategies that embrace larger areas - reflecting the distances dogs can travel - that involve state and private landholders and utilise the most effective tools for the situation," he said.

"Experience has taught us there is no point one producer trying to act in isolation - all that does is move the problem somewhere else, often temporarily. In some instances, under-resourced and poorly coordinated control programs have actually increased stock attacks."

The CRC has also invested in community engagement research aimed at improving how community-led wild dog control programs can best be implemented and coordinated, and how to deal with the issue's often emotive coalface.

"This is a whole new approach compared to how we've worked in the past, and it eliminates the top-down style of disseminating information to producers," Greg said.

"The focus is on information sharing and working collectively."

Greg said there were successful broad-scale programs, such as the South Australian pastoral zone's Biteback program and the Wild Dog Watch group in western Queensland.

"Wild Dog Watch has a full-time, funded coordinator who oversees and integrates

control programs across 13 shires, which cover almost two-thirds of Queensland," he said.

The National Wild Dog Action Plan, released in July, conservatively estimated wild dogs cause production losses of up to \$60 million a year and pose a risk to at least 14 types of native mammals, reptiles and birds.

Simon Humphrys, the Invasive Animals CRC Project Leader Land Pests, Commercial Products, said most communities affected by wild dogs were getting much better at working together and choosing the right tools to achieve the best control outcomes, while minimising effects on non-target species.

"During the life of this CRC (2012-2017), we've got a range of new tools to bring on to the market that will improve those outcomes even more," he said.

"However, there are registration requirements to be addressed before products can be commercialised, so that will influence when they will become available."

In the pipeline

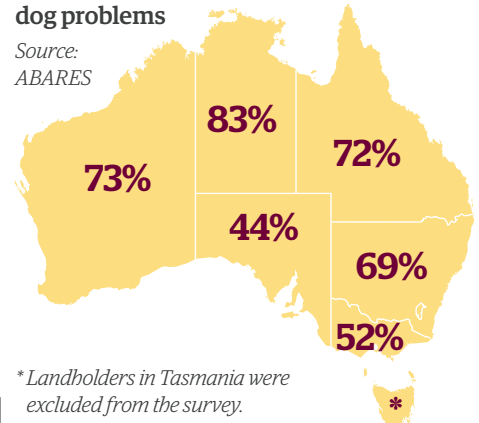
PAPP - A new toxin with an antidote, PAPP is intended for use where domestic dogs are at risk. Like 1080, PAPP is more toxic to some species than others and, importantly, the two poisons affect native species differently, so control programs can be tailored for minimal risk to non-target species.

PAPP is not yet approved by the Australian Pesticides and Veterinary Medicines Authority (APVMA). Once approved, PAPP baits are expected to be considerably more expensive than 1080 baits, as the poison is more expensive and more of it is required for a lethal dose.

Blue Healer - An intravenous injectable, this antidote to PAPP is already available, but only to veterinary surgeons. The CRC, with support from ABARES, is developing

Figure 1 Percentage of surveyed agricultural landholders reporting wild dog problems

Source:
ABARES



* Landholders in Tasmania were excluded from the survey.

another product - most likely a suppository - for dog owners to treat accidentally poisoned animals. It will be released at the same time as PAPP poison and baits.

Canid Pest Ejector (CPE) - Successfully used in the US for 60 years controlling coyotes, the CPE is a stationary device that delivers liquid 1080 when a dog or fox bites or pulls on the bait head. Ejectors are considered safe for most non-target species because a certain pull force is required to activate them and their immobility makes them suitable for use in populated areas and national parks. The poison is protected from the weather, so baits remain active for longer. Invasive Animals CRC partner, Animal Control Technologies, is applying to the APVMA for its registration and it could become available in Australia as early as next year.

Lethal trap devices - Developed by the CRC and its partners Connovation in New Zealand and NSW Department of Primary Industries (DPI), this product will improve the humaneness of leg hold traps. The device is essentially a bubble of PAPP, fixed to the trap jaws. As the animal chews at the jaws, the nipple is punctured and the animal quickly becomes unconscious and death occurs within 60 minutes.

Computer-assisted technologies - The CRC, with its partners, NSW DPI and the University of New England, is working on electronic solutions that can be used to automate the real-time detection and monitoring of wild dogs, including individuals from their facial features via remote tools. In the future, automating bait delivery could be possible from a device that recognises the target pest. Smartphone technology could also be applied to warn producers of troublesome dogs on their perimeter.

55%

of all landholders reported wild dogs were reducing their lambing or calving rates

17%

of landholders reported changing their livestock composition/leaving the industry as a result of sustained attacks

45%

of landholders with wild dog problems reported the problem was becoming more severe

Source: ABARES survey of landholders in eastern Victoria, south-west Queensland and the South Australian Arid Lands

Disease carrying dogs

Wild dogs may not be the only - or even main - culprits guilty of spreading *Neospora caninum*, a coccidian parasite of canids (dogs and foxes) that can cause reproductive loss in cattle through abortions and calf mortalities.

According to research into wild dogs and the transmission of *N. caninum* by Dr Jessica King from the Invasive Animals CRC, domestic dogs, foxes and even wildlife potentially share the blame. The report found neosporosis is transmitted to cattle in several ways, most commonly from cow to foetus. Cows do not carry *Neospora* in their intestinal tracts, as dogs do, and therefore don't contaminate the environment with oocysts (eggs).

Jessica's work confirmed the parasite can be transmitted 'horizontally' from dog to cow if dogs eat infected tissue such as placentas or aborted foetuses. They shed the parasite - in oocysts - through their faeces, contaminating pasture and water supplies.

The report also proposed a second, hypothetical 'horizontal' route of transmission that involves wild dogs eating infected material and subsequently infecting wildlife. However, more research is needed to determine how - or if - this influences the transmission of the disease to livestock.

The research concluded that farm dogs are just as likely as wild dogs to transmit neosporosis to cattle, because of their ready access to potentially infected material through scavenging or being fed infected tissue.

It recommended further research to determine the impact of removing wild dogs from infected farms and the role foxes and native wildlife play as disease carriers.

Neosporosis prevention tips

- Control wild dogs and foxes on your property.
- Keep domestic dogs confined during calving season. Don't allow them to eat placentas or aborted foetuses.
- Limit the opportunity for domestic dogs to defecate where your cattle eat and drink.

Neosporosis signs

Infected adult cattle do not show clinical signs, but the infection can cause reproductive loss.

There are three potential outcomes for calves infected *in utero*:

1. Abortion (quite common in dairy herds) usually between four and seven months, but it can occur anytime from three months to term;
2. Abnormal calf born (rare) - low body weight, unable to stand, flexed or over-extended limbs, poor coordination and reflexes, asymmetrical eyes;
3. Normal calf born (most common), healthy but a carrier.

\$110 million

in dairy industry production losses due to *Neospora caninum*



Simon Humphrys

E: simon.humphrys@invasiveanimals.com

Greg Mifsud

E: greg.mifsud@invasiveanimals.com



APVMA: www.apvma.com.au

For wild dog information and resources see PestSmart: www.feral.org.au/pestsmart/wild-dogs

To record wild dog activity, WildDogScan: www.feralscan.org.au/wilddogscan

To view *An Integrated Assessment of the Impact of Wild Dogs in Australia* visit: <http://data.daff.gov.au/data/warehouse/9aai/2014/AssessWildDogs/AssessWildDogs20140428v1.0.0.pdf>

www.feral.org.au/pestsmart

Dog action

The National Wild Dog Action Plan, Australia's first national framework to promote and support community driven action for landscape-scale wild dog management, was launched at Armidale, NSW, in July.

MLA was on the national plan's development project steering committee and attended the launch.



Read the National Wild Dog Action Plan at www.woolproducers.com.au/national-wild-dogs-action-plan



For more information visit: www.feral.org.au/wp-content/uploads/2014/02/WDCS3_neospora.pdf

Invasive animals

Guardian angels

Feedback first talked with Andrew and Glenda Bowran in 2012 to hear about their experiences with Maremmas as a wild dog control measure (see the June 2012 issue). Two years on, we've caught up with them to find out how effective it has been.



Snapshot

Andrew and Glenda Bowran, Tallangatta, Vic.



Property:
1,215ha

Enterprise:
Cattle and sheep/
wool production

Livestock:
600 cattle, 1,500
Merino sheep

Pasture:
Ryegrass, clover,
native pastures

Soil:
Black to granite

Rainfall:
900mm

Some sheep producers might not think a 65% lambing percentage was anything to write home about but, for Andrew and Glenda Bowran, it's cause for celebration.

Eight years ago, the Bowrans, at Tallangatta South in north-east Victoria, were almost put out of the sheep business when a sudden spike in wild dog activity nearly wiped out their Merino flock.

"I don't know what caused it. It seemed to go from manageable to out of control overnight," Andrew said.

"To get a lambing percentage of 65% at marking most years - we've even managed 100% a couple of times - is just fantastic."

Andrew and Glenda, with help from their sons Steven and Leigh, operate 'Riversdale', a 1,215ha sheep and beef enterprise that ranges from sweeping Mitta River flats, on irrigation, to the granite-strewn, windswept peaks that contain the Mitta Valley.

After trying almost every wild dog control tool there is, they have settled on guardian dogs - Maremmas (one of the 40-odd breeds available).

"Our hill country is too rough for electric fencing, as we can't check it every day to make sure it's working properly," Andrew said.

"Baiting doesn't work for us and trapping is a bit 'hit and miss'.

"Shooting works - we've cleaned up more than 40 dogs in four years - but it is time consuming. During the worst period, we spent up to six hours a day tracking and controlling dogs."

At their wits' end, the couple turned to guardian dogs and, after some teething problems, are convinced they are the best solution.

"Initially, you can spend a bit of time returning them to their paddock, and their territory doesn't always follow the title boundaries," Andrew said.

"Our neighbours have been really good about it and just tied them up and given us a call. Most of the time the dogs just do their job with little maintenance required."

The Bowrans' guardian dogs, originally Bindi, Mudgee, Gongga and Ringo, have been tracked using GPS collars and VHS transmitters. They were part of Dr Linda van Bommel's research project that produced the Invasive Animals CRC handbook, *Guardian Dogs: Best Practice Manual for the use of Livestock*, which is available free online.

"We learnt they will routinely travel 5-6km. When they find a wild dog, they follow it out of their territory," Andrew said.

Unfortunately, Mudgee was accidentally shot and his mate, Gongga, opted for early retirement as a result.

"They work in pairs, and it gave Gongga a big fright when we lost Mudgee. He wouldn't stay up the paddock so he's warming the back step instead," Andrew said.

The remaining pair, Bindi and Ringo, are now eight years old, very experienced and devoted to their flock. Together, they are holding the fort, but Andrew is looking to invest in another young pair to continue the old guard's protective legacy.



Andrew and Glenda Bowran
T: 02 6071 7231



For the *Guardian Dogs Best Practice Manual for the use of Livestock* Guardian Dogs visit
[www.invasiveanimals.com/
wp-content/uploads/2010/09/
Guardian-Dogs-web.pdf](http://www.invasiveanimals.com/wp-content/uploads/2010/09/Guardian-Dogs-web.pdf)

Community engagement



Sharing our story

Shannon and Zara Camp, two of Kylie and Ernie's children, meet a curious calf at Peewee Turkey Nest on Floraville Downs.

Kylie Camp is a proud North Queenslander. She and her husband, Ernie, live and work on 'Floraville Downs', about 70km south-east of Burketown on the Gulf of Carpentaria.

The couple and their four children recently celebrated the 150th anniversary of the station's settlement, which coincided with Ernie's 50th birthday and the 50th anniversary of his family's ownership of the property.

"Our children are now the fifth generation to live in this region," Kylie said.

The couple share a strong commitment to their local community. Ernie is the Mayor of Burke Shire and serves on the Riversleigh Scientific Advisory Committee, while Kylie is involved in the Isolated Children's Parents' Association, The Country Women's Association and the Regional Arts Development Fund, and is president of the local kindergarten committee.

Kylie shared her family's story on the Target 100 site in 2013. Her goal was to tell a positive story about the beef industry and life in the bush.

It wasn't the first time Kylie had shared her story, and the passionate advocate for the bush says it won't be the last.

"I often do interviews on ABC radio and if newspapers ring me I always try to contribute," she said.

"We have a big waterfall near us, so when tourists come to visit it I talk to them about

what we do here. We also have megafauna fossils on the place, so when people from the universities come out they see a different kind of life too.

"A lot of people know very little or nothing about the beef industry and how we run our properties.

"Most are genuinely interested, but they can only go on what information they have. If we're not out there providing the correct information, they'll have to believe the people who are presenting misinformation."

Educating consumers

Kylie hoped sharing her story would help beef consumers in the city understand and support their local industry.

"It would be great if we could educate consumers so they recognise we're good environmental stewards who are looking after Australia, as well as raising a quality product, so they will want to reward us by buying our product," she said.

"That would get some balance back in the system so everyone's getting a fair share of the pie."

Environmental stewards

The Camps take their environmental stewardship seriously and have instigated a number of sustainable practices on Floraville Downs.

A targeted burning program started by Ernie's father, Walter, encourages pasture

Snapshot

Kylie and Ernie Camp,
Burketown, Qld.



Property:
94,000ha

Enterprise:
Beef cattle

Livestock:
About 8,000 head, including Brahman cows, Charolais and Santa Gertrudis bulls

Pasture:
Mostly Flinders and Mitchell grass, plus annual grasses and fodder trees in the riverine areas

Soil:
Black soil plains

Rainfall:
580-630mm

regeneration, and reduces plant and insect pests and wildfire risk.

Ongoing investment in water infrastructure, including 50km of poly pipe, tanks, troughs and solar-powered pumps, has reduced water lost to evaporation, reduced reliance on fossil fuels and allowed stock to spread out and better utilise feed, resulting in less grazing pressure on the grasslands.

The Camps have also put in several soil banks to control flood runoff and help reduce erosion. On the animal welfare front, they continue the traditional low-stress stock handling techniques and minimise the use of mechanical mustering of their herd.

Economic challenge

"The biggest challenges are economic and I would like to see some more processing development in the north," Kylie said.

"We currently sell all our cattle through the saleyards at Charters Towers, 830km away.

"We need to maximise the diversity of our markets, and less travel would also improve animal welfare and product quality."



Kylie Camp

E: floravilledowns@optusnet.com.au

Community engagement

Join the campaign...

So far 210 cattle and sheep producers have joined the Target 100 program to share their stories of sustainable production, but more are needed.

MLA Community Engagement Manager Pip Band said Target 100 participants were connecting with consumers through YouTube, Facebook, Twitter and the Target 100 website, as well as farm visits and media interviews.

If a multimedia presence is not your style, Pip said writing a few paragraphs about your production system and uploading a photo to the Target 100 website would serve just as well.

"The Target 100 program was conceived as a way to promote industry research and development, but the wider community really connects with the producer case studies," Pip said.

"We know some consumers have concerns about the environment and animal welfare, and there is a lot of misinformation out there.

"Target 100 is our way of having an honest discussion with consumers about what really happens on farms.

"The more people telling the story of how they produce beef or lamb on their place - the stronger the message that the whole industry is committed to ethical and sustainable production."

Target 100 is

2 years old and tells the story of

210 producers.

It has had

40,000 YouTube views and

80,000 website hits.

Advocacy from the

In the mid-2000s, Steve and Rebecca Cadzow took over the station from Steve's parents Dick and Ann, veteran Northern Territory pastoralists and former NT Landcare award winners.

Steve and Rebecca shared the family commitment to sustainable land management and the production of Poll Hereford cattle in a challenging environment.

They're also enthusiastic adopters of technology as a means of improving efficiencies, profits and animal welfare outcomes.

Telling their story

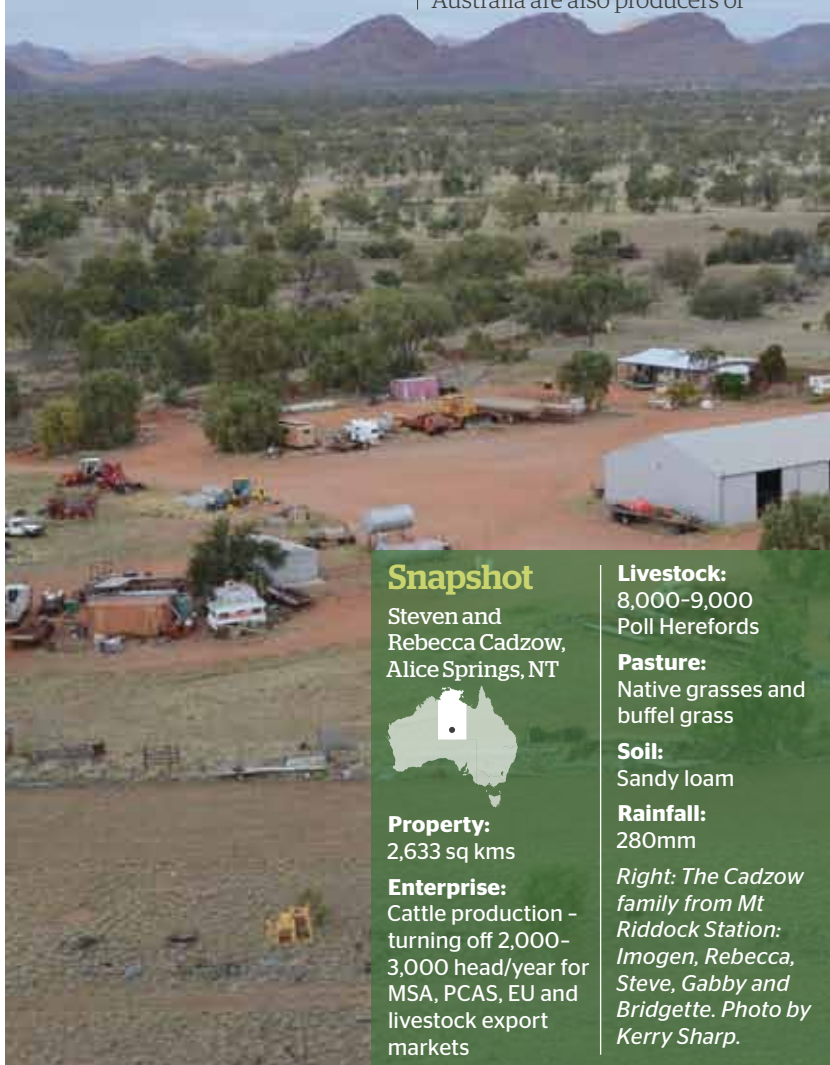
In 2013, the Cadzows shared their story of sustainable food

production with the broader Australian community through Target 100.

"At the time, we had just been through the live export debacle and most people thought 'Northern Territory beef' meant the Top End, Brahmans, big cattle stations owned by big companies and live export," Rebecca said.

"We wanted to let people know that sustainable, family-owned companies exist here in Central Australia, producing high quality, pasture-fed beef.

"Mt Riddock is MSA, PCAS (Pasturefed Cattle Assurance System) and EU-accredited, and some of the stations in Central Australia are also producers of



Snapshot

Steven and Rebecca Cadzow, Alice Springs, NT



Property:
2,633 sq kms

Enterprise:
Cattle production - turning off 2,000-3,000 head/year for MSA, PCAS, EU and livestock export markets

Livestock:
8,000-9,000
Poll Herefords

Pasture:
Native grasses and buffel grass

Soil:
Sandy loam

Rainfall:
280mm

Right: The Cadzow family from Mt Riddock Station: Imogen, Rebecca, Steve, Gabby and Bridgette. Photo by Kerry Sharp.



Pip Band, MLA
E: pband@mla.com.au



To upload your sustainable farming story to the Target 100 website go to www.target100.com.au/Farmer-stories/Add-your-sustainable-farming-story

Alice

The Cadzow family from 'Mt Riddock Station', north of Alice Springs, are passionate producers and enthusiastic advocates for the Central Australian beef industry.

organic beef. Nearly all the stations around Alice Springs are family-owned."

Multi-media personalities

As well as telling their story on the Target 100 website, the Cadzows featured in a Youtube video and were special guests at an 'ideas festival' after supporting Target 100's partnership with TEDx Sydney 2014.

TEDx events help share ideas in communities around the world, and a competition run as part of TEDx Sydney saw a pair of Sydneysiders travel to Mt Riddock to experience life on a cattle station (see article on page 5 of the June edition *Feedback*).

The Cadzows then travelled to Sydney to join a TEDx panel discussion at the Opera House, discussing beef cattle management practices and how they have incorporated technology at Mt Riddock.

According to Steve, the TEDx audience was engaged and educated, and listened intently.

"People from many different avenues in life came up, asking us different things about station life," Steve said.

"For example, one lady said she had no idea there were cattle - or even properties - in Central Australia. She had finished high school and university and said no one had told her cattle were

reared in Central Australia or, for instance, that we were pumping water with solar power."

History of innovation

Among the technological innovations discussed at TEDx was the Cadzows' recent investment in a remote livestock management system which incorporates a walkover weighing platform, automatic draft gates and UHF telemetry.

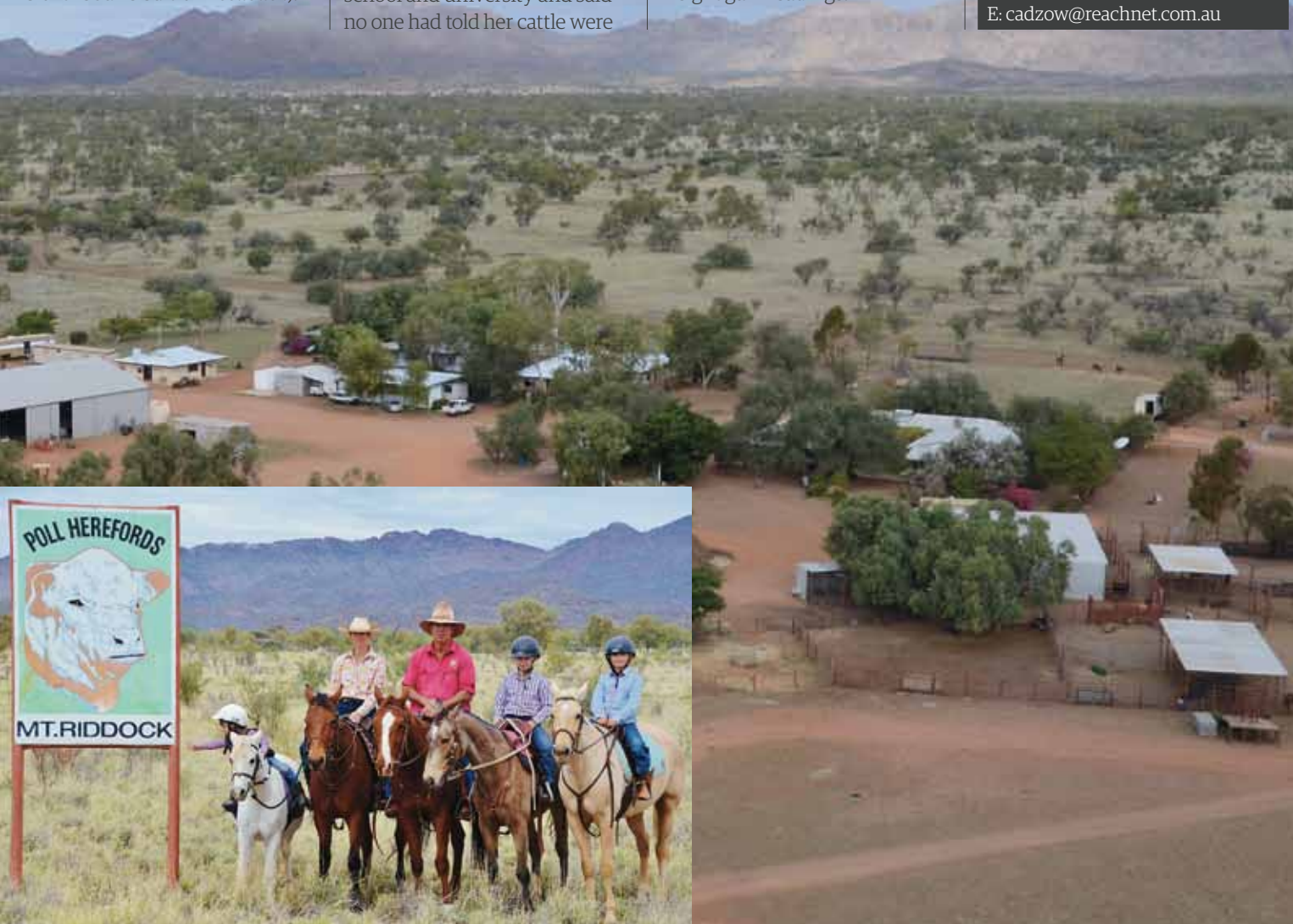
The system was installed in April and provides labour efficiencies, reduces animal handling and stress and gives an indication of land condition and feed on offer, based on daily weight gain readings.

The Cadzows have also installed remote water point monitoring and solar bores, saving thousands of dollars in wages, fuel and vehicle running costs, and freeing up time for other jobs.

Each year the Cadzows set aside a portion of their budget and time for Landcare work, a practice that began when Dick bought the station in 1986 and began converting a "virtual desert", degraded by rabbits and feral horses, into a successful and productive grazing property.



Steve and Rebecca Cadzow
E: cadzow@reachnet.com.au



Collaborative marketing

Going for it with grassfed

The launch of MSA-licensed, grassfed beef brand Blue Label Beef is a major step on the road to vertical integration for fourth-generation beef producers Roderick Binny and Karl Harms.

Producers Roderick Binny and Karl Harms launched their MSA-licensed flagship brand, Blue Label Beef (BLB), with the support of MLA via the Collaborative Marketing Program.

"The collaborative agreement has basically doubled our marketing dollar's punch, providing 50% funding of promotional activities for the brand," Roderick said, adding it helped pay for trade show sites, brand launches, celebrity chefs, brochure production and taste testing.

"The program has been an absolute godsend for us and is an example of producers' levies in action because it's helping to provide more markets and more competition for Australian beef.

"When I'm out buying cattle and talking to producers, I can relate our price grid directly to their levies. Without the co-funding marketing budget, our brand, and others like it, may never have got off the ground."

BLB is a licensed Meat Standards Australia (MSA) brand and, according to Roderick, "MSA is the cornerstone of the brand".

"The MSA stamp is a guarantee of high quality that's trusted in the domestic marketplace and is being increasingly recognised in export markets as well, so we'll leverage off that in our international marketing," he said.

As co-founders of Australian Grassfed Meats (AGM), Roderick and Karl are steadily realising their vision for a vertically integrated beef business that will control the supply chain from conception to processing.

Blue Label Beef (BLB) aims to be a premium brand and is marketed as 'Hormone Free, GMO Free, Free Range and Grassfed'.

Roderick said offering a grassfed product was central to the AGM business plan.

"Setting up a grassfed beef label wouldn't have been a business plan that would fly five years ago, but with the advent of food shows such as MasterChef and My Kitchen Rules, food awareness in the domestic market has grown exponentially," Roderick said.



Erin and Karl Harms with their daughters, Stella, 5, and Lily, 8.

Snapshot

Karl Harms,
Texas, Qld.



Property:
400ha under
irrigation

Enterprise:
Lucerne hay, some
cash crops and
beef cattle
finishing

Livestock:
Turning off 1,000-
1,500 finished
cattle annually

Pasture:
Lucerne

Soil:
Red loam river flats

Rainfall:
635mm

"That's what I'm being told by butchers at the coalface and there are some butchers in metropolitan areas who are switching over to purely grassfed beef.

"People in the first world want to know the origin of their food. They want to know the animals are free of chemicals, such as hormones and antibiotics, that may impact their own health, and they also want to know the animals have been raised humanely.

If you can verify that your brand meets those standards, the market is quite prepared to pay a premium."

Sourcing stock

Cattle destined for the BLB brand are grown out and finished on Roderick's Guyra property 'Westbrook Station' and Karl's Texas irrigation farm 'Severn Fields', or purchased as finished stock from beef producers in the NSW Northern Tablelands and Queensland's Southern Highlands.

The brand's "ideal animal" is a milk tooth, prime European-British cross steer or heifer, 500kg liveweight.

"The top of our grid is 245-325kg carcass weight, 5-17mm P8 fat depth, meat colour 1B-3 and fat colour 0-5," Roderick said.

"Agents help us find cattle then either Karl or I personally inspect them."

While BLB is non-breed specific, there are plans to produce a grassfed Wagyu brand before Christmas and a Charolais blend early in 2015.

"Karl and I are both second generation Charolais seedstock producers and one of our motivations for developing the brand was to provide a premium return for our seedstock clients and ourselves," Roderick said.

The BLB brand is currently in limited release in South East Queensland through one wholesaler and one specialist portion cutter butcher.

"We plan to release in Sydney early in 2015 and Melbourne later in 2015 as we build numbers," Roderick said.

"As we're building our domestic brand awareness and reputation we'll be doing the same overseas with a portion of our production."

While the focus for BLB is currently in the domestic market, trial shipments have been sent to China and Korea.

"Karl and I made several trips to China last year and were encouraged by the growing market there for smaller, boutique style brands," Roderick said.



Roderick Binny

E: glenleacharolais@bigpond.com



www.australiangrassfedmeats.com



<p>Snapshot Roderick Binny, Guyra, NSW.</p>  <p>Property: 800ha</p>	<p>Enterprise: Trade cattle and prime lambs, Charolais stud</p> <p>Livestock: Turning off 1,500-2,000 finished cattle annually (currently have 500 breeders but going out of breeding)</p>	<p>Pasture: Improved pastures of phalaris, fescue and ryegrass, plus native country improved with clover and fescues, sown with fertiliser</p> <p>Soil: Trap and basalt soils</p> <p>Rainfall: 889m</p>
--	--	--

Roderick Binny with a heifer sold at Beef Australia 2012.

Collaborative marketing

Branding time

The recent launch of the Blue Label Beef brand (see pages 28-29) is an example of MLA's new Collaborative Marketing Program in action.

The Collaborative Marketing Program began in July this year and is designed to support Australian companies marketing beef, veal and lamb brands to develop top quality brand marketing strategies.

The 2014-15 funding round has seen the program commit just over \$3 million to 66 companies marketing beef brands, with individual funding agreements ranging from \$3,000 to \$250,000.

In order to receive funding brand marketers must first complete an online e-learning program and then commit to end-of-year reporting on measurable objectives, such as establishing a new supply chain into a market, raising customer awareness of a brand's attributes, or achieving a sales target.

"MLA is investing in companies and we need to ensure we get a return on that investment, so the new program and online management system has rigour around the reporting requirements," MLA's Program Manager Samantha Jamieson said.

"The benefit to industry comes in terms of building demand for branded red meat products and helping build the value, or the amount consumers are willing to pay, for the brand of red meat."

For brands to be eligible, they have to have an MSA Brand License.

Continued demand for funding through the Collaborative Marketing Program looks positive with 31 new MSA-licensed red meat brands established in 2013-14, taking the total number of MSA-licensed brands to a record 108.

Branded product is a way for brand owners to find their point of difference in a competitive market, while MSA licensing adds an independent endorsement of eating quality.



Samantha Jamieson, MLA
E: sjamieson@mla.com.au



Collaborative Marketing Program website
<https://comarketing.mla.com.au>

Beef marketing

Growing great

Americans are the world's biggest meat eaters - cutting and chewing their way through more than 120kg each every year. With US consumers seeking alternative protein choices and a healthier lifestyle, natural and organic meat has become more popular.

Grassfed beef is taking a share of this pie, which has driven growth for Australian exports into this market.

For the first time, the US has become Australia's largest export customer for chilled grassfed beef, overtaking Japan, to account for almost one third of Australia's chilled beef shipments in 2013-14, totalling 44,340 tonnes swt (see figure 1).

In the first part of 2014, chilled grassfed exports to the US had already reached 37,821 tonnes swt (January-August).

MLA North America Regional Manager David Pietsch said the growing acceptance of chilled grassfed beef at retail and foodservice, was a unique emerging niche for Australia.

"Although still a small segment, we have recognised the potential for Australia to service this niche, and worked closely with wholesalers and suppliers to promote Australia's credentials as a fully traceable, safe and consistent supplier."

He said more and more people were developing a desire to learn where their meat comes from, and the 'farm gate to plate' story behind it, even for imported products.



"That's why the family farm story, told through compelling branding and communication, is so important," David said.

"This has worked well for us through trade awareness and retail promotions to consumers. Our industry has come along leaps and bounds in this regard in recent years but there is still so much opportunity to capitalise on this further."

Filling the gap

Declining domestic production in the US is providing more opportunities for Australian beef, including the frozen manufacturing beef segment which still accounts for over two-thirds of Australia's exports to the US.

"With other countries also in for a share of the grassfed beef market, including Uruguay, New Zealand and domestically-produced beef, we need to ensure we maintain our current strong position based on our key strengths and attributes," David said.

"There is a window of opportunity over the next two to three years - as domestic supplies shrink - in the US market to



solidify a place for niche, branded Australian beef products.”

David said driving Australia's growing reputation as a supplier of natural, ‘sustainably raised’ pasture-raised beef had been the strategic push over the last several years by industry, towards targeted marketing of grassfed product into the US market.

“There has been an intensified marketing focus on the grassfed segment in the US in the past five years which was stimulated by grassfed producer representatives from AgForce and Cattle Council of Australia, through MLA's international marketing taskforce.

“This has continued with the development of more sophisticated Australian supply chains, including the more recent introduction of the Pasturefed Cattle Assurance System (PCAS).

“MLA's North America program has been investing grassfed levies in programs that generate an awareness

of Australian grassfed beef and its attributes, and provide information on Australia's eating quality, traceability and the integrity systems that underpin our products,” he said.

“And although grassfed beef remains a niche, after years of working with importers and the trade to educate them about the benefits and consumer appeal of ‘Australian’ and all natural product, recognition by chefs, retailers and consumers has grown - adding long term value to the Australian grassfed cattle industry.”

MLA's role in North America has been utilising grassfed beef levy funds to:

- Generate awareness of Australian grassfed beef and it's attributes.
- Provide information on the industry and our integrity systems that underpin the product.
- Work in partnership with supply chains to demonstrate first-hand these systems and Australia's production practices.



The PCAS premium

Producers involved in the Cattle Council of Australia's Pasturefed Cattle Assurance System (PCAS) have received premiums this year of 70¢/kg above the MSA grid, according to the Cattle Council of Australia.

The demand for high quality grassfed beef products has continued to grow throughout the year. One example is a major retailer stocking the Teys Grasslands' brand, which is underpinned by PCAS, in stores from June 2014.

PCAS is an assurance program that enables the industry to prove claims relating to pasturefed or grassfed production methods.

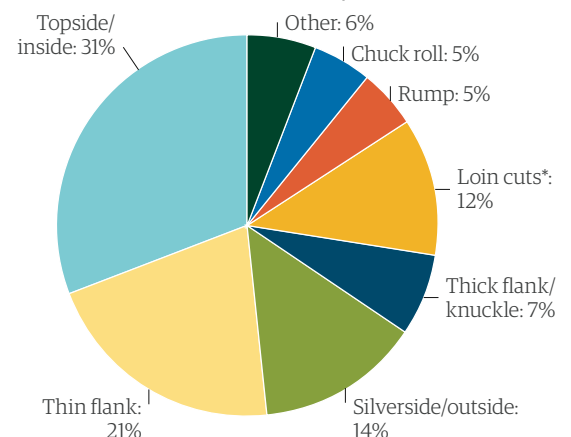
Underpinning PCAS are the PCAS Standards which govern the on-farm feed requirements and traceability of the cattle as well as pre-slaughter handling practices which influence eating quality. The PCAS Standards also include two optional modules to support claims relating to the freedom from antibiotics and hormone growth promotants.

There are currently 260 certified producers in the PCAS database, with a number of audits currently being processed.



Want to become a PCAS producer? Go to www.certifiedpasturefed.com.au

Figure 1 Australian chilled grassfed beef exports to the US in 2013-14 totalled 44,340 tonnes swt



*Loin cuts include striploin, tenderloin, cube roll/rib eye roll

Source: Australian Department of Agriculture

Beef marketing

**Tackling perceptions**

Despite grassfed beef's rising popularity, challenges still exist.

"We need to remember that we are an imported product in a country that is very loyal - as most countries are - to their domestic production. Given that, we're not doing comparative advertising or messaging that seeks to denigrate American beef, rather just focusing on putting forward the credentials of Australian beef and letting the customers decide," David said.

"Several years ago, MLA, together with US importers, laid down the groundwork to raise awareness of the opportunity for grassfed beef in the market and now we are seeing more than 15 retail chains with more than 3,500 outlets carrying an Australian grassfed beef product.

"Some large foodservice customers are buying into the story as well - to differentiate their offer in a highly competitive foodservice market.

"This is where our strengths lie, in our commitment to food safety and traceability, variety of quality offerings like organic, natural, and grassfed, and our consistency of supply and shelf-life, which is very strong, and imperative for a product that takes 30 plus days by ship to reach the market.

"The challenges are undoubtedly the perceptions that shipping a product a long way is somehow not sustainable or environmentally sound. And that the product must be frozen to make it here. But with good research and communication programs we are addressing that perception, and many customers in the US now have a better understanding of our capacity to bring in high quality, consistent chilled fresh beef."



David Pietsch, MLA
E: dpietsch@mla.com.au

The natural way

Grassfed, natural and organic beef have grown in popularity as US consumers seek healthier lifestyle choices and view these products as fitting the bill.

The value of sales of organic meat, poultry and fish rose 11% to \$675 million in 2013 in the US, according to the Organic Trade Association. The category is still small, comprising just 2% of the \$35 billion organic market.

According to the annual US report, the *Power of Meat, An In-Depth Look at Meat and Poultry Through the Shoppers' Eyes*, more shoppers are trying natural and organic meat and poultry products. The survey indicated that 34% of respondents had purchased these items compared to 26% last year.

Their chief reason for buying natural and organic meat and poultry is the desire to avoid certain substances, such as added hormones, steroids or antibiotics.

This has changed from five years ago when shoppers looked at natural and organic because of perceived health benefits. Taste and freshness are the second and third reasons for buying natural and organic proteins.

Aussie beef - Mexican style

One of the fastest growing casual restaurant chains in the US, Chipotle Mexican Grill, has begun selling Australian grassfed beef to supplement its existing supply of US beef.

Chipotle has 1,700 stores in the US and Canada, with around 200 new outlets opening every year.

To keep up with its growth the chain has needed to source additional grassfed product to help meet growing consumer demand in this niche category.

Chipotle's decision to take on Aussie beef resulted from a partnership between the company's main supplier, Australian beef exporters, and was strongly supported by MLA's coordination and educational activities.

On behalf of Australian grassfed cattle producers, MLA's role was to build awareness and recognition of Australia's ability to supply high quality grassfed beef into this market.

Australian industry's promotional efforts around Australia's beef industry systems, verification programs and no added hormone and antibiotic-free status were influential in educating Chipotle on Australia's equivalent practices to their current US suppliers.

Last year, Chipotle purchased 20,410 tonnes of responsibly-raised beef and had a net income of US\$327million, employing more than 45,000 staff.

Chipotle's store ethos is about serving premium and sustainably raised local ingredients, and their motto of "food with integrity" acts as an endorsement of the



1,700

Chipotle stores in US and Canada

200

new outlets opening each year

hardworking producers who invest in raising quality grassfed beef supported by industry-led integrity systems.

Securing the Chipotle account was recognised by industry as a positive development for Australian beef, and is further evidence of the growing grassfed beef niche in the US, with chilled grassfed beef exports to the US growing steadily.



Watch the Chipotle story at:
www.youtube.com/watch?v=aMfSGt6rHos

Recipes

'Never lamb alone' during spring with these meals which are ideal for sharing at picnics and at any group gathering.



Spiced lamb and pistachio koftas

Serves: 4

Preparation time: 15 minutes, plus chilling time

Cooking time: 8 minutes

Ingredients

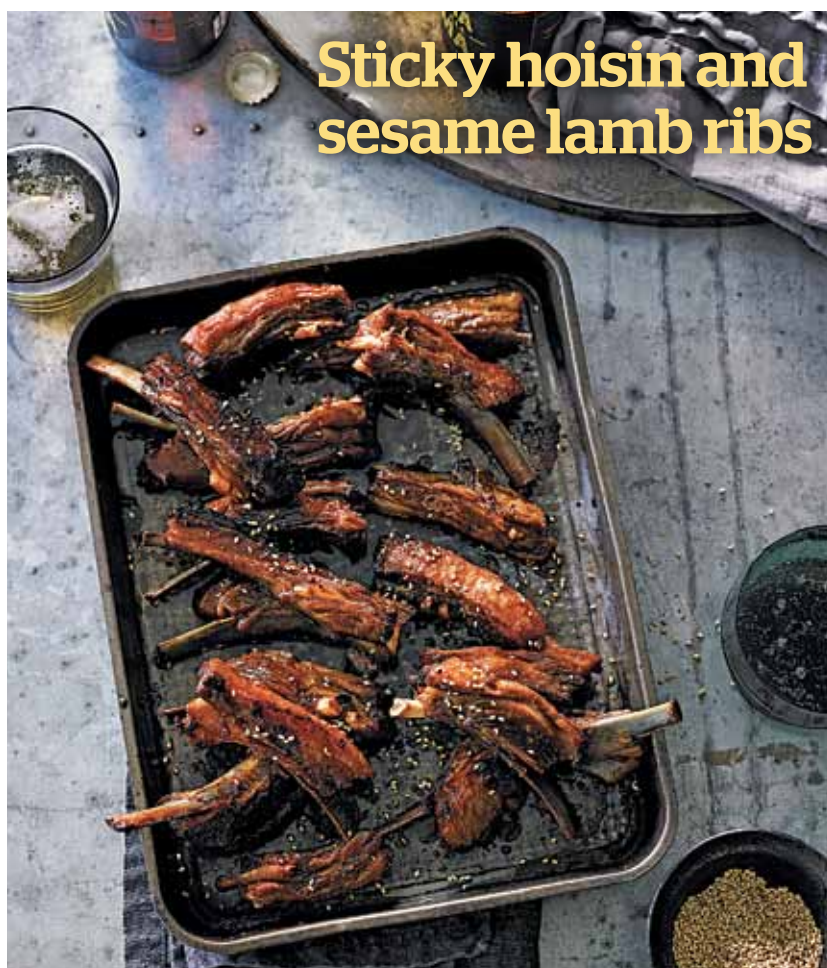
600g minced lamb
 ½ tsp ground allspice
 ½ tsp ground cumin
 ½ tsp ground coriander
 ¼ cup chopped pistachio nuts, plus extra for serving
 1 small onion, grated
 2 cloves garlic, chopped
 1 cup flat-leaf parsley leaves, finely chopped
 ½ cup mint leaves, finely chopped

To serve

Flat bread, hummus and salad

Method

1. Place all of the ingredients into a large mixing bowl and season with salt and pepper. Mix to combine and form into 12 long patties. Place on a tray, cover and refrigerate for an hour.
2. Preheat a chargrill pan to moderately high. Cook for eight minutes or until browned on all sides and cooked through.
3. Sprinkle with the extra chopped pistachios and serve with flat bread, hummus and salad.



Sticky hoisin and sesame lamb ribs

Serves: 4 (makes approximately 18 ribs)

Preparation time: 10 minutes, plus marinating time

Cooking time: 2 hours, 35 minutes

Ingredients

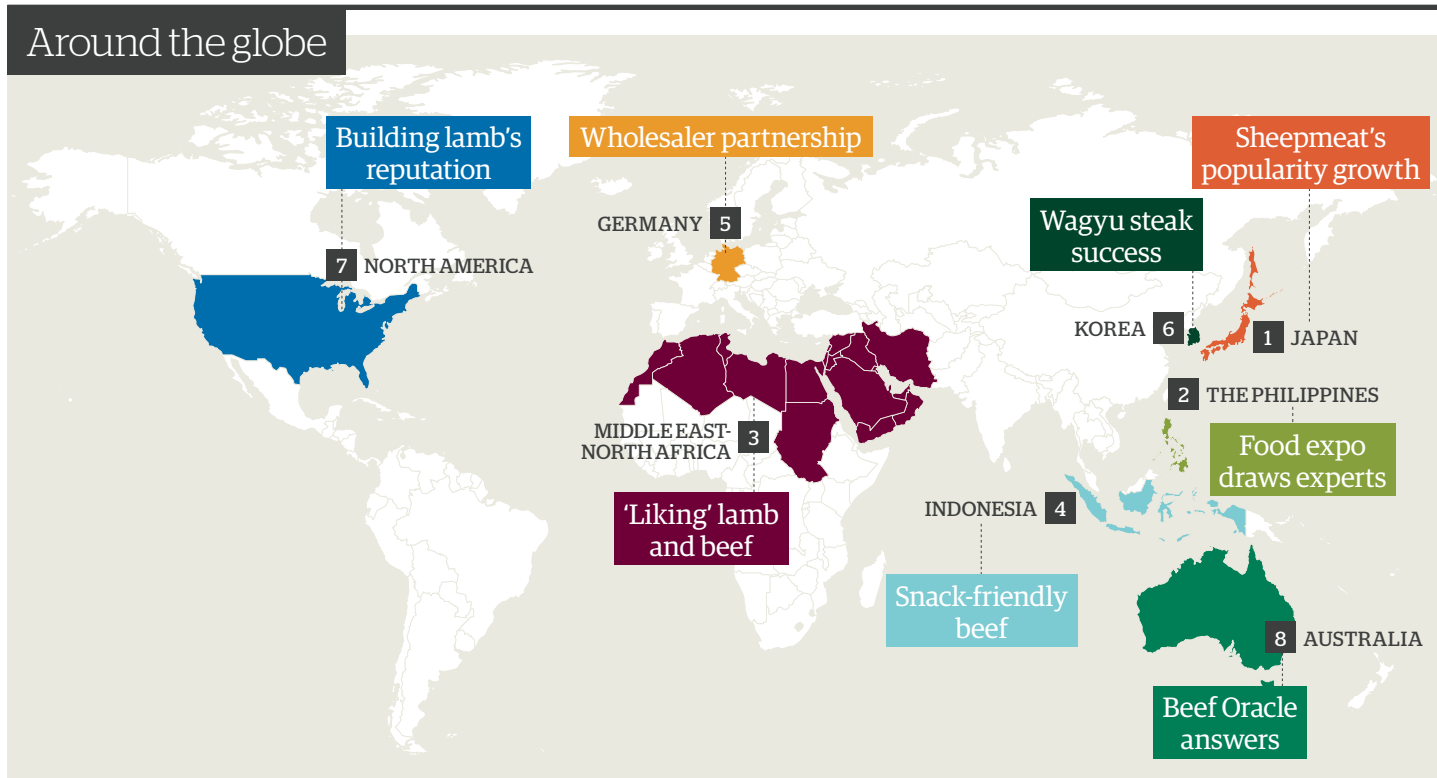
2 x lamb short rib racks* (550–700g each)
 1 tbsp grated ginger
 2 tbsp Chinese rice wine
 1 tsp sesame oil
 3 tbsp hoisin sauce
 1 tbsp honey
 1 tsp soy sauce
 2 tsp toasted sesame seeds

* Also known as lamb breast. Ask your butcher to bone it across-ways so you can easily cut the rack into individual ribs.

Method

1. Place the ribs into a large container with the ginger, rice wine, sesame oil and two tablespoons of hoisin sauce. Stir well, cover and leave to marinate in the fridge for three hours or overnight.
2. Preheat the oven to 170°C. Place the lamb racks and marinade into a large baking dish, cover tightly with foil and cook for 2½ hours or until very tender. Set the racks aside and allow to cool slightly.
3. Increase the temperature to 220°C. Using a large, heavy knife, cut the racks into individual ribs. Place the ribs onto a large baking tray covered with baking paper. Mix the remaining hoisin sauce with the honey and soy sauce and brush onto the ribs. Cook for five minutes or until dark and sticky.
4. Sprinkle with the sesame seeds and serve.

Around the globe



1 JAPAN
Genghis Khan goes digital



MLA ran a 'Genghis Khan' foodservice competition which attracted more than 11,000 entries, to raise awareness of Australian sheepmeat in Japan. Genghis Khan is a Japanese dish of marinated and grilled lamb or mutton, which is a specialty on Japan's northern island of Hokkaido.

Around 100 Genghis Khan-style restaurants, 80% of which were in the Hokkaido region, participated and diners used a smartphone to

scan posters to win an outdoor dinner set, Australian lamb rack packs or a lamb mascot toy. Hokkaido has the highest regional sheepmeat consumption, accounting for 80% of Japan's consumption. Nationally, there are around 500 Genghis Khan restaurants.

11,065
entries in Genghis Khan campaign competition

2 THE PHILIPPINES
Chefs use Aussie beef and lamb



More than 800 local and international chefs worked with Australian beef and lamb during three MLA-funded competitions as part of the World Food Expo (WOFEX). WOFEX is a hospitality expo attended by

aspiring and renowned chefs, including 10,000 culinary students. It is also the venue for the Philippine Culinary Cup - a prestigious competition for up and coming foodservice, culinary school instructor and student chefs.

At the Cup, MLA hosted the Butcher and the Chef Tandem competition, the Australian lamb cooking competition and the Pencil Box Young Chef Challenge, where contestants used Australian beef (shin shank and blade) and lamb (neck and bone-in shoulder) to break down cuts and present finished dishes for judging. MLA chef Alan Palmer was the overall culinary competition coordinator and judged all MLA competitions.

The new 'True Aussie' brand was also showcased when MLA partnered with exporters at WOFEX, which attracted more than 54,000 people in four days.

800
chefs used Aussie beef and lamb during competitions

3 MIDDLE EAST-NORTH AFRICA
Social media success



The popularity of MLA's Facebook page in the Middle East - which recently received 100,000 Facebook 'likes' - has precipitated the development of a variety of online resources. These resources included 100 newly translated Arabic recipes using Australian beef and lamb, with hundreds more to follow, an integrated external video channel, country of origin information about how Australian lamb and beef is produced and consumer nutritional information.

MLA's Master Chef Tarek has also received high traffic numbers to his Facebook page, which promotes the qualities of Australian beef and lamb, as well as recipe inspiration, to Middle Eastern consumers, with 20,000 'likes' in four months.

4 INDONESIA**Aussie beef made snack-friendly**

Around 90,000 copies of a new Australian beef recipe booklet have been distributed through *Martha Stewart Living Magazine* across Indonesia. In collaboration with one of Indonesia's leading media groups, MLA published the booklets featuring 35 beef recipes for daily meals and snacks.

5 GERMANY**Wholesaler sampling success**

MLA partnered with a German-based meat wholesaler, who supplies large foodservice chains in Hamburg, to promote their new offering of Australian grainfed beef cuts, including inside cap-off, rump cap and chuck eye roll. The wholesaler supplies a large number of food and restaurant chains directly and this was their first shipment of Australian beef. They have now committed to 12 months of shipments. The demonstration coincided with the launch of MLA's global 'True Aussie' brand.

6 KOREA**Steak sells**

Major family restaurant chain TGI Fridays saw a 16% increase in beef sales in the month during an Australian Wagyu steak promotion.

Four different cuts of Australian Wagyu steak (striploin, chuck eye roll, tri tip and knuckle) were featured on a new menu and MLA supported the promotion by providing 400,000 place mats, 4,500 menu books, and 50,000 steak picks to stimulate sales of the new steaks. TGI Fridays has 44 stores nationally. The chain's average monthly consumption of Australian beef so far in 2014 is almost 12 tonnes.

16% increase in beef sales during promotion

7 NORTH AMERICA**Racking-up lamb on US menus**

Almost 18 tonnes of Australian lamb racks were served during a three-month spring menu promotion at a US West Coast steakhouse restaurant chain.

The main course lamb rack, developed in consultation with MLA and the local supplier, outstripped expectations - accounting for over 450 of main course orders from the 15,500 guests that dined in one of the chain's 45 restaurants each day, compared with the average new menu item which accounts for around half of those orders.

Starting out as a limited time offer on the spring menu, the restaurant is again looking to feature Aussie lamb racks in autumn with a view to taking up a permanent place on the restaurant's steak-centric menu.

8 AUSTRALIA**Oracle has the answers**

The Beef Oracle was busy over winter, answering more than 10,000 questions about beef cooking and cuts from the public. More than 92,000 people visited AskTheBeefOracle.com, where they could chat live with The Beef Oracle, who was the centrepiece of MLA's 2014 winter beef campaign aimed at driving consumers' cooking confidence and knowledge.

The campaign was based on the insight that 1 in 2 Australians would cook more beef if they knew how.

92,011 visitors to AskTheBeefOracle.com

On the ground**Australia**

Michael Edmonds
General Manager, Central Marketing
and Industry Insights
E: medmonds@mla.com.au



Australian beef and lamb continues to face pressure from poultry and pork for the share of the plate in the domestic market.

In the quarter ending 9 August 2014, the volume of beef sold at retail was maintained year-on-year at 38%, while value share increased 5.1% to 38.2%.

The volume of lamb sold at retail lamb decreased 9.6% year-on-year but value share remained steady at 13%. Chicken's retail value share was also stable, at 27.4%, while pork's value share increased 1% to 11% for the quarter.

So, while volumes of beef and lamb sold at retail as a whole are decreasing, as Australian product is drawn to export markets, beef and lamb's domestic value of market share is holding its ground.

To maintain this, MLA has been encouraging consumers to think differently when it comes to their meat choices. We are focusing on building a stronger presence with consumers by promoting the important attributes of beef, lamb and goat to the trade through to consumers.

An example of this was the Beef Oracle winter campaign which focused on two key media channels - outdoor and digital - moving away from traditional advertising methods. Despite reducing the number of channels, we were able to increase reach to more than 80% of our target audience. The campaign drove beef value share to its highest figure since October 2012.

The initial four-week campaign period saw total beef sales value increase by 2.5% compared with the same period last year.

The third Beef Masterpieces campaign was launched to the foodservice sector in April. It promoted the use of selected non-loin cuts to chefs, including beef shin, knuckle, topside and short ribs to encourage the usage of these non-traditional cuts on menus.

Nutrition has also been an ongoing focus for MLA's marketing activities in the domestic market. MLA hosted the Dieticians Association of Australia's annual nutrition symposium in Sydney, attended by more than 400 dietitians. The nutritional attributes of beef and lamb as a reliable source of essential nutrients, were highlighted throughout the agenda and reinforced the need for beef and lamb in the diet - from babies through to older people.

Why are US cattle prices so high?

Australian producers may be perplexed as to why their US counterparts are enjoying record cattle prices, while our prices remain below long-term averages.



The general upwards price trend in the US started in around 2010 and has been more prominent this year (see figure 1), although there has been a downward correction in the market from late July.

While the drought-induced surge of turnoff has been the main reason Australian prices remained low, the US situation is the result of many factors, which include:

1. Slowing turnoff

At the start of 2014, the US cattle herd was reported by the United States Department of Agriculture to be 877 million head, the lowest in 60 years - down from a peak of more than 130 million in 1975. In that time, there have been improvements in production efficiency, with more beef produced in the US in 2013 than in 1975, despite slaughter being almost 25% lower.

In a situation that might seem counter intuitive, the extensive drought in the US across large cattle producing regions in the southern plains (especially Texas, Oklahoma and Kansas), and dairy cattle in California in recent years, has been a large contributor to the increase in cattle prices. With a lack of feed and water, cow/calf producers have had little choice but to liquidate their herds. In the past 12-18 months, however, the high turnoff has slowed somewhat, especially of heifers.

The US cattle industry has, at least in the past 50 years, tended to move in a loose 10-year cycle between the peaks in cattle slaughter. Generally in periods when cattle slaughter dropped from a peak, cattle prices experienced a sharp increase (notably in the late 1970s, late 1980s and mid 2000s). The last few years have coincided with a drop in cattle slaughter, in conjunction with the following factors, which have contributed to the high cattle prices (see figure 1).

2. Higher prices feeding higher prices

Higher prices have provided a monetary incentive for US cattle producers to rebuild their herds. This is not unlike the situation in Australia's lamb and sheep industry in 2010-2011 when a return to good growing conditions caused a rush on young ewes and high prices for all categories.

Similarly, US cow/calf breeders in areas where the drought has receded are now in a position to retain older cows and young heifers that, in the past four to five years, would have been sold as culls or to feedlots. While this is in aid of the longer term goal of breeding more stock, it also means there are fewer cows and heifers on the current market, creating more upward price pressure.

3. Cheaper feed

With record feed grain crops and yields in 2013 (and expectations for similar in 2014) resulting in cheaper feed prices (see figure 2), feedlot operators have been able to offer higher prices for the fewer young, light cattle.

The US feedlot sector is unlike that in Australia for a couple of key reasons. Firstly, there is much more of a reliance on grains to maintain stock condition through winter. Secondly, there is an increased relative abundance of feed grain to pasture availability for finishing stock. At any one time in the US, around one in 10 cattle are in a feedlot compared to less than one in 30 in Australia.

4. Processor overcapacity

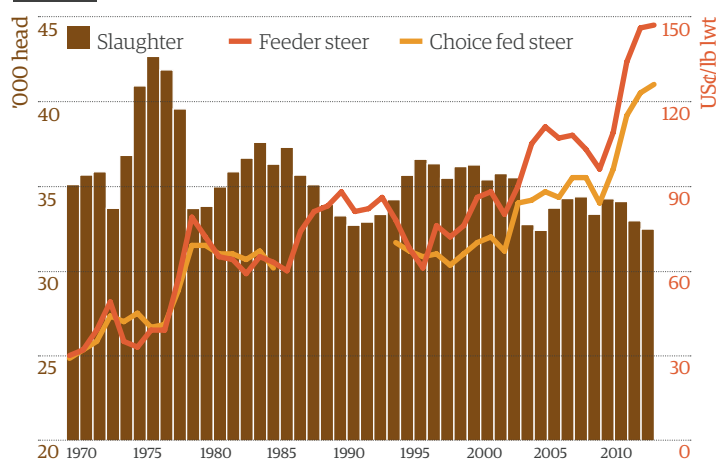
Analysis presented in the *Daily Livestock Report* last year suggested that in the last few years the US processing sector has developed overcapacity. While processor capacity has remained relatively steady (on a small upward trend) between 700,000-750,000 head/week for 15 years, average weekly slaughter recorded a downward trend from 675,000 head/week in 1999 to 625,000 head/week in 2012 (which has continued down through 2013 and 2014).

To maintain workforce shifts and supply contracts with fewer cattle available and lower slaughter, processors have been forced to increase their offer prices for cattle.

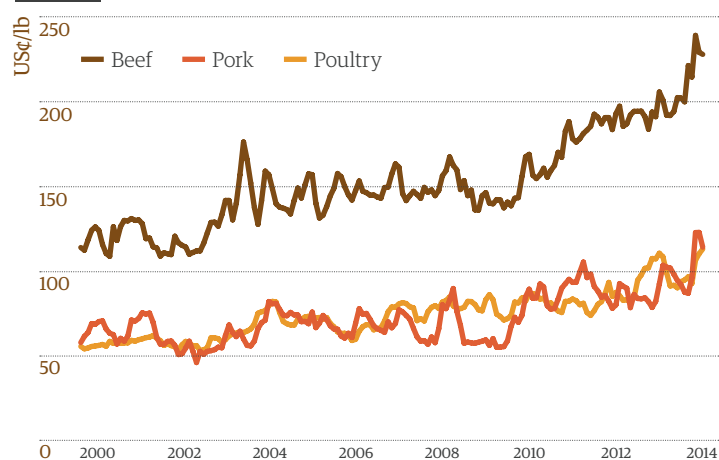
Since the beginning of 2013, six US processing plants have closed as a result of difficulties associated with consistent supplies of cattle, which will reduce total capacity, potentially reducing competition and prices.

5. Mandatory country of origin labelling

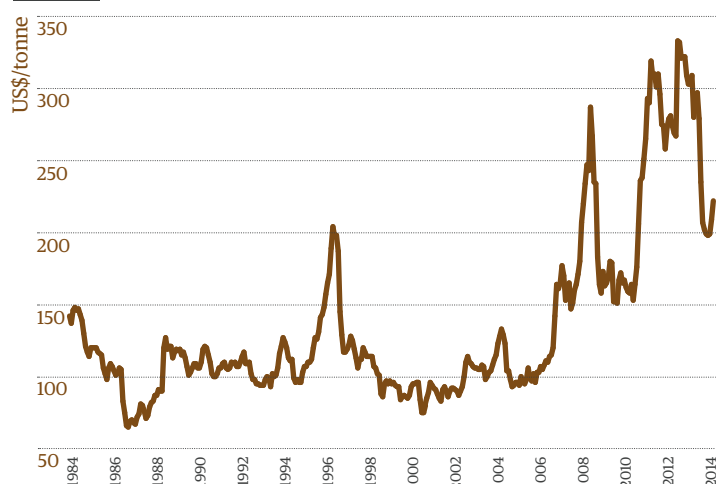
The recent introduction and enforcement of mandatory country of origin labelling in the US has made a number of US processors,

Figure 1 US cattle slaughter and prices

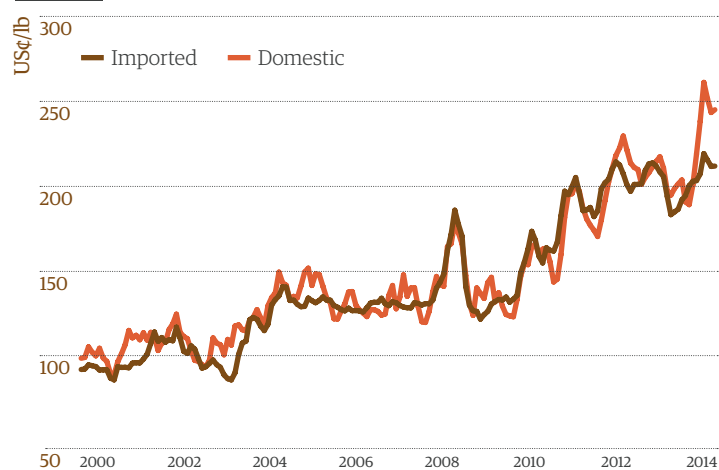
Source: US Department of Agriculture

Figure 3 US wholesale prices

Source: US Department of Agriculture

Figure 2 US corn prices

Source: Centre for International Economics

Figure 4 Lean manufacturing beef prices in the US

Source: Urner Barry, Steiner

packers and retailers reluctant to import (or use imported) cattle and beef. The new laws require beef and beef products sold at retail to be labelled according to where the animal was born, raised and slaughtered, and the meat must be segregated.

This increases the complexity of logistics and the costs at each stage in the supply chain. Initially a number of US feeders and processors stopped or reduced their purchases of Canadian cattle. This has reversed recently, as the price differential between US and Canadian cattle grew to the extent that Canadian cattle were cost effective to purchase again.

6. Improved consumer demand for beef

Consumer demand for beef in the US has generally been increasing since 2010, after a notable decline throughout the second half of the 2000s.

At the same time that prices have generally been increasing, US consumers have shown more willingness to pay more for beef. In early 2014 prices reached record levels (see figure 3).

As US-produced beef has increased in price throughout 2014, imported beef prices have followed a similar trend, although generally at a slower pace and not to the same highs (see figure 4). Although there

have been periods in the past when imported beef has traded at a premium to US beef, this has not been the case this year.

The largest category of Australian beef exported to the US is lean manufacturing beef, which is generally mixed with lean and fat trimmings produced in the US to form hamburgers and other products. The low supply of US-produced lean beef in 2014 has largely been offset by increased volumes of imported product, mostly from Australia and New Zealand. These higher volumes have failed to constrain prices – both domestic and imported lean beef products have been trading at record prices for most of the year.

The record beef and cattle prices in the US at the same time as relatively low cattle prices in Australia in 2014 reflect the highly divergent cattle supply and market situations between the two countries.

The prospect of strong demand and a significant and sustained contraction in Australian supplies would allow cattle prices to play 'catch up' to the recent rise in global beef and cattle prices.



Western Australia// BeefUp Forums

MLA headed to the north-west of the country in August to share the latest on industry research and development and market directions with cattle producers from Kununurra and Broome. Producers heard from speakers including:

Agribusiness advisor Ian McLean, an author of the Northern Beef Situation Analysis 2013, who explained the top performers in this sector had a higher income due to more productive herds (higher reproductive rate, lower mortality and higher sale weights), lower and more targeted herd expenditure, improved labour efficiency and lower overhead expenses. He recommended a BusinessEDGE workshop for producers wanting to improve their business performance.

MLA RD&E Coordinator for On-farm Beef Geoff Niethe focused on research findings from MLA-funded research to lift reproductive performance in the Kimberley. "Nutrition, disease and bulls are all important factors in the overall equation of getting a cow in calf but the condition score of the cow at calving is the single most important factor to getting her back in calf after she gives birth," he said. Maintaining pregnancy and calf survival were the next two important factors, Geoff said.

Consultant Barb Bishop of Barbara Bishop and Associates showed producers how to work to a "game plan". "It doesn't matter if we are talking about your beef business, your career, your retirement, training for an event, planning a holiday or raising your children or chasing your dreams. The key element is that you will want to be successful. Success is achieved through building your game plan," she said. Producers were also encouraged to use the numerous MLA-developed publications, including fact sheets, manuals and tips and tools, to support northern beef businesses. These can be downloaded at www.mla.com.au/publications

More information:

Charlotte Fox, MLA // E: cfox@mla.com.au
Consider enrolling in a BusinessEDGE course:
www.mla.com.au/EDGENetwork

Kununurra



Mick Quirk, MLA and Tom Shephard, Consolidated Pastoral Co, Newry.

Tom: "Having worked on one of the properties data was collected from for the CashCow project, it's really interesting to see the outcomes and messages for producers relating to improving reproduction."



Dave Young, Kirkimbie Station and James Beale, Auvergne Station, both with Consolidated Pastoral Co.

Dave: "We've learnt today it's possible to have profitable beef management practices even if you're working in traditionally less profitable areas."

Broome



Michael Delong, Dampier Downs Station and Ian McLean, Bush Agribusiness.

Michael: "There is an urgent need for Kimberley beef producers to increase productivity and meet market requirements. As discussed today, to achieve this, it is important to keep on top of simple issues such as phosphorus deficiencies, breeder mortalities, vaccination and buying better bulls."



Sarah-Jane Wilson, Livestock Biosecurity Network, presenting at the Broome forum.

Upcoming events

Grazing Best Management Practices workshops

At these workshops find out about animal health and welfare issues facing cattle producers in 2014. Topics include markets, reproduction, genetics, health management and biosecurity.

When and where:

27 October, Theodore Qld
28 October, Taroom Qld
29 October, Injune Qld

Bookings and more information:

RSVP 20 October
Theodore Qld - Honour Johnston // T: 07 4993 1004 // E: admin@dcca.net.au
Taroom and Injune Qld - Andrea Beard // T: 07 4627 3859 // E: andrea.beard@dcca.net.au
www.futurebeef.com.au/events



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

Northern Territory//Kidman Springs Field Day

Are you asking the right questions about your business? Are you collecting the right data to ask the right questions? These were some of the questions posed to the 73 participants at the Kidman Springs Field Day on 13 August 2014. Despite these challenging questions, there was an overwhelming message that considerable gains could be made in productivity through the fine tuning of management.

Dr Steve Petty, Director of the Northern Development Company said that the recently published Northern Beef Situation Analysis highlighted some big opportunities, including improving cost of production through improving herd productivity.

Kieren McCosker, a beef production scientist with the Northern Territory Department of Primary Industry and Fisheries, spoke about the major factors affecting reproductive performance highlighted in the findings of the CashCow project.

CashCow researcher Dr Geoffry Fordyce challenged the crowd with his presentation "Do you have a problem?" One of the strengths of CashCow was that it established achievable production and performance for broad country types, allowing producers to gauge how their breeding herds were performing.

A highlight of the day was an impromptu talk from Russell Cornall of Heytesbury Beef at the Shruburn site, outlining the company plans to implement a broad scale fire program targeted at managing woody thickening.

More information:

Trisha Cowley // E: trisha.cowley@nt.gov.au



Russell Cornall, Rangelands Manager for Heytesbury Beef, outlining the company's plan to manage woody thickening using fire, based on recommendations from the Shruburn trial, with Dionne Walsh from the Department of Primary Industry and Fisheries who gave the Shruburn talk.



Attendees hear Whitney Dollemore from Department of Primary Industry and Fisheries talk about the Selected Brahman project.

Bred Well Fed Well

A hands-on workshop about breeding and feeding to make more money. Topics include: improving ewe nutrition, developing a breeding goal, developing a feed budget and breeding better ewes.

When and where:

22 October, Rhymney Vic

Bookings and more information:

Rob Shea // T: 0438 521 357

E: yadin@netconnect.com.au

www.mla.com.au/events

MLA Annual General Meeting 2014

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

When and where:

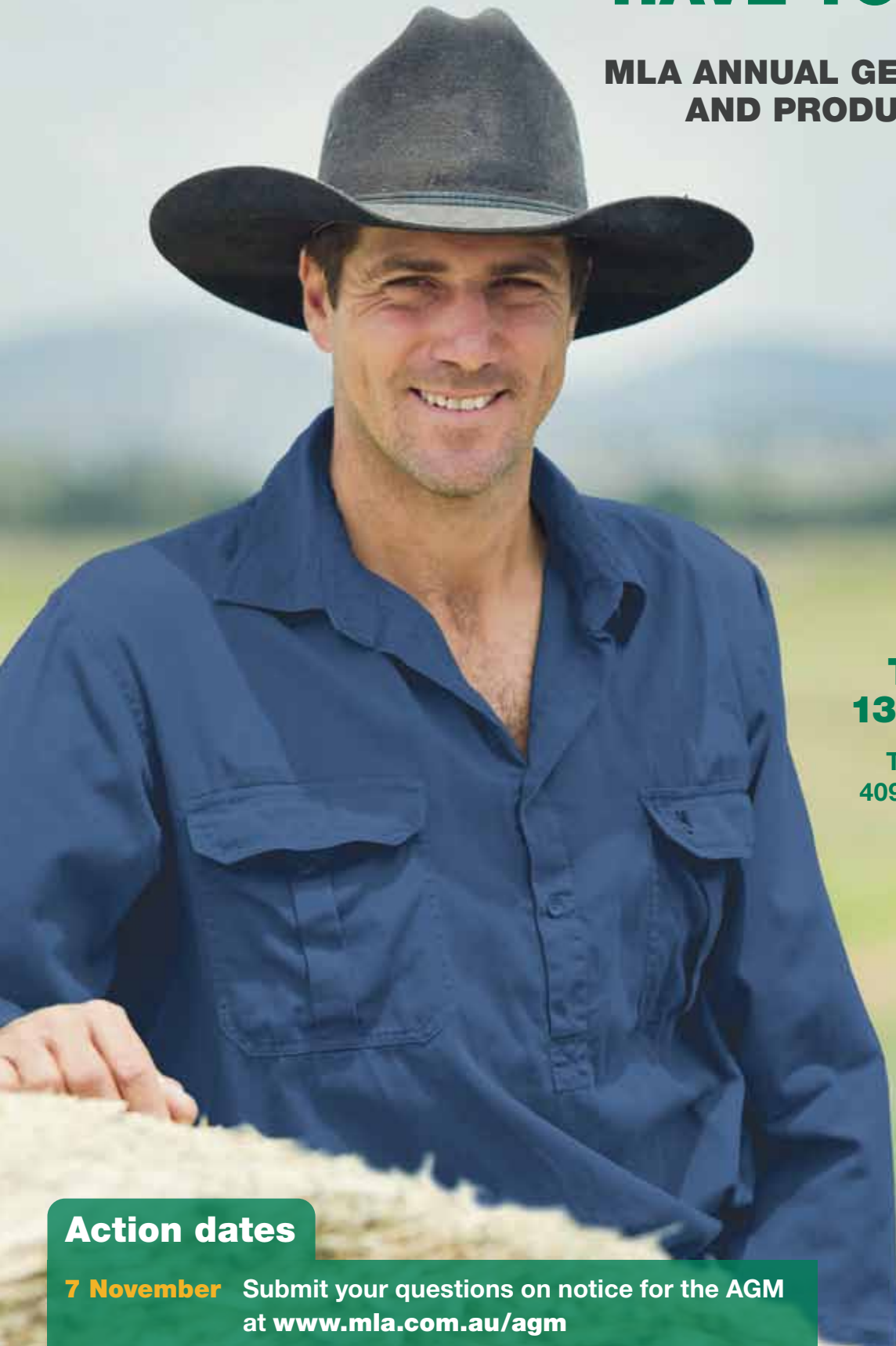
13 November, Chatswood NSW

More information:

www.mla.com.au/agm

MLA IS YOUR COMPANY HAVE YOUR SAY...

MLA ANNUAL GENERAL MEETING AND PRODUCER FORUM



**Thursday
13 November**

The Concourse
409 Victoria Avenue
Chatswood
Sydney, NSW

Action dates

7 November Submit your questions on notice for the AGM
at www.mla.com.au/agm

11 November Return your proxy form or submit online
by 2.00pm AEDT

13 November Attend the MLA AGM and Producer Forum

For more information visit www.mla.com.au/agm
or call **1800 675 717**