

Feedback

A close-up photograph of a male scientist with glasses and a white lab coat. He is wearing blue nitrile gloves and is holding a small, rectangular microarray chip. The chip displays a grid of colorful spots in shades of red, green, and blue. The background is a soft, out-of-focus laboratory setting.

Looking to the future

Next generation R&D

05// **SNP chip**

Get to know this revolutionary genetic tool

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Increasing reproduction efficiency in the north

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Sheep breeders' progressive approach

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The role of sampling around the world

A note from the MD...

What is 'the next big thing' for our industry, and more importantly, how will we find it?

Blue sky research attracts limited investment from the private sector due to the high degree of risk and lengthy timeframes.

However it is these types of projects that can potentially deliver the greatest rewards for industry (ie read about the benefits that are flowing from the SNP chip on page 5).

MLA is uniquely positioned to invest in this arena due to the collective investment of industry levies and matching dollars from the Australian Government. We can take the risks and find the breakthroughs that individual producers can't.

We are careful, however, to balance our portfolio of R&D, with 10% of our total research investment directed into blue sky projects. Given the potential risks in this

field, it is important we build in mechanisms to quickly identify when a project is unlikely to deliver benefits so we can redirect that investment - although finding out something won't work can of course be a valuable lesson in itself.

I hope you enjoy reading more about blue sky research and 'the next big thing' in this edition of *Feedback*. Turn to pages 6-7 to read about the transformational projects that MLA is currently investing in. Also on those pages you'll find out what the next big consumer marketing trend is.



Scott Hansen
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Your feedback



What future does ag hold?

Kevin Rattigan

Unfortunately, the people who need the food we produce (the poor of the world) cannot afford to pay the prices that we need to have to enjoy a lifestyle similar to comfortable urban Australians. The world food crisis is not going to make us rich. Equally, yelling and screaming at non-rural Australians, who are 80% of the voters, is not going to help either. We need to put our case in ways which they understand and which fit with their values and that includes environmental protection. Complaining about governments 'locking up the country' – native vegetation protection, national parks, the Murray-Darling – and in the same breath demanding the government 'lock the gates' against coal seam gas just makes us look foolish and not capable of thinking rationally about issues.

22/06/2012

The MLA blog featured stories on the future of agriculture, biosecurity and industry projections during June and July. Jane Weatherley's provocative posting on some of the challenges facing agriculture and how we can bring people back to the land got keyboards typing.

Join the conversation at www.mla.com.au/blog

Bob Rowlings

Farming is a great lifestyle until you get your bank statement. Cost of production is killing the small farm. Land prices don't allow us to get bigger. How can we survive eg when we get a bike fixed in town at \$100 per hour and we get about \$10. The small saleyards where its a lottery to get a good price are the only option when you don't have big lines to sell. The add on fees like weighing, scanning, marketing, trucking leave not much per head. We can't all have contracts with the big supermarkets and who gets the profit from the low priced (good) cattle. MLA does a lot of good beef promotion such as recipes, butcher profile and the like but we get the crumbs when all others in the chain have taken their cut, so to speak. Unfortunately we are too independent to form marketing groups as in the last *Feedback* – that is our only hope if you are small. As for kids taking on ag, one of my sons works on the farm, the other is an ag research scientist working on the same research stations I worked on years ago. History repeating. I live in hope, really don't have much option at my age.

25/06/2012

Kaye Black

Do more for less, you've got that right. Politicians on both sides of the fence are telling us to double our food production by 2015 or 2020, while tens of thousands of hectares have been taken out of production with mining and coal seam gas, millions of hectares given to national parks and now they are taking over the oceans as well. Vital food resources taken out of production. We have less labour, less resources, less family business and are given more regulations, more paperwork and our costs have doubled over the past few years. I have been in this industry for over thirty years and it has never been this hard to keep our heads above water. Wake up Australia before you run out of food and loose the best lifestyle in the world!

23/06/2012



To share your views and questions, send your feedback to the editor at info@mla.com.au

MLA online

Social networking

MLA blog

Join the conversation this month on the Meat Profit Day, whether we gamble on our R&D, the future direction of MLA and much more.

www.mla.com.au/blog

Facebook

Stay connected with MLA by friending us on Facebook.

www.facebook.com/meatandlivestockaustralia

Flickr

View MLA's photo stream on Flickr including the 2012 MLA Black Box Culinary Challenge

www.flickr.com/meatlivestock

YouTube

Check out the latest information on how a beef carcass is graded to Meat Standards Australia (MSA) specifications

www.youtube.com/mlafeedbacktv

Clarification

In the June edition of *Feedback*, a story titled 'Muscling up the herd' outlined research on gains from increasing muscling in beef herds. The article warned producers should take care when using extreme muscling genes, such as the myostatin gene.

There are at least nine known forms of the myostatin gene, with differing effects in

terms of both extent of extra muscle growth and when that extra growth starts.

Some of these forms of the myostatin gene can cause high levels of calving difficulty, and reduced fertility and longevity. The different forms tend to be associated with different breeds.

The form which causes increased muscling in the Limousin breed is known as the F94L

mutation. With no known negative effects, it is associated with an increase in the number of muscle fibres and, hence, an increase in meat yield.



Producers can learn more of the value of this form of the myostatin gene at www.limousin.com.au/Limousin-flyer.pdf

Lodge your levies notice

MLA members are encouraged to get their full voting rights for this year's AGM by submitting their levies notice by post or online.

All MLA members will receive their Levies Notice in the mail.

By returning this notice or lodging online, members inform MLA about the amount of levies they paid last financial year.

This process is voluntary, however it is important that members lodge their levies to receive their full voting entitlement for all meetings and polls held in 2012-13, in particular this year's AGM.

To ensure you receive your full voting entitlements, return your Levies Notice or lodge it online by 4 October 2012.



T: 1800 675 717
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www.mla.com.au/voting



A new MLA research project will aim to map Anthrax outbreaks and identify ways of controlling and reducing the impacts of this unpredictable disease.

MLA's Manager Animal Health and Welfare, Dr Jim Rothwell, said the purpose of the project is to improve knowledge of how the disease spreads, improve diagnostics and prepare for future outbreaks.

"Being able to predict an outbreak would allow producers to vaccinate their animals in advance, instead of reacting to a known outbreak. Improved tools will also be developed to allow fast and simple diagnosis on-farm, resulting in rapid response and reducing the impact should an outbreak occur," he said.

"Animal deaths from the disease, associated production and market access issues, as well as the potential for human infection make vigilance important," he said.

The project, being conducted by the Victorian Department of Primary Industries (DPI), will create a database of different Anthrax strains and map outbreaks to allow investigation of the causes of outbreaks, which are currently not well understood.

Investigating the impact of a changing climate and events like flooding also helps to predict outbreaks, which will allow producers to be better prepared and have more effective vaccination programs.

Anthrax is caused by infection with the bacteria *Bacillus anthracis*, present in soil. Outbreaks in sheep and cattle are most prominent in Victoria and NSW.



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Beef 2015 and beyond

Cattle Council of Australia (CCA) is developing a new national strategy for the grassfed beef industry to be called 'Beef 2015 and beyond'. The strategy will provide the basis for clarifying the future priorities, roles and responsibilities of CCA and will direct and mobilise all grassfed industry resources and efforts for the next few years.

Over the past three months, CCA has carried out extensive consultation involving producer forums, online forums and surveys, a national telephone survey of producers, in-depth interviews with key industry stakeholders and a series of workshops in each state and territory. The information from this consultation informed a national workshop on 17 July, where industry leaders

and key stakeholders discussed the final strategy 'Beef 2015 and beyond'.

Consultation revealed consistent producer views across the industry, both by state and herd size. In particular:

- A large proportion of producers are optimistic about the future of the industry, with 38% expecting an improvement, a similar portion (41%) expecting no change and only 12% expecting the industry situation to worsen in the next five years.
- Producers consider the most important opportunities for the beef industry include improved/new export markets, clean, safe and high quality product, better market access and improved production strategies.



→ When discussing how industry representation was delivering on its strategic themes, some areas were regarded to be about right, such as biosecurity and ethical production. Others were reported to require improvement including a coordinated national voice, and developing and retaining staff.

The national workshop discussed how the strategic plan will be implemented. This included how the industry will address many of the issues and opportunities that were raised by stakeholders regarding existing industry representation and services arrangements and structures.



www.cattlecouncil.com.au/beef2015andbeyond



Reinforcements roll in

Specially chosen for their spring frenzy and voracious appetite, two new species of European dung beetle have arrived in Australia to finish off a job started more than 40 years ago to improve cattle pastures.

Collected in the south of France, *Onthophagus vacca* and *Bubas bubalus* are the first new species of dung beetle to be imported to Australia in more than 20 years.

Through a project led by CSIRO and supported by MLA, these beetles have been carefully selected for their suitability to the climate and seasons of southern Australia. It is hoped the new species will be the perfect allies for existing beetles that are doing a good job but are not active during the early spring months across southern Australia.

According to CSIRO Ecosystem Sciences research leader, Dr Jane Wright, the beetles have just produced their first eggs in CSIRO's quarantine facility.

"Once we have harvested the eggs, they will be surface sterilised and ready for release from quarantine under AQIS supervision," Jane said.

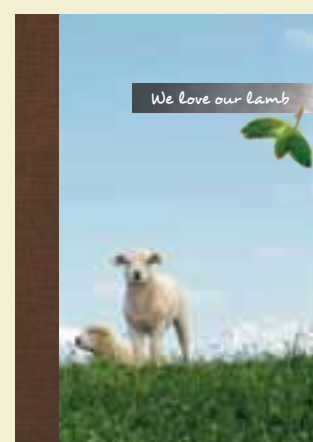
"We will place the eggs into man-made dung balls for development and synchronisation to the southern hemisphere season and then mass-rearing before the expected field release in 2014."

"If the new beetles can become widely established the main benefit will be the head start they give to pasture productivity from early spring," MLA's Manager Southern Pastures and Resource Management Cameron Allan said.

Some related benefits are likely to be improved soil aeration and root depth, less water run-off and nutrient loss, soil and greenhouse gas improvements from more nitrogen and carbon being stored for longer in the soil and the reduction in fly breeding sites and the numbers of bush flies.

Fast facts

- The average cow drops between 10 and 12 dung pats per day
- A single dung pad produces up to 3,000 flies in a fortnight
- 43 species of dung beetles were introduced to Australia between 1967 and 1992 from Europe, Africa and Hawaii
- 23 species of exotic dung beetles have become established in Australia



From back paddock to worldwide markets

We love our lamb is a new hardcover book that tracks the tale of how the lamb industry has transformed most acutely over the past 20 years.

Its author, Michael Perry, worked with an industry steering committee, to take readers on a journey from the industry's beginnings in the 1800s through to its determination to reinvent itself from a wool industry offshoot into an industry in its own right in the 1990s and its indisputable success today.

This book provides a colourful insight into how Australian lamb has become internationally renowned, retracing the hard work to produce the right product from the back paddock and its hard working series of marketing campaigns.

It is a celebration of how far the industry has come in a relatively short time and reinforces why *We love our lamb*.

We love our lamb is available to order at \$35 from www.mla.com.au/we-love-our-lamb



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www.csiro.au/dungbeetles

The next big thing

Kissing frogs and other important research strategies

How did we know we needed the internet? Twenty odd years ago did any of us think 'this pen and paper business is too slow' or 'I'm sick of walking to the library'? No one knew we needed it, yet it has provided one of the greatest transformational changes in the past century, impacting on every sector and nearly every part of our lives. Looking in our own backyard, what will be 'the next big thing' for Australia's livestock producers, and how will we find it?

Dr Greg Harper
Deputy Chief
CSIRO Livestock
Industries



This is the question pondered by many in the industry when determining the best investment of its finite research funding. Do we stick with 'safe' territory where we're confident of generating incremental returns on that research investment, or take a gamble in the unknown where it can be high risk, but potentially high return if the research leads to a transformational outcome for industry?

When Deputy Chief of CSIRO Livestock Industries and MLA board director Dr Greg Harper presented a paper to this year's ABARE Outlook Conference titled 'Livestock R&D. Should we kiss more frogs?', he suggested Australian agriculture needed to consider new approaches to research.

"If we take an overly cautious approach and only fund the deadset winners, we'll almost certainly miss out on the radically innovative ideas that can lead to scientific breakthroughs - the frogs that turn into princes," Greg said.

"We need to find the brilliant concepts that are the essential cornerstones to progress, with long-term R&D investment to build the sound structure around it."

MLA aims to fund a balanced research portfolio (figure 1). Currently about 10% of research funding is directed to strategic science or new knowledge research while a further 30% each is invested in applied science and development projects. Adoption and commercialisation accounts for 17% and the remaining 13% is spent on extension or capability building.

The balance, suggested Greg, needs to sit comfortably with enough funding for immediate solutions (think animal health or noxious weeds) while still investing in the blue sky projects which might deliver an on-farm revolution.

And where do these brilliant, potentially transformational 'frogs' come from? As a country that contributes just 2% of the global science and 4% of the global agricultural science research, Greg believes Australia needs to look internationally and at other sectors to find solutions.

"Genomics came to the livestock industry via human medicine. GPS came from the

military. Environmental science evolved from what was considered the lunatic greenie fringe in the 1970s," he said.

However, as Greg pointed out to the Outlook conference, you can only kiss a lot of frogs if you can quickly identify those who are not going to turn into princes. Fast fail arrangements must be in place.

"Transparency and evaluation are important. After three years, if the knowledge we have gained is that a certain line of research is not going to result in a solution, then we still need to see that as a worthwhile investment - that the livestock industry has learnt something," he said.

Dr Terry Longhurst, MLA's Strategic Science Manager, says the benefits of investing in strategic science can require industry to be quite patient, with 'transformation' often only recognised from afar or with hindsight.

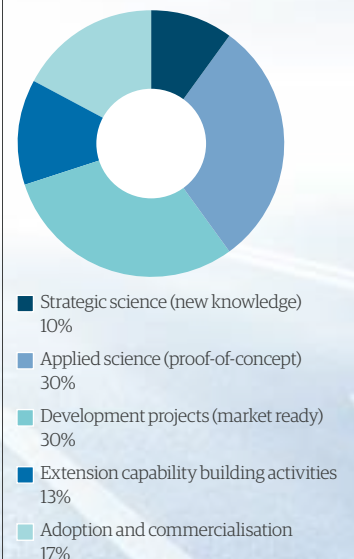
"We don't necessarily foresee transformational change at the initial investment stage of a new technology or field of knowledge. We focus on creating opportunities for industry to continually develop," he said.

"Achieving transformational change requires success in the initial technology or

knowledge investment and then in all subsequent investments.

"More importantly, transformational change requires industry to grab onto the opportunity and invest in the adaptations required to make it practical and profitable."

Figure 1 MLA research portfolio



To read Dr Greg Harper's ABARE paper www.daff.gov.au/abares/outlook/program

Or view it at www.youtube.com/watch?v=HMbXA2b1JTU&feature=youtu.be

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The next big thing In profile

SNP Chip // *Revolutionising genetics*

After lurking in the background of the meat industry for more than a decade, the SNP chip is ready to make its presence truly felt. Here we talk about this example of 'transformational' R&D.

What is a SNP chip?

It is a small sliver of glass, about the size of a finger-nail, into which are etched a very large number of very small pits. Each of these hold a tiny amount of DNA, which has been extracted from the tissue sample of an animal or plant, and can be 'read' by a DNA sequence-reading machine.

When it was invented (around 2000), it only carried a few hundred pits for DNA, now it can carry millions. Making the chip and the machine to read it cost millions. Now the total cost of making and reading one is down to around \$50.

It has been developing at the fastest rate of any technology ever invented. If cars were improved at the same rate everyone would have top of the range Mercedes-Benz cars for a couple of dollars each. Next year they'd be a few cents each.

How is it used by a sheep or cattle breeder and how does it help their business? What does it allow them to do that they couldn't do in the past?

It's really simple for a sheep or cattle breeder. If they want to get DNA or genomic information on an animal, they simply take a hair or other tissue sample (probably using a blood card), and send it off to be read. The results then get combined into either BREEDPLAN, LAMBPLAN or MERINOSELECT breeding values.

The information the chip conveys can include pedigree testing, tests for horn/poll status, and/or traits like growth rate or eating quality. And these different types of information can all be included on just one chip!

That last step is important because almost always a breeder will get a more accurate picture of their animals' genetic merit by adding performance data on the animals and their relatives.

What's the next 'big thing' for the SNP chip? Where to from here?

The next version will be used to work out the actual sequence of each animal's genome - its actual DNA sequence, rather than simply testing for lots of markers scattered through that sequence. That will make the DNA test result more accurate.

Will we hear more of the SNP chip in the future?

SNP chips will become as ubiquitous as computers or iPhones. They will be part of our medical system, be used to help breed better animals and plants.

One thing that is really important to stress is that while it is a very smart piece of technology, for it to be useful, there has to be lots of good data on the traits evaluated. That means an ongoing collection and calibration of performance and pedigree information from an elite nucleus of animals.



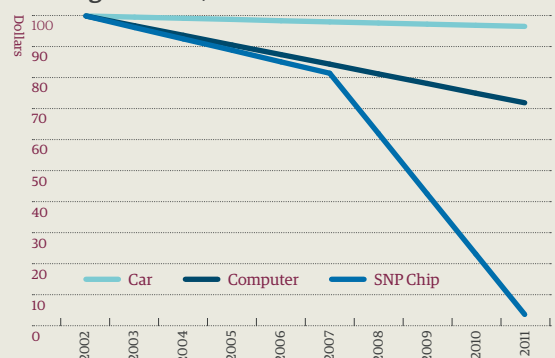
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www.mla.com.au/snpchat



The declining cost to consumers of the SNP chip in comparison with other technologies. For comparative purposes the three items had a starting value of \$100.



Graph constructed by Drs Rob Banks and Ben Hayes

The next big thing

Red meat's blue sky future

From in-crush cameras that measure condition scores, to processing technologies that extend the shelf-life of our products, Australia's red meat industry has an innovative future thanks to its long-term and balanced investment in research to build productivity and profitability.

Terry Longhurst, MLA's Strategic Science Manager said MLA involves producers and processors when identifying the big challenges to be overcome to move industry forward.

"This engagement underpins the development of MLA's five-year research strategies for beef, sheepmeat, animal welfare, animal health and biosecurity."

MLA invests \$3.6 million/year into strategic science. A well known strategic science investment is Meat Standards Australia (MSA), which transitioned from a 'blue sky' research program in the 1990s to applied science to identify the critical control points throughout the supply chain that guarantee eating quality, to finally encouraging adoption of these findings by producers, processors and end-users, with the economic benefits continuing to grow today.

Strategic science projects are prioritised by their potential benefit to industry, be it economic, environmental, market access or other. Although 'blue sky' projects stand to

deliver huge benefits to industry, they are not without technical or commercial risk.

"MLA applies a rigorous evaluation and only invests in high risk projects if there is a high net benefit," Terry said.

Some examples of current strategic science:

3D image analysis: By late 2013, the humble cattle crush could be a one stop cattle information centre. P8 fat, rib fat, a frame score and muscle score established by 3D images taken as the animal moves through the race or crush will be available to the operator at a touch of a button. Developed by MLA, the NSW Department of Primary Industries and University of Technology Sydney, the technology will potentially feed into prediction tools such as the BeefSpecs calculator, which matches young cattle to markets.

Algal ponds: A watering hole or a protein shake for young cattle? MLA and University of Queensland (UQ) are investigating how to develop and harvest on-farm algal ponds as a source of high-value protein and energy

supplements. It is based on the premise that nutritional limitations of northern Australia's pastures can be partly overcome by critically-timed additional protein. The high protein algae would provide a locally-produced, low-cost source of protein.

Livestock Data Link: It's long been a complaint of livestock producers that feedback on the carcase performance of their animals is difficult to obtain. A web-based tool is being developed to enhance the exchange and utilisation of carcase performance feedback, linked to the NLIS database. Processors can automatically enter performance data on individual carcasses. This is complemented by a 'Solutions to Feedback' library, providing producers with tools to address specific issues to boost market compliance. Producers can benchmark their herd/flock at a regional, state and national level, and performance data will help set priorities for industry research. The pilot program is underway in several processing plants with a broader roll-out planned pending evaluation of the pilots.

Coming to a screen near you



Look out for subtlety - it's the next big consumer marketing trend. Product placement, television programs where the content is created around the advertiser's message, mobile telephone apps, Youtube videos, twitterverse conversations, viral campaigns.

Without knowing it you are being subjected to product marketing and, as a staple food rather than a labelled 'brand', red meat is in the box seat to take advantage of this new age.

MLA's Group Marketing Manager - Consumer Programs, Andrew Cox said traditional electronic and print advertising is today being used to tease or entice the consumer and lead them to other means to absorb the message. Think the Barbie girl campaign in January with its more than one million Youtube views.

"The world is changing so fast we cannot simply identify one good source of consumer trends and stick with it - we need to take inspiration from everywhere and use as many



Measuring ammonia from a feedlot using an open path laser.

Reducing livestock emissions: It's a massive project to deal with a massive industry challenge - finding the silver lining in carbon emissions for livestock producers. MLA is coordinating a \$20m (approx) Australian Government research program from 2012-15 in partnership with nine research agencies building on knowledge developed from the Reducing Emissions from Livestock Research Program (2009-2012). Research will be conducted into feed additives, nutrition, rumen processes, genetics, modelling and management practices to identify ways to reduce livestock methane emissions while also increasing farm productivity.

High pressure processing (HPP): MLA is investigating HPP's potential for red meat, following its success in creating fresh tasting long-life fruit juices. Hydraulic pressure (equivalent to 200 elephants standing on a CD) is applied to products immersed in a liquid medium. This inactivates food-borne pathogens while

maintaining integrity and freshness without preservatives.

MLA is also conducting strategic research with CSIRO to see how HPP could tenderise meat with high connective tissue.

High moisture extrusion cooking (HMEC): While munching away on a Cheezel, imagine it with meat flavour - and you will have an insight into the next potential snack food trend. The HMEC process is used to produce expanded snack products and MLA has initiated a scoping study to see if the process can produce value-added products from lower-cost cuts of meat and trim, so MLA is mitigating risk through this proof of concept project.

Very fast chilling (VFC): KFC revolutionised the chicken industry and VFC could do the same for beef and lamb. VFC reduces carcass temperature quickly to limit growth of microorganisms for longer shelf-life and reduced preservatives. Chilling a carcass too quickly is known to cause cold shortening (toughening) of meat, but MLA's



Measuring hip height, a key measure of skeletal development

strategic research has found if chilled rapidly enough, cold-shortening can be avoided and eating quality is maintained.

Skeletal growth compensatory gain: Northern cattle typically alternate weight loss in the dry season with weight gain in the subsequent wet season. Animals with higher levels of dry season weight loss tend to compensate by growing faster the following wet season than animals with lower levels of dry-season weight loss. This compensatory growth can erode benefits of dry season supplementation. MLA and the UQ are conducting strategic research into interactions of dry season liveweight gain/loss, skeletal growth/elongation, and compensatory growth. This may lead to developing more cost-effective supplementation regimes and management interventions to drive profitability through improved growth rates.



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sources to share our message," Andrew said.

"Underpinning all this needs to be a strong central message ie beef on the barbie in summer and warm up in winter with a casserole.

"Digital and social media is driving us to develop initiatives that go deeper and make a bigger splash than the traditional advertising campaigns where we simply bought space from the media owners."

The current marketing strategy for red meat targets the 'food

captains' - those people who are most responsible for the household's food decisions. Engaging this person may be as simple as providing an electronic 'app' for weekly food planning or 'QR codes' on advertisements which can be scanned via mobile phone and direct the consumer to a recipe website to reveal the ideal way to serve that cut.

Andrew said another advertising format being explored by MLA is developing television content in a program format which has a central

message regarding red meat. Think of it as taking the visit to a sheep farm by the Masterchef contestants to the next level.

"As traditional advertising declines, television executives need to come up with smarter ways of attracting the advertising dollar and we are keen to see where that can take red meat," he said.



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A great (Farm) Day out

What happens when producers across Australia open their farm gates to hundreds of city families armed with gumboots and cameras? They help change consumer perceptions about agriculture.

It's called FarmDay and is the brainchild of Victorian founder Deb Bain, who first connected city and farming families in 2006.

Deborah Leake, Manager of MLA's Industry Integrity Communications, said FarmDay's concept of creating a real farming experience for the urban community is a perfect fit with MLA's Industry Integrity Program. MLA took FarmDay national in 2007.

Deborah said while the concept of FarmDay is simple - city families having the chance to spend a day on a real farm - its success lies in managing the 'ripple effect'.

"We focus on offering the opportunity to city families with school-aged children, so they can share their experience with classmates," Deborah said.

"We hear stories about children bringing treasures from the farm back to their classrooms for show-and-tell. Their classmates often register the next year and teachers even incorporate agriculture into their curriculum after hearing about a student's experience."

FarmDay is held each year on the last weekend in May and this year, 539 families took part. But the event has a far greater reach than just those who get their boots dirty. FarmDay generated 679 media hits with a 6.2 million audience reach this year alone. Social media plays an important role too, with participants Tweeting about their experience and sharing photos on Facebook.



Twitter: #FarmDay

Facebook: Farm Day Oz

www.farmday.com.au

Fast facts

1,800 city families have taken part in the annual FarmDay since it began in 2007.

After taking part in FarmDay:

- 93% of participants said they learned that Australian farmers genuinely care for their animals' health and welfare
- 97% said they have a better understanding of people from the country
- 98% said they would buy more Australian-grown products

Source: 2008 post-event survey conducted by Lightspeed Research.



Farming family: Adair and Dean Dunsford, Keith, SA

Why did you participate in FarmDay?

This is our third year - we like meeting new people and it's an opportunity to show them what really happens on a farm. Most people in cities don't know any farmers so without this connection they often have no knowledge about our industry.

What did you enjoy most about the experience?

The Thomsons were open minded and very interested. It was nice to see what we often take for granted through the eyes of someone else.

Why should other producers participate in FarmDay?

It is a rewarding experience to meet new people and is one way farmers can give our consumers a hands-on experience so they understand the realities of producing sustainable food.

City family: Dominica, Mark, Maia (5) and Jordan (7) Thomson, Golden Grove, SA:

Why did you participate in FarmDay?

This was our first time on a farm and we thought it would be a rare opportunity to see a real farm.

Describe your day on the farm:

We made a family holiday out of the weekend and stayed two nights at Keith. Adair gave Jordan and Maia notebooks and explained that farmers keep a lot of records. She gave them little challenges, such as pretending to be sheep in the yards. We went for a drive around the farm and the kids got to play with a pet lamb and Border Collie pup.

Has your visit changed your attitude towards farmers?

It was a great experience; the kids are still talking about it. Adair and Dean took the time to answer all our questions so we understood the real issues facing farmers, not just urban media's version. We loved learning about how they use technology and how they produce food ethically and sustainably.

Top: The Thomson family at FarmDay in May 2012, with Dean Dunsford on the Dunsford's property in south-east SA.

Right: Jordan Thomson (7) plays with 'Scott' the puppy while his sister Maia (5) takes notes during their day on the farm.



Southern WA Meat Profit Day **In profile****Warren Pensini** // *Owner Blackwood Valley Beef, Boyup Brook, WA*

Organic beef producer and marketer Warren Pensini's philosophy is to produce natural, sustainable and healthy red meat on pasture. He is convinced consumers are realising the benefits of this approach.

The Australian Certified Organic producer recently visited the US and saw first-hand a noticeable shift back to production of grassfed meats.

In the cattle sector, this is being driven by a greater awareness and appreciation for how animals are treated in the paddock, meat eating quality and research findings that grassfed beef has elevated levels of beneficial Omega 3 fatty acids and the potentially cancer-fighting Conjugated Linoleic Acid.

Warren, who is the fourth generation of Pensinis to raise cattle in WA since 1920, expects the same factors will lift demand for Australian grassfed beef. He currently produces 500-600 head a year for his Blackwood Valley Beef branded products.

He had been running up to 600 head of breeders until last year, when the business focus changed to finishing cattle backgrounded on 'Kanandah station' on the Nullarbor. Kanandah supplies Blackwood Valley Beef with predominantly Murray Grey organically-produced steers.

How important is it to know what your customer wants?

"It is vital to supply what your market requires and to know there is demand for your product. Our brand, Blackwood Valley Beef, started with

word-of-mouth deliveries of 20kg meat packs around metropolitan Perth. Now we sell a range of shelf-ready portion packs to retailers and whole cuts to top-end Perth restaurants.

"We use several processors and adhere to the MSA grading system to ensure a consistent meat eating quality for our buyers."

What are the major opportunities to build better beef businesses in WA?

"I would like to see a beef industry that is truly 'clean and green' using practices we employ, such as holistic management, controlled grazing and sustainably produced fertilisers. There are premiums for organic meat, but ultimately profits in any business will be driven by the way it is run, costs of production and level of sustainability."

What are the major challenges to a productive and profitable beef industry in WA?

"High processing, transport and labour costs, government regulations, lower volumes of cattle, lack of processor choice and distances to market are major barriers and set us apart from other states. My ideal model would be direct sales from farm to consumer, but that is a long way off."



To see the full program or to register for the Meat Profit Day go to www.mla.com.au/MPD-Albany
T: 0429 833 752



Keep up-to-date #mlampd



www.blackwoodvalleybeef.com.au

Warren Pensini will be speaking at the Southern WA Meat Profit Day on 28 August about the importance of focusing on every aspect of beef production, from soil to stomach.

He will share his experiences gained during the first few years of direct marketing, how production has evolved on and off-farm, and how the model will look in the future.



Animal welfare assured under new exporter regulations

Australia's livestock export industry is undergoing a major transformation as new Australian Government regulations come into force.

Australian cattle, sheep and goats will only be allowed to be exported by companies that meet the requirements of the Government's new Exporter Supply Chain Assurance System (ESCAS).

All exporters have implemented new systems and retrained staff to accommodate ESCAS requirements; including Australia's largest livestock export firm Wellard Rural Exports.

"We've invested more than \$1 million in preparing for the implementation of the ESCAS, including training staff to handle the paperwork and the employment of staff on the ground in Indonesia and the Gulf States to ensure animal welfare standards are being maintained," said Wellard Trading CEO, Fred Troncone.

He said his company had always met the relevant animal welfare standards but the new system meant that exported cattle were now scanned at each stage of the supply chain through to the point of slaughter.

"We've purchased scanning equipment for some Indonesian abattoirs and the company has assisted those businesses to achieve compliance with international standards," Mr Troncone said.

Under the ESCAS, exporters must provide evidence that the livestock will be handled in accordance with internationally accepted World Organisation for Animal Health (OIE) standards up to, and including, the point of processing.

"The ESCAS is a good approach to ensuring animal welfare and meeting consumer demands but now it is up and running we would like to see if the auditing and paperwork can be streamlined to make it more efficient."

Under the new framework all exporters seeking a permit to export feeder and slaughter livestock must show their supply chain enables animals to be effectively traced through to slaughter, has appropriate controls through reporting and accountability, and is independently audited.

Working with export partners

Exporters and peak councils have put their support and expertise behind the ESCAS, which was developed after the temporary suspension of the livestock export trade to Indonesia last year.

Australian Livestock Exporters' Council CEO, Alison Penfold, said Indonesia and its importers have played a huge part in making the ESCAS work.

"There has been a strong commitment from our customers there," she said.

Cattle Council of Australia (CCA) and Sheepmeat Council of Australia (SCA) representatives joined Agriculture Minister Joe Ludwig on a delegation to Middle Eastern export markets earlier this year.

CCA President, Andrew Ogilvie, said the visit provided importing countries with a better understanding of the ESCAS.

"The CCA stands committed to working with Government and industry in assuring the welfare of Australian livestock while maintaining a sustainable live export industry. The ESCAS will ensure that outcome," Mr Ogilvie said.

SCA President, Ian McColl, said the Australian Government, producers, exporters and importers were committed to improving animal welfare through the ESCAS.

"Everyone we talked to was determined to make the ESCAS work," Mr McColl said.

"Implementation of the ESCAS will not only provide the industry with a long-term future, it will also mean Australian livestock will continue to play an important role in meeting the food security needs of the countries of the region."

Goat Industry Council of Australia (GICA) President, Glenn Telford, said the ESCAS was vital to protecting the goat industry's Malaysian export market.

"We are fully supportive of the need for it and believe it is a good system," he said.

MLA, CCA, GICA and SCA are all part of the Industry Government Working Group that developed, and is helping implement, the ESCAS framework. When requested, MLA supports exporters and importers with the implementation of the new regulations, including conducting gap analysis and training programs overseas.



www.daff.gov.au/aqis/export/live-animals/livestock/escas



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Andrew Ogilvie, Cattle Council of Australia // T: 02 6269 5600

Glenn Telford, Goat Industry Council of Australia // T: 07 4623 3791

Alison Penfold, Australian Livestock Exporters' Council // T: 02 6269 5690

Figure 1 The Exporter Supply Chain Assurance System

Roll out

ESCAS was initially rolled out in Indonesia and Egypt, followed by Kuwait, Bahrain, Qatar and Turkey on 1 March 2012. The regulatory framework will apply from 1 September for Israel, Japan, Jordan, Malaysia, Oman, the Philippines, Saudi Arabia, UAE and Singapore. Supply chains to Brunei, Mauritius, Russia and Vietnam must be ESCAS compliant by the end of the year.

Under ESCAS, cattle in an export consignment must be individually identifiable and traceable through to the overseas processing facility.

The Federal Government has the power to apply sanctions if breaches occur.

Initial independent audit

Before animals are exported, the auditor conducts an assessment to ensure control and traceability systems are in place.

A complete audit of the supply chain is also conducted to ensure the OIE animal welfare checklist is satisfied.

Approval of export consignment by the Department of Agriculture, Forestry and Fisheries (DAFF)

DAFF reviews the audit reports and contracts before granting approval for export.

Performance audit

The auditor conducts a performance audit while the animals are in the supply chain to ensure the control, traceability and OIE standards are being met.

Reporting

At the completion of each shipment the exporter must provide DAFF with an end of process report, including the performance audits.

This reporting is made publicly available through the DAFF website (www.daff.gov.au)

Research at work

Every month, check this section of *Feedback* to find the latest information and resources for making a difference in the paddock

In this issue

Benchmarking

Beef producers in the Kimberley and Pilbara get a handle on profit drivers

MSA lamb

Retailers are now stocking MSA-branded lamb offering new marketing options for producers

What grows where?

Insights into Australia's pasture make up in updated audit

Elite lamb

Poll Dorset breeders prove the benefits of genetic gain

Crunching the Cash Cow numbers

The Cash Cow project is one of the industry's largest investments into increasing the reproductive efficiency of northern beef herds and the latest data collection is already providing an insight into lifting fertility. →

While the latest findings are only preliminary, the MLA-funded Cash Cow or Northern Australian Beef Fertility project has identified the significant factors impacting on the likelihood of a cow becoming pregnant four months after calving.

Across the Cash Cow herds, preliminary analysis showed significant factors reducing the percentage of cows pregnant four months after calving were:

- timing of previous calving - out-of-season calvers (April-June) were much less likely to be back in calf within four months of calving than those calving October-January
- wet season phosphorus deficiency - cows with evidence of low dietary P (as determined from faecal P levels) during the wet season were much less likely to be in-calf than those with adequate dietary P
- previous year's reproductive performance - non-lactating cows that became pregnant were subsequently less likely to be in-calf than lactating cows that became pregnant

- body condition score at last year's annual pregnancy test - cows in poor to fair condition were much less likely to be in-calf than cows in good condition.

Project leader Professor Michael McGowan from the University of Queensland (UQ), said that the Cash Cow data analysis team had completed the first round of multivariate analysis.

The analysis recognised that different factors collectively influence a breeding female's performance, and that producers need to know the magnitude of each identified factor that affects performance. This will enable producers to make better management decisions and more effectively target resources.

Michael stressed results available at this stage were only preliminary, and that the findings of the final round of multivariate analysis would be available later in the year.

The Cash Cow data showed that all four regions of northern Australia (Downs, Brigalow, Southern Forest and Northern Forest - see figure 1) experienced some high calf losses between pregnancy

diagnosis and weaning. Some preliminary findings of factors increasing calf losses were:

- timing of previous calving - out-of-season calvers (April-June) had higher losses
- low protein and energy consumption in last trimester - cows consuming pasture with less than 0.125cp:dmd (ratio of crude protein content to dry matter digestibility).

Dianne Joyner from UQ said Cash Cow benefited from the whole-hearted participation of its co-operating cattle producers and veterinarians.

She said the recent project meeting at Beef Australia 2012 in Rockhampton demonstrated a great camaraderie between participants and researchers and an invaluable industry network had been established.

Final results from the Cash Cow project should be available later this year.



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Figure 1 Cash Cow data was collected from four regions of northern Australia (Downs, Brigalow, Southern Forest and Northern Forest) between 2008 and 2011.

While industry-wide recommendations based on the Cash Cow project can't be made just yet, preliminary findings point toward a number of best practice approaches to managing breeder herds in northern Australia.

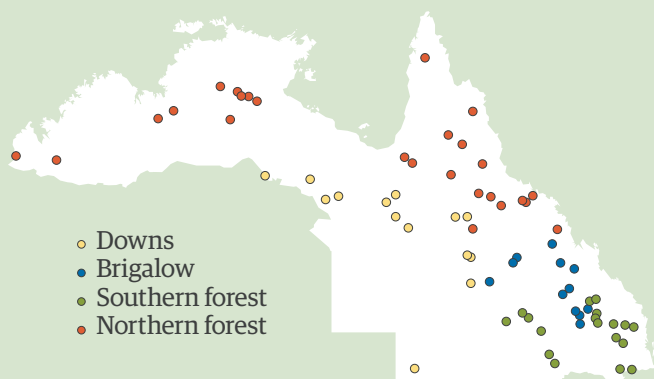
- Implement foetal ageing at annual pregnancy test to enable identification and management of 'out-of-season calving females' and more appropriate timing of branding/weaning musters.
- Assess wet season pastures by using faecal P testing to determine P status of females.

- Implement a heifer replacement program, and cull heifers that fail to conceive within three months of joining.
- Assess body condition score of all cows at annual pregnancy test during first-round muster. Aim to have cows at body condition score 3 or better at time of calving.

- Ensure weaning occurs before cows lose too much condition, and that cows have sufficient time and access to adequate quality pasture to recover condition prior to next calving.
- Ensure pregnant cows are on a good plane of nutrition (protein and energy) in the last trimester of pregnancy. (This is another good reason to manage out-of-season calvers



1: Cash Cow project leader Professor Michael McGowan.
2: The Cash Cow research team (back from left) Don Menzies, Brian Burns, Nigel Perkins, Di Joyner, Dave Smith, Tom Newsome, Peter O'Rourke, Michael McGowan and (front from left) Kieren McCosker, Geoff Fordyce, Sandi Jephcott and Louise Marquart. Absent - Nancy Phillips



Number crunch

Cash Cow data was collected from:

3 states

(Queensland, Northern Territory and Western Australia)

78 commercial beef cattle breeding properties located between south-west Queensland and the Pilbara for three to four years

2-3 breeding cycles of **78,256** breeding females

more than **45,000** weaners

1,633 dung samples

8,499 blood samples

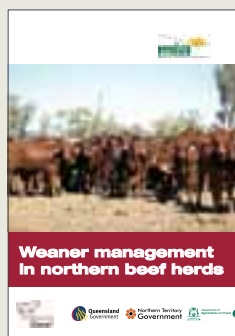
275,000km travelled for data collection

The data collected from participants included bull selection and management policy, vaccination programs, supplements fed, rainfall, distance to water, stocking rate, mustering technique, weaner weights, cull cow information and disease status.

To help producers increase reproductive efficiency in their northern beef herds, the Cash Cow database will be used to identify realistic benchmarks for major reproductive traits (eg percentage of females pregnant four months after calving) based on the value achieved by the upper 25% of mobs in the study.

as a separate group, as it's difficult to achieve this in the last months of the dry season).

Many of these practices are explained in two MLA publications, *Heifer management in northern beef herds* 2nd edition available for download at www.mla.com.au/heifermanual, and *Weaner management in northern beef herds* available for download at www.mla.com.au/weanermanual



Meat the elite

Sharing genetics, progeny testing elite young sires and using latest breeding technologies is equipping Meat Elite Australia (MEA) to identify and supply animals that lift the productivity of the sheepmeat industry.

This innovative Australian sheep breeding group is achieving 21% faster genetic progress than the average for all terminal sire groups across the country for a range of profit-driving traits.

This means commercial sheep producers have access to rams with enhanced genetic potential for extra carcass weight, higher growth rates and more reliable performance at an earlier stage than the average LAMBPLAN ram.

The 19 Poll Dorset breeders who participate in MEA's Young Sire Program attribute their success to a focus on collaboration, sharing information, trialling new genetics, strategic planning and adopting practical industry-generated tools for genetic improvement.

Each year an MEA committee selects a Young Sire Program team of up to 15 objectively tested young rams, from about

4,000 potential ram-lambs, based on sound confirmation, birth weight, growth, fat and muscling breeding values calculated through LAMBPLAN.

This coordinated selection and use of elite young sires, backed by stringent performance recording standards, is the basis of MEA's success. This Young Sire Program approach was pioneered in Australia.

These elite young sires and a link sire are mated to ewes in MEA members' flocks, which are located from Mingenew, in the mid-west of WA, to Glen Innes, in the New England region of NSW. This ensures robust performance testing in a wide range of environments.

"For commercial lamb producers who lack a bit of confidence in selecting sires based on Australian Sheep Breeding Values (ASBVs), we can demonstrate how genetics perform in a range of environmental conditions to

optimise productivity," MEA member Dale Price said.

"MEA supplies sheep producers with only rams that perform better than the terminal sire average on LAMBPLAN.

"We offer no rams below the terminal average for Carcase Plus Index or LAMB2020 Index and our group as a whole is moving in that direction," he said.

The power of the data collected by MEA members and its effective use is clear. Lambs bred by rams from MEA flocks have carcass weights that are just on one kilogram heavier on average at the same age than the average of all rams in flocks that use LAMBPLAN. That is estimated to be worth an additional \$4-5 per lamb. In addition, progeny of lambs from MEA flocks have higher yielding carcasses, delivering additional benefits to processors and retailers.

Embracing genomics

To ensure it remains at the forefront of breeding developments, MEA has started implementing cutting edge genomics research from Sheep Genetics Australia.

Touted as the next revolution in Australian sheep breeding technology, genomics - which uses an animal's DNA combined

21%

faster genetic progress

Additional

\$4-5

per lamb

1kg

heavier carcasses

with its performance data - can provide up to 65% more accurate sheep selection for key production traits. This includes traits that are hard to measure.

This year's MEA Young Sire Program rams have been DNA tested and will receive research ASBVs for birth and post weaning weights, shear force, dressing percent, intramuscular fat (IMF), lean meat yield (LMY), and worm egg count (WEC).



www.meatelite.com.au

Download *Module 9 Gain from Genetics of Making More From Sheep* at www.makingmorefromsheep.com.au/module-index.htm

www.makingmorefromsheep.com.au/module-index.htm

Trading up - tips for breeding trade weight lambs

- Select rams with LAMBPLAN data to ensure animals purchased have some performance guarantee.
- Look for sheep with silver or gold quality LAMBPLAN data - it means they are highly reliable sheep in terms of potential performance.
- Use the Carcase Plus or the 2020 index to do an initial sort of rams on offer. Aim to only purchase rams above average.
- Australian Sheep Breeding Values enable you to select rams that will do the job you want.

Look for rams in the following ranges:

BWT	WWT	PWWT	Pfat	EMD	WEC	Lambing ease
0.2 > 0.5	7.5 +	10 +	0 > -1.0	0.8 +	Negative figures	0 +
Birth weight indicates likely lambing ease	Weaning weight is measured when the ram was weaned	Post weaning weight - ideally measured at about 5-6 months after lambs are run under the same conditions	Fat scored when PWWT completed	Ultra sound measurement of the eye muscle depth indicates carcass muscling and yield	Worm resistance/resilience - negative figures are good	Some studs offer these figures - an indication of lambing ease - close to zero or positive figures are good

These figures are based on the ram's individual performance and the performance of his sire, dam and siblings. Accuracy percentages indicate the sheep's ability to replicate his performance. A young rams' accuracy figures are likely to be in the 50-60% range, while a stud ram with 800-900 tested progeny will have accuracy figures around 95%.

It is also important to remember that the ram only contributes half an individual lamb's genes. Selecting tested ewes will also lift performance outcomes.

The price is right on meat genetics

Commercial sheep producers are capitalising on the genetic resources of the Meat Elite Australia (MEA) Young Sire Program to produce high value lambs suited to their environment.

Dale Price, wife Ruth, son Adam and his wife Jodie contribute rams to the Young Sire Program, which progeny tests superior genetics from a pool of about 4,000 young rams under a range of environmental conditions across southern Australia.

"This year's rams will be DNA tested to contribute to the development of research ASBVs for a range of economically important - and often hard to measure - meat traits," Dale (pictured with three-year-old grandson Kallan) said.

"It is great to be part of a group that gets excited about these genetic advances and learns together."

"It gives us the opportunity to share information about management strategies, review breeding techniques - such as artificial insemination, embryo transfer and electronic ear tags - and helps us to stay motivated in a supportive environment."

The Prices were among the first sheep breeders in their district in the lower south east of SA to undertake performance recording in the early 1980s and started using LAMBPLAN at its inception.

It starts on the farm

Dale said a diligent approach by sheep breeders to collecting accurate raw progeny performance data should give commercial sheep producers a high degree of confidence in using LAMBPLAN's Australian Sheep Breeding Values (ASBVs) and MEA sires with high genetic merit for particular environmental conditions.

In his own breeding operation, use of LAMBPLAN, MEA Young Sire Program results and embryo transfer were improving flock genetic gains for early lamb growth, post weaning weight, muscle and sheep intestinal worm resistance.

The Price's breeding flock is above breed average for the LAMBPLAN Carcase Plus and LAMB2020 Indices, growth rate is +12 points above average and birthweight is only +0.3-0.5kg. This means ewes are producing lambs with moderate birth weights - a key strategy in improving lambing percentages while not compromising the lamb's potential for rapid growth.

This year, genomic testing will identify sire prospects for improved meat eating quality traits using research ASBVs for shear force, dressing percentage, intramuscular fat (IMF) and lean meat yield (LMY).

Snapshot

Dale, Ruth, Adam and Jodie Price, Glencoe, SA.



Property:
220ha

Enterprise:
Stud Poll Dorsets, White Suffolk and beef breeding

Livestock:
700 stud ewes, 150 head of cattle

Pasture:
Subclover and ryegrass

Soil:
Variable, from sand to heavy black soils

Rainfall:
800mm

Customer satisfaction

Peter Bateman, who runs 1,800 Merino and Merino-Poll Dorset cross ewes at Millicent, in SA, said by using the Price's rams, he was benefitting downstream from genetic and genomic breeding advances being achieved by MEA members and through LAMBPLAN and Sheep Genetics Australia.

His main income is derived from the sale of second cross lambs weaned at four to five-months-old and sold up to two months later, mostly to the export market.

Most of these lambs weigh 26-27kg (dressed), which requires fast growth to weaning and post-weaning growth.

"We are achieving this without impacting on birthweight by selecting genetics for birthweight of +0.3-0.4 and high post-weaning weight," he said.

"Our success is measured by better sale returns and processor feedback that our lambs have good eye muscle and kill-out well."



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New ammunition against parasites

Australian beef producers have another tool to fight internal parasites – genetic resistance – and it comes packaged as a new Angus EBV.

Research, funded by MLA and led by veterinarian and Angus breeder Dr Peter Honey, has developed a new weapon against growing internal parasite resistance – genetics.

“A colleague who I worked with in the US alerted me to the excellent research being done in the famous Wye Angus herd. I’ve been following their progress for the past 10 years,” Peter said.

“In this herd it was shown faecal egg count (FEC) is a phenotypic indicator of parasite resistance and this resistance is moderately heritable. Predicted differences – the equivalent to our EBVs – were derived even in this relatively small herd.”

And even better, Peter’s Australian research found no indications of negative impact on production traits by selecting for parasite resistance (figure 1).

“The Angus Long Fed/CAAB Dollar index was very similar for animals with high or low parasite resistance EBVs which gives an early indication you can select for parasite

“The Angus Long Fed/CAAB Dollar index was very similar for animals with high or low parasite resistance EBVs which gives an early indication you can select for parasite resistance without compromising progress with production traits,” he said.



Veterinarian and Angus breeder Dr Peter Honey.

resistance without compromising progress with production traits,” he said.

The two-year trial involved about 2,400 Angus cattle from eight herds, all with strong genetic links to Te Mania Stud at Mortlake in western Victoria.

“Genetic linkage was achieved through the use of common sires across the participating herds through artificial insemination with frozen semen,” Peter said.

“All sires were recorded with BREEDPLAN and the genetic linkage provided half-sibling sire lines across a range of climatic and management situations.”

Lots of worms from few calves

FECs were recorded from weaners aged from 6-17 months, when they are most susceptible to parasites. All animals had either never been drenched or not drenched for at least six weeks prior to sampling so there was no effect from any residual chemical. The sires of each weaner were recorded and, although the dam’s details were known for each individual, their maternal contribution was ignored.

“The data showed the offspring of different sires contributed unevenly to the total pasture contamination load. For example, in a sampling from one of the herds one bull had sired 22% of the calves but those calves only produced 4% of the pasture contamination,” Peter said.

“In practical terms, there may only be a small number of calves in a herd that are creating the worm problem.”

2,400

Angus cattle in parasite EBV trial

77

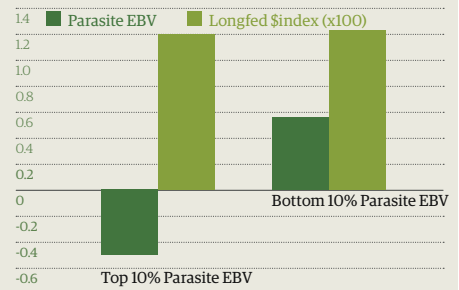
known Angus sires with parasite resistant EBVs

Effect of enhanced parasite resistance on production traits

Dollar index values for Long Fed/CAAB²⁶ showed little variation between the animals with the highest 10% and the lowest 10% of parasite resistance EBVs.

On the evidence from this project there is no indication of any unfavourable links between FEC EBV and genetic merit for other traits.

Figure 1 Mean Longfed/CAAB Dollar Indexes for highest and lowest 10% parasite resistance EBVs. Source Dr Peter Honey.



Gender worm link

Another interesting outcome of Peter’s work was the clear relationship between sex and worm burden. He found that bulls had significantly higher worm counts than steers, which in turn had significantly higher counts than heifers.

“It is likely that hormonal effects are expressed on the immune system but clearly there is a relationship that warrants further investigation. The finding has implications in how seedstock herds manage their unmarked calves,” he said. With Peter’s research now complete, he said the challenge now lies with industry to adopt and refine the science.

“Following the project, the Angus breed now has 77 sires with a parasite resistance EBV so it is possible to select resistant lines of cattle within commercially acceptable timeframes,” he said.

“It will really depend on the seedstock industry deciding whether or not there is a demand for this EBV and whether they are satisfied it’s useful.”



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Module 5: Genetics and Module 7: Herd Health and Welfare from More Beef from Pastures program
www.mla.com.au/morebeef



Proceed with caution on parasite EBV

Research has developed a new parasite resistance EBV for the Angus breed, however, seedstock producer Tom Gubbins urges industry to keep the big picture in mind.



Snapshot

Tom Gubbins,
Mortlake, Vic.



Property:
2,422ha

Enterprise:
Seedstock

Livestock:
Angus cattle

Pasture:
Rye grass,
Phalaris sub clover
white clover

Soil:
Sandy clay loam

Rainfall:
640mm

A new Angus EBV for parasite resistance might sound like a silver bullet but according to Te Mania Angus principal, Tom Gubbins, breeders need to proceed with caution.

Speaking about the recent two-year research project, directed by veterinarian Dr Peter Honey, Tom said a parasite resistance EBV is an excellent stepping stone but seedstock producers should be committed to further investigation to ensure there are no negative correlations with key productive traits.

"There are still areas we need to know more about, particularly the economic impact and how it affects other important traits, such as marbling, which breeders get a good premium for," he said. "We've got to be careful we don't put it out there too soon."

The project involved 2,400 weaners with genetic links to Te Mania from eight herds from as far north as Coolah, NSW, to Mortlake in Victoria in the south. The herds came from varying climatic and management situations (including autumn and spring-calving herds). Half-sibling sire lines were provided through the use of progeny test sires and by artificial insemination to genetically link the herds.

Balanced breeding

It is important to balance selection though - Tom recommends producers always look to balance the important production traits in their stock and not get immediately carried away with the potential of this new EBV.

"Parasite control is a cost, there's no doubt about that and producers are very cost conscious and always looking for ways to reduce their expenses," he said.

Tom also made the point that the parasite resistance EBV is not an easy or inexpensive trait to measure.

"Collecting the phenotype is another expense to seedstock businesses. Each sample has to be collected rectally, placed in an individual vial, numbered and sent to a laboratory. It's not as simple or as economic as just measuring the weight of an animal," he said.

"At the end of the day, we need to examine the benefits including will it increase the value of the animal?"

Above: Te Mania Angus principal Tom Gubbins believes a parasite resistance EBV is an excellent stepping stone but seedstock producers need to remain focused on a balance of traits.

Left: A new Angus EBV for parasite resistance has the potential to reduce production costs.



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Eating quality

The rise of MSA lamb

Meat Standards Australia (MSA) grading has been a success story for the Australian beef industry, and now the same benefits are being seen by the lamb industry with the introduction of MSA graded and branded lamb by the nation's largest meat retailer a welcome boost.

Woolworths launched an extension of its MSA program for red meat in May by offering lines of MSA-graded Australian lamb to its customers. Starting in NSW the program has been progressively rolled out to other states.

MLA's MSA Manager, Michael Crowley, said there was rapid growth in the supply of MSA-graded lamb last financial year (2011-12) with over 3 million lambs presented for MSA grading in the 12 processing plants currently licensed to process MSA lamb.

"Of those lambs who were graded, 10% are stamped as MSA-graded and sold under different brands through retail, including butchers," he said.

Michael expects over three million lambs (16% of the national lamb production) to be presented for grading this financial year (2012-13).

"It only takes a handful of processing plants to become licensed and volume will grow quite quickly," he said.

MLA will increase its focus on producer education to increase the number of producers registered to supply MSA eligible lambs, as well as training for wholesalers, retailers and the food service sector.

In 2011-12, 30 MSA producer workshops were run and over 3,000 new sheep producers registered for the program.

Good news story

It is not just a major retailer getting in on the act, Brisbane-based meat suppliers Country Fresh has used MSA to underpin its New England Gold brand launched in October last year. It is sold to restaurants and now through butchers and Stockman's Choice stores in Queensland and Western Australia.

Country Fresh Marketing Coordinator, Michael White, said they wanted a signature brand as a marketing tool.

"We single out the lambs that meet MSA criteria and present best for use in our premium brand," Michael said.

"Consumers are led by what their butcher says. The feedback we have received from third and fourth generation butchers is that it's the best lamb they've ever eaten."

Supplying a quality product

Taste testing and genetic research are working to ensure that eating quality continues to improve and that consumers continue to eat top tasting lamb.

"By understanding what consumers really want in terms of lamb eating quality, and then using genetic tools to deliver on these taste requirements, the sheep industry will be able to guarantee continued improvement in consumer satisfaction for the foreseeable future," said MLA Eating Quality Research Manager, Dr Alex Ball.

The research is coordinated by the Cooperative Research Centre for Sheep Industry Innovation (Sheep CRC) in conjunction with MLA and has established a clear understanding of the attributes of lamb that underpin consumer satisfaction.

"During the tasting process, consumers are asked to rate the quality of meat from two-star (unsatisfactory or fail) to five-star (premium) and indicate what they would be prepared to pay for the product," Alex said.

"Consumers have consistently said they would pay twice as much for five-star quality compared to three-star.

"With good genetics, it's possible to consistently lift a lamb loin to a four or five star product."

"Research into specific genes carried by 35 sires from the Information Nucleus flock has discovered three genes that strongly influence tenderness," he said.

These and other new gene markers will eventually form part of the genomic-assisted Australian Sheep Breeding Values (ASBVs) for eating quality, which will in turn assist producers in predicting the performance of young rams in influencing the eating quality and lean meat yield of their progeny.

Fast facts

- 12 processors licensed to process MSA lamb
- 9,000 producers registered to produce MSA lamb
- 90,000 consumer sensory tests carried out to date
- 3 million lambs supplied for MSA processing in 2011-12



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To become MSA registered call 1800 111 672 or visit **www.mla.com.au/msa**

MSA rewards on-farm and on plates

Snapshot

Darryl Croser,
Wattle Range,
(east of Penola)
SA.



Property:
2,000ha

Enterprise:
Prime lambs,
prime cattle

Livestock:
1,200 breeders
and followers

Pasture:
8,000 crossbred
lambs, 450 Angus
yearlings

Soil:
Sandy loam,
black clay

Rainfall:
580mm

South Australian beef and lamb producer
Darryl Croser believes one important person
underpins his business - the consumer. →





For this reason he feels MSA is a tangible link between his paddock and the plate of that important person.

A registered MSA beef producer since the program's inception in 1999, it was only natural Darryl, who runs 2,000ha at Lucindale in south east SA, was one of the first to sign up for the MSA lamb program.

"Consumers have that many choices and buying power. I listen to the consumer and work back to provide that product," said Darryl, who with his sons Nathan and Damien turns off 450 Angus yearlings and 8,000 cross-bred lambs annually.

"Lamb is fairly consistent because it's younger but you can't afford to have one in a box that is tough. The consumer doesn't want to pay for that. They expect the same product every week."

Darryl uses British breed rams over high fertility first-cross ewes, breeding spring drop lambs to target out-of-season lambs.

We can finish late lambs as we have underground water and centre pivots, as well as late finishing country," Darryl said.

But the MSA program is not just about keeping customers happy, Darryl has identified many on-farm rewards.

"It will increase the overall yield of your lamb because they won't be sent through a saleyard 100km away, then left in hot, dusty yards and killed two to three days later," he said. "They are delivered straight from your paddock to an MSA-accredited processor."

"Doing that just means your lamb will lose its bloom something which took quality feed to achieve in the first place."

A helping hand

Under MSA guidelines, producers receive advice on genetics, nutrition, management and transport preparation.

Producers must ensure their lambs are fed on a rising plane of nutrition, as weight reduction can cause stress and produce a tough product.

How to become MSA accredited:

- Register as an MSA producer for free either at <http://registerproducer.msagrading.com.au/> or contact MSA on 1800 111 672.
- Check that you meet the list of MSA requirements and find an MSA processor near you at www.mla.com.au/msa
- Make sure you are familiar with the buyer's specifications - they may have specific carcass weight and fat ranges.
- Liaise with the abattoir to ensure sheep are processed within 48 hours of being off feed.
- Fill in the National Vendor Declaration (NVD) to accompany the consignment to the abattoir. It is important that you include your MSA registration number on the declaration.
- Take note of the reasons for any non-compliance.

"Using electrolytes, we can reduce the stress on animals when handling and transporting," Darryl said. "We've improved our feeding system and can select from accredited genetics."

"There's no greater cost as you always want to bring in new genetics and improve. Animals that don't perform are very inefficient and cost your business."

To avoid stress and the associated decline in tenderness, adhering to the MSA process means lambs are delivered straight to an MSA-accredited processor, they are not mixed with other flocks of lambs, and are processed quickly.

"There may not be a premium as such but others will receive a discount for not having the right type of lamb."



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Looking to leucaena

The area sown to leucaena-based pasture continues to grow, not only in central Queensland but also in areas of southern Queensland and is estimated to be at least 200,000 ha. Recent MLA research investment has focused on optimising the productivity of these pastures and here MLA's Project Manager Northern Beef R&D, Dr Mick Quirk, explains what research is underway.

MLA is funding leucaena research to:

- Conserve genetic diversity
- Develop a psyllid-resistant line
- Assess the need for a sterile variety to avoid unwanted spread
- Ensure a robust supply chain for the rumen bug inoculum to improve efficacy
- Assess persistence and productivity on the Darling Downs
- Evaluate establishment techniques

200,000ha
of leucaena in Queensland

Queensland and Hawaii have more in common than beaches and a tropical lifestyle. Both locations are well-suited to leucaena and Queensland researchers are now ensuring access to the genetic diversity of the species by drawing from long term work in Hawaii.

MLA is supporting University of Queensland (UQ) researchers to conserve 62 lines of leucaena obtained from the University of Hawaii. The Hawaiian collection was accumulated by renowned leucaena specialist, Professor James Brewbaker, but it is unlikely to be conserved into the future when he retires. UQ has established the 62 lines in small plots and, through controlled pollination, will collect true-to-type seed for storage in the Australian Tropical Crops and Forages Collection.

UQ researchers also have industry support to develop a psyllid-resistant line of leucaena. It is expected final selection of this line will occur this year, with seed available for seed-increase crops by early 2013. Productivity of leucaena can be limited by psyllids, leaf-sucking insects especially damaging in coastal areas.

MLA has also commissioned a scoping study into the development of a sterile variety, as a means of reducing the risk of leucaena spreading into ungrazed areas.

Ensuring cattle are protected from DHP depressions in productivity

The toxicity risk with leucaena, arising from the presence of mimosine in its foliage, and the solution in a rumen bacteria that breaks down the toxic by-product of mimosine (known as DHP), is generally well known. Dr Ray Jones from CSIRO was the pioneer of this work.

Distribution of the DHP-degrading bacteria (or 'rumen bug') was initially done via rumen fluid collected directly from cattle carrying the bug however, in the past 15 years, Queensland Department of Agriculture, Forestry and Fisheries (QDAFF) has cultured the bacteria in the lab using a fermentor.

Cattle inoculated with the rumen bug can consume diets high in leucaena without any risk of DHP-induced depressions in growth or reproduction.

However, testing of mobs of cattle grazing leucaena on 44 properties in 2004 found that up to 50% of mobs appeared to be at risk of DHP-induced depressions in productivity. This was based on the presence of elevated levels of DHP in urine samples.

What is leucaena?

It is a high quality, long-lived leguminous forage tree. First introduced by CSIRO in the 1950s for extensive grazing systems for tropical Australia. Today it is also being used by livestock producers in cooler sub-tropical climates.

It produces palatable, nutritious, high protein leaf for cattle giving liveweight gains of 250-300 kg/HD/yr, or 125-150kg per hectare at a stocking rate of 1hd:2ha. This is 2-3 times that of grass-only pastures.

The reasons for this were unclear but were most likely related to:

- 1 producers not adopting the protocols for inoculating cattle with the rumen bug
- 2 poor retention of the rumen bug on properties during periods when cattle were not grazing leucaena, and/or
- 3 inconsistency in the efficacy of inoculum produced in the fermentor

MLA supported recent research by UQ and CSIRO to explore these factors, both in the lab and on properties in southern Queensland, but the results have not resolved the primary cause of inconsistent protection of mobs grazing leucaena.

The research did find cattle taken off leucaena pasture can lose the rumen bug within a short time, perhaps within as little as 2-3 months. This means producers must ensure that some cattle with the rumen bug be retained on the property from year-to-year, to act as donors, and that these cattle not be off leucaena for more than 4-6 weeks at a time.

New research will ensure the supply chain for the inoculum is robust, from lab culture through to inoculation of cattle on the target property, and that the lab-based source of the inoculum is as effective as that used in the original studies by Ray Jones.

Other projects

Support is being given to the Toowoomba Landcare Group to assess the persistence and productivity of established leucaena in several areas of the Darling Downs, including the impacts of frosts and cold weather.

Other activities includes the evaluation of the impact of various establishment techniques and configurations on pasture productivity, as well as support for the Leucaena Network in its promotion and extension activities including promotion of the code of practice for responsible use of leucaena as a pasture plant.



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The guidebook *Leucaena: A Guide to Establishment and Management* is available at www.mla.com.au/leucaena

The Leucaena Network: www.leucaena.net

Benchmarking

Leucaena driven gains in southern Queensland

Despite being told leucaena was unsuitable to grow outside central Queensland, the Millmerran-based Antonios saw it as a potential tool to move their more marginal country out of cropping, which was barely covering costs, and into livestock production.

In the early 2000s, soil tests revealed the need for legumes on this challenging soil, but historically they had been difficult to establish, leading Craig on a crusade to find a suitable species. Craig planted a 15ha trial of leucaena in March 2004.

"It frosted and stopped growing during winter, but when we conducted a six week weight gain trial the following February, we achieved weight gains of up to 1.6kg/day," Craig said.

"Since then we have established nearly 400ha on our home property, Borambil."

A fourth-generation producer, Craig runs two properties south-west of Millmerran with his wife Lexie and parents Paul and Judy. As well as growing grain, the family traditionally ran Angus breeders, turning-off weaners for the feedlot market.

Leucaena now fills the feed gap between weaning in January-February and the availability of forage oats in May, removing the cost of assisted feeding.

As well as breeding, they now buy in and background steers and heifers and can turn-off cattle year-round from the leucaena for regular cash-flow and much reduced risk.

Snapshot

Craig, Lexie, Paul and Judy Antonio, Millmerran, Qld.



Property:

Two properties totalling 1,500ha

Enterprise:

Grain and cattle

Livestock:

500-600 head including 200 Angus breeders plus bought-in steers

Pasture:

Leucaena and a mix of tropical and native grasses (native bluegrass, rhodes, gatton panic, green panic)

Soil:

Brigalow-Belah through to loamy ironbark and pine

Rainfall:

625mm/year

Getting the most out of your leucaena:

Establishment:

- Minimise seed spread by planting leucaena away from potential weed dispersal zones eg water courses.
- Maintain 20m buffer zones between plantings and external fences.
- Fully fence leucaena paddocks to avoid seed spread by cattle.

Management:

- Graze or cut leucaena to keep it within the reach of cattle, to minimise seed set.
- Establish vigorous grasses inter-row to minimise suckers, reduce seed spread during heavy rains, prevent soil erosion and use fixed nitrogen produced by the system.
- Regularly monitor paddocks and water courses to control escaped plants.

Maintain the 'rumen bug':

- Inoculating one in 10 head with the rumen bacteria should achieve full dispersal within six weeks.
- Keep leucaena in the diet of a core herd to maintain the bacteria.
- If totally destocking, re-inoculate cattle on re-entry to leucaena.

Best practice:

- Comply with local weed laws.
- Keep abreast of best practice developments.
- Follow The Leucaena Network's Code of Practice, available at www.leucaena.net



Queensland producer Craig Antonio was one of the first in his area to trial leucaena. Eight years on, it delivers year-round productivity gains, inspiring neighbouring producers to give it a go.

“Our catch cry is now ‘kilos of beef per hectare per year’,” Craig said. “We consistently achieve 1kg/day weight gains on the leucaena. It has tripled our productivity and given us a future in a sustainable grassfed system.”

Craig sourced information on establishment and maintenance from the University of Queensland, MLA and the Queensland Government. He trialled various planting methods, including zero-till and full cultivation.

Planting systems

“We refined our establishment practices and now use a twin disc vacuum planter with twin press wheels. We plant twin rows one metre apart with an eight metre row centre, at a rate of one seed every three centimetres (1.4kg seeds/ha),” Craig said.

Tropical and native grasses are established inter-row when the leucaena is 1.5m high.

Craig rotationally grazes, stocking each leucaena paddock for two weeks, followed by a 6–8 week spell. He finds the best value from leucaena arises with about 35% intake, balanced with 65% roughage.

“If properly managed, Leucaena not only provides a feed option within six months, but remains productive for 30–40 years, so producers can’t afford to make mistakes with establishment.”



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Snapshot

Robin, Lyle, Geoff, Lynda, Scott and Annette Mills, Warrawagine Station, east Pilbara WA.



Property:
401,780ha

Enterprise:
Beef cattle

Livestock:
8,000 breeders

Pasture:
Native spinifex, buffel, Roebourne Plains grass, Mitchell grass

Soil:
40% alluvial floodplain, 60% spinifex/rocky

Rainfall:
300mm (100 year average), 500mm (20 year average)

14%

increase in calving rates in five years

Calving out a boost for their business



Outside pressures, like the changes to live export weights to Indonesia and the 2011 ban, impacted greatly on the Mills family's Western Australian cattle enterprise. However it was by looking inside their business that the Mills found they could have the greatest impact on their bottom line.

It's not a topic that will grab the headlines, but benchmarking and the valuable information it can offer grabbed the attention of the Mills family when they were dealt a double blow to their major cattle market and income stream.

In 2010, Indonesia introduced a 350 kilogram limit on live export shipping weights when the family had geared up to supply the 600kg slaughter weight trade.

A year later, the six week ban on live exports to Indonesia came into effect just as their 'Warrawagine Station' muster was in full swing.

Geoff Mills said the family was still reeling from the flow-on effects of having to carry stock over, find alternative markets and take a price cut by sending cattle to southern WA domestic markets.

So when the MLA-funded Department of Agriculture and Food WA (DAFWA) benchmarking project came up, they embraced the opportunity to get a better insight to the strengths, weaknesses and challenges facing their pastoral beef business.

Geoff said benchmarking was invaluable in allowing the family to compare the station's financial performance and management strategies with other pastoral businesses in the region and in the Kimberley, Northern Territory and Queensland through consultant Phil Holmes' network.

"We have never done anything like this before and now we know where we sit compared to the best benchmarking performance - identified by Phil over many years - for profit-driving factors such as beef produced per hectare, labour resources and money spent on repairs and maintenance," he said.

Enterprise focus

Geoff, wife Lynda, parents Robin and Lyle and brother Scott and his wife Annette, run 8,000 breeding cattle on Warrawagine and turn-off 4,000-5,000 head annually.

A Droughtmaster breeding program was introduced in the mid-1990s and has been accelerated in recent years to minimise the influence of Shorthorns in the herd.

Geoff said this was a market-driven approach to target slaughter markets in Indonesia, rather than feeder markets, and supply southern WA domestic markets if necessary.

Analysis of 10 years of data through the benchmarking project found the biggest opportunity to improve business performance on Warrawagine was to increase calving percentages.

In response, the station has started to keep more accurate calf marking records and address problems of bovine vibriosis. Better records have also led to faster and harder culling of dry cows and spaying of Shorthorn stock.

Lessons learned

Geoff said more supplementary feeding was being used, as the benchmarking project showed this was influencing calving percentages in other pastoral businesses.

He said these measures had led to an increase in calving rates on Warrawagine from a low 60% five years ago to 74% last year.



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Analysing WA's pastoral enterprises



Like all northern Australian beef producers, pastoralists in WA are dealing with increasing costs of production and myriad financial pressures.

For this relatively small group of producers with some of the largest land and cattle holdings in the country, there appears to be a relatively straightforward strategy to help ease some of these pressures.

Department of Agriculture and Food WA (DAFWA) Development Officer, Manus Stockdale, said a recent benchmarking project in the region highlighted the potential for pastoralists to improve herd genetics and that this would directly lift fertility and productivity by as much as 20%.

"Sub-optimal reproductive rates are a major constraint to the profitability of Kimberley and Pilbara cattle enterprises," he said.

"Herd modelling showed overall weaning rates were about 60% and 62% respectively in each region and there was scope to lift this by 20%," Manus explained.

"Strategies to boost herd fertility include more emphasis on culling empty dry cows,

good weaner management and more attention to breeding selection criteria."

He said adoption of appropriate grazing land management strategies would also boost herd performance, optimise production, help achieve turnoff weights close to 350kg for live export and contribute to long term sustainable businesses.

"A big challenge faced by northern beef producers is the ability to match available feed with herd numbers to optimise pasture use in a variable climate," Manus said.

"We found there is an ongoing need for promotion of grazing land management (GLM) principles and strategies to help pastoralists manage the risks and impacts of failed seasons.

"Infrastructure development and planning is a vital part of this and will lead to improved animal productivity through better control of the breeding herd and grazing management."

These solutions come from a DAFWA and MLA supported project that aimed to build an accurate picture of the production and financial performance of WA's northern pastoral businesses and by tracking a selection of those businesses understand what factors would have the greatest impact.

With support from consultant Phil Holmes, benchmarking groups of five pastoral businesses were set up in each region to analyse three to five years of financial records. Some of the challenges identified for long term sustainability included the ability to generate cash flow after capital expenditure, reduce costs of production,

Optimal labour:

- Benchmarking estimates the optimal number of cattle run per one full time equivalent (FTE) employee is 2,300 Animal Equivalent (AE).
- At an average 2,200AE/FTE, Kimberley businesses are close to this level of labour efficiency.
- Labour efficiency in the Pilbara is below the average at 1,534AE/FTE.

manage the risks associated with failed growing seasons and reduce reliance on the live export trade.

"Pastoralists need viable and profitable alternatives to the live export trade," he said.

"We need to address the factors that are limiting pastoralists' ability to sell into southern domestic markets, including breed, age and cost of transport."

"There are northern pastoralists successfully supplying these markets, whether it is direct to slaughter, backgrounding or to feedlots, and from their experience we can develop profitable models for other pastoralists to use."

Manus said the survey findings and benchmarking situation analysis would help to set the priorities for the Kimberley and Pilbara Research, Development and Extension (RD&E) program being developed for the next five years.



An MLA-funded survey and benchmarking project has found opportunities for further R&D in WA's Pilbara and Kimberley regions.



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Download *Heifer management in northern beef herds* at www.mla.com.au/heifermanual or *Managing the breeder herd - Practical steps to breeding livestock in northern Australia* at www.mla.com.au/breederherd

Register for a BusinessEDGE workshop
www.mla.com.au/EDGENetwork

Biosecurity



OB-free is the way to be

Ovine Brucellosis (OB) remains a significant disease in Australia's sheep flock - unnecessarily so.

In the lead up to spring ram purchasing, commercial sheep producers are being urged to move one requirement for potential sires to the top of the list. That they be OB-free.

Each state in Australia operates OB-free accreditation programs for stud flocks and MLA's Program Manager Animal Health and Welfare, Dr Jim Rothwell, said while the prevalence of OB in Australia is much less than in countries without regulatory or voluntary control measures, there is room for improvement.

West Australian stud SAMP and Border Leicester breeder, Jeff Murray, who is also a councillor on the Sheepmeat Council of Australia (SCA), encouraged commercial producers to consider the impact of investing in rams from non-accredited studs.

"If you put those rams straight out in the paddock, you may well be infecting your flock with a disease which costs money and is hard to get rid of," he said, adding in Western Australia, "OB-free status is a requirement for all meat breeds entered in shows or sales, but not for Merinos.

"Vigilance is essential. If you take the risk of buying rams from non-accredited studs then keep your young rams separate from your old rams until you are certain they are free from OB," Jeff said.

"It's easier just to buy from an accredited stud in the first place, but you still need to be aware of the risk of neighbour's sheep getting in with yours and that elements of the industry don't believe it to be the problem it is.



Checking rams for OB lumps in testes.

"If you buy rams in tip top health then your dollar is going to go further and the return on your investment is greater."

Queensland Poll Merino stud operator and councillor on SCA, Mark Murphy, said industry groups were "right in this space at the moment", working to reduce the impact of OB on Australian flocks. He applauded the simplifying of what is currently a state-by-state approach to OB accreditation with the addition of a question regarding OB status on Sheep Health Statements.

"Good biosecurity practice puts us on the front foot," Mark said. "If you are buying sheep from a source which doesn't have OB accreditation, ask why not?"

What is Ovine Brucellosis (OB)?

It is a bacterial disease confined to sheep, characterised by infertility in rams. Infected rams produce semen of lower quality, making them sub-fertile or sterile and the effect on flock fertility depends on the percentage of infected rams and flock breeding management. The effects of OB are often unrecognised, especially where marked fluctuations in fertility occur for other reasons.

How to keep your sheep OB-free

- Purchase sires only from studs accredited as OB-free and if not purchasing from accredited studs, keep newly purchased rams separate and test prior to mixing with flock.
- Keep rams in small groups with younger and older rams separated. Ewes can spread OB so keep rams isolated from ewes until disease status is established.
- Palpate ram testicles to check for lumps prior to purchase and before joining. The lumps caused by OB are generally in the lower part of the testicle. Seek veterinary advice if you notice lower lambing percentages, longer lambing periods or abnormal lumps in testes.
- Establish the OB status of your flock before introducing OB-free sires and maintain ram-proof fences to avoid visits from neighbour's rams.

10-15%

of South Australian sheep flocks carry OB (PIRSA).

15-60%

of Victoria's untested flocks carry OB (Vic DPI).

10-80%

of rams in an infected flock have impacted fertility



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www.mla.com.au/Ovine-Brucellosis

Right: The winning dish from the Thai team featuring both Aussie beef and lamb. Also the winning menu and dessert.

Below: Chefs from around the world travelled to Tasmania for the Black Box Culinary Challenge and to get out of the kitchen and see lamb and beef production first hand.

Master of the black box



Long before MasterChef and the era of celebrity chefs, the MLA Black Box Culinary Challenge was already using the 'mystery box' concept with groups of chefs to create a series of innovative red meat dishes. The Challenge, now in its 17th year, has inspired some of these chefs to re-write their restaurant menus to include Australian red meat.

The Black Box Challenge recently held its grand final in Tasmania, bringing together 60 top young chefs from 15 of the world's most highly acclaimed kitchens ranging from five-star hotels, to restaurants and hotels and catering schools from the USA, Thailand, Indonesia, Cambodia, China, Malaysia, the Philippines, Singapore, Hong Kong, the United Arab Emirates, Mauritius, Korea, Egypt and Australia.

MLA's investment in the Black Box Culinary Challenge helps develop a rapport with young chefs, by showcasing to them a range of Australian red meat products, allowing them to handle, experiment and cook the product, while encouraging the use of Australian red meat in their restaurants back home.

"It's a great way to raise awareness of the versatility and taste of Australian red meat among young chefs. Once they've worked with Australian beef and lamb, and developed an understanding of what goes into producing the integrity and consistency of our product, they appreciate these attributes and develop a preference for it on their menus," said Tim Kelf, MLA's Manager - International Market Projects.

"Over the years I've heard great stories of chefs who, after competing in the Black Box, have introduced Australian red meat to their menus."



Having included a totally new Australian beef cut (the D Rump) in the 2006 'mystery box' in Jordan, five star restaurants have embraced this cut and it is now an item on menus. While a winning chef in Indonesia replaced his entire red meat offer on his menu with Australian product.

During the 2012 global grand final, the 'mystery box' contained fresh ingredients sourced from Tasmania, including lamb rump, beef brisket, wasabi, Petuna ocean trout and King Island cheese.

Teams were given one hour to create a four-course menu, to be judged on taste, creativity and artistic merit. The next day they cooked for the judges and then followed up in the evening by serving 300 guests at a gala dinner for the foodservice trade and consumers.

The Thailand Culinary Academy was awarded first place with a braised Australian beef brisket and mushrooms and crispy rice coated Australian lamb rump. Indonesia's Bvlgari Hotel and Australia's Henry Jones Art Hotel came second and third, respectively. Competitors participate in national heats of the Challenge over a three year cycle to qualify for the global final, where all national event winners compete for the title of global winner.

"This event has given us an unforgettable opportunity to represent our country, cook alongside young chefs from around the world... and working with innovative cuts of Australian beef and lamb has been an educational experience," said Thai team captain Phonganan Sirisaengphaiwan.

Since inception in 1996, the MLA Black Box Culinary Challenge has seen:

4,000 chefs
from over 20 countries
participate

224,000
meals cooked

6,000kg
of Australian beef and
lamb used



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Consumer

The global taste test

All over the world, inviting potential red meat customers to try a sample of Australian beef or lamb is proving a successful marketing technique.

MLA research has found consumer sampling to be a successful marketing technique, as well as introducing customers to Australian red meat and showing them how to cook it. More than **75%** of consumers purchase beef or lamb immediately after sampling.

In all of our export markets, Australian beef and lamb competes not only with the locally produced protein, but red meat products from the likes of NZ, the US, India and Brazil. In the face of this tough competition for consumer attention, it's important to influence purchasing decisions where they matter most - at the meat cabinet.

"The combined impact of tasting the product and hearing a local talk about its safe, healthy and delicious attributes is a powerful way of convincing customers to buy Australian," says MLA General Manager Global Marketing, Michael Edmonds.

"We are careful to tailor each sampling program to the local market - from the messages the samplers spruik, to the flavours they use with the product, to what the samplers wear. It all helps ensure it is our product, not a competitors', the customer takes home."

North America

As meat competition in the United States is high, with chicken and pork inexpensive compared to beef and lamb, sampling to help drive purchase is a worthwhile investment. MLA supports in-store sampling of lamb and organic beef with two exporters and their retail accounts.

In the US, sampling is an effective method to educate consumers about Australian lamb's mild flavour and the taste and tenderness of organic beef compared to US grainfed beef at the point of purchase.



Eun-Sil Nam, MLA sampling promoter (see profile opposite) explains 'Clean and Safe' Australian beef to Korean customers.

Korea

Consumer sampling is an important and effective part of MLA Korea's marketing efforts with more than **1,000** Aussie beef sampling events held in retail outlets every month. Given the increased competition Australia faces as the US increases its beef marketing effort, ongoing sampling support is vital to defend consumer loyalty to Australian beef in Korea. Experienced in-store promoters educate customers about the range of Australian products and their 'clean and safe' attributes, with surveys revealing that **78%** of consumers go on to purchase Australian beef immediately after sampling in this market.

Middle East/North Africa (MENA)

In the past two years, MLA has collaborated with importers, exporters and retailers in the United Arab Emirates, Jordan and Lebanon to undertake nearly **500** hours of in-store sampling programs. Results indicate consumer sampling is responsible for driving significant sales increases during the sampling programs, and also maintaining double digit growth in the following months. More retailers across the region are starting to recognise the positive impact of the in-store theatre that goes with consumer sampling programs - once the domain of the dairy and beverage categories but now increasingly important for the positioning and trial of red meat.



An MLA demonstrator in Dubai Town Centre.

South-East Asia/Greater China

In-store sampling is big in Asia. Shoppers are even known to skip a meal for the cultural experience of sampling while shopping. In the emerging markets of this region, the best opportunity to showcase Australian product is at the point of purchase. Providing a compelling reason for the consumer to buy a more expensive product and one not part of their normal diet is essential. In surveys, more than **80%** of consumers have said promotion increases their knowledge of beef nutrition and entices them to buy more beef. During a cooking demonstration, sales usually increase by **15%**.



Indonesian shoppers get a taste for Aussie red meat.



Europe and Russia

With very limited Australian product at retail in Europe and Russia, there is limited value in boosting awareness and creating consumer pull via consumer sampling programs in this market. Instead, MLA focuses its efforts on the trade, building and supporting supply chains in targeted activities. Sampling of grainfed beef is being explored as an option in specific outlets of some of the newer developing supply chains as it is not a commonly known product in the EU.



A taste test of Aussie beef for Russian shoppers.

Japan

Consumer sampling is the most effective method to communicate the nutritional and health benefits of Aussie red meat to Japanese consumers, as well as teach them how to cook it. Understanding consumers' eating requirements is essential and the feedback from in-store sampling helps MLA to shape product information and promote Australian red meat for the Japanese market in the most effective way, with demonstrators trained regularly to improve performance.



A warm welcome as Japanese shoppers are tempted with Aussie beef samples.

Tempting the tastebuds. What's on offer from MLA sampling around the world?

North America:
Grilled boneless lamb legs cut up in cubes and organic striploins with light seasoning.

MENA:
Beef steaks.

South-east Asia:
Meal concepts like spaghetti bolognese, stir-fry, grilled steak, ragu and curries to show how beef and lamb can replace pork or chicken in traditional dishes.

Korea:
Chuck roll or short rib beef with the focus on the natural taste and texture without sauces or seasoning.

Europe:
Grainfed beef.

Japan:
Beef rib fillet steak with soy sauce.

In profile



Selling the Aussie beef story in Korea

Eun-Sil Nam *Sampling promoter*

One of our 'army' of 200 samplers in Korea, Eun-Sil Nam has worked as an in-store promoter for 11 years. She sees herself as more than a promoter - she is an ambassador for Aussie Beef. Here we talk to her about her role.

Why have you stayed loyal to promoting Australian beef?

"I became attached to Australian beef because MLA provides training for us promoters, including cooking classes and workshops, through which I could network with other promoters and learn useful information about Australian beef, retail shops, and promotion tips.

"Now I work with pride as a promoter of Australian beef, and the fact that I can personally see and hear from consumers that they believe in the 'Clean and Safeness' of Australian beef, really makes me feel fulfilled as its promoter."

What reactions and comments have you seen and heard from consumers after tasting Australian beef?

"Australian beef is particularly popular among consumers who are conscious of health, because of its 'Clean and Safe' image.

"Sampling does attract the attention of consumers and because they are so tasty many consumers buy Australian beef after sampling."

How many go on to buy Australian beef after sampling?

"According to the consumer survey (targeting 1,000 consumers) conducted in March of 2012 by MLA, 78% of consumers are purchasing Australian beef after sampling."

"I know I like eating Aussie beef. It is perfect for Korean barbecue, or in soup. I also like to marinate it and use it in a stir fry."



Jason Kwak, MLA Korea Regional Office

E: jkwak@mla.com.au

Learn more about the market opportunities for Australian beef in Korea on *Feedback TV* at <http://www.youtube.com/watch?v=vVFrWnrZTGg>



www.mla.com.au/Marketing-red-meat/International-marketing

Nutrition

Red meat ticks the nutritional boxes

Veronique Droulez
MLA Marketing Manager
Nutrition



The nutritional benefits of any food are a key driver for consumption. Australian red meat producers can rest assured they're producing a nutrient-rich product for consumers.

Underpinning this confidence is MLA's nutrition research program, which funds research to demonstrate red meat's role in a healthy balanced diet.

MLA's Marketing Manager Nutrition, Veronique Droulez, who is also an accredited practising dietitian, talks to Feedback about the program and offers health tips for producers.

Funding nutrition research programs is important because...

People want evidence, not propaganda. Anything to do with health is of the utmost importance, so we really need sound and credible information to reassure our audiences - policy makers, healthcare professionals and consumers - about the role of red meat in a healthy, balanced diet and to substantiate our nutritional claims.

What are the three research priorities of MLA's Human Nutrition Research Program?

- 1 Maintaining an up-to-date database on the nutritional value of red meat representative of retail supply and consumption patterns.
- 2 Building evidence on the role of red meat in the Australian diet in terms of the contribution to nutrient intake and ultimately, public health.
- 3 Developing healthy red meat diets effective for managing health issues at key life stages including prevention of childhood obesity by establishing healthy eating habits in early childhood;

preventing iron deficiency and weight gain in young women via higher protein red meat diets; managing metabolic risk factors important for managing diabetes and cardiovascular health in middle aged adults with higher protein diets; and improving muscle health for ageing people.

What is the role of red meat in the Australian diet?

Beef and lamb are nutrient rich foods and contain 10 essential nutrients. They are a good source of iron, zinc, B vitamins and a source of omega-3. Most Australians are consuming about two beef and one lamb meal a week. For this reason, they make a valuable contribution to the intake of key nutrients in the Australian diet, including iron, zinc and omega-3. Our research consistently shows that in Australia, beef and lamb are consumed with vegetables so that as red meat intake increases, vegetable intake increases.

From time-to-time, the 'link' between red meat consumption and cancer surfaces in the media, what is the latest news in this area?

Recent evidence suggests a weak association between red meat (beef, pork and lamb) consumption and colorectal cancer in men, but not in women. Interestingly, this difference does not seem to be as a result of differences in the amount of red meat consumed. Since red meat intake has been shown to be highly correlated with other high risk diet and lifestyle risk factors, it is possible that the weak association in men is explained by their high risk diet and lifestyle rather than due to their red meat consumption.

There is no evidence that consuming red meat as part of a healthy diet and lifestyle, increases risk of colorectal cancer.

MLA is funding research to gain a better understanding of the association between red meat consumption and colorectal cancer and in particular, what diet and lifestyle factors are most likely to contribute to optimal gut health.

Packed full of nutrients



- Beef and lamb contains 10 essential nutrients
- Red meat (beef, veal, lamb and mutton) is an important source of top quality nutrients (iron, zinc, omega-3, B vitamins and protein)
- Consumed three times a week by most Australians, red meat plays an important role in the Australian diet - it is the largest contributor of readily available iron and zinc and the second largest contributor of omega-3, after fish.
- With less than 4% saturated fat, trimmed red meat has the Heart Foundation's Tick of Approval.
- Higher protein (red meat) diets are effective for improving risk factors for diabetes and cardiovascular disease, including weight, blood pressure and glucose levels.
- Higher protein (red meat) diets combined with exercise helps to improve muscle health in older people.

Do you have any health tips for producers?

Maintaining a healthy weight and strong, functioning muscles are essential for good health, particularly from 45 years of age. Our research suggests that a higher protein diet combined with exercise is effective for both weight management and for muscle health. I suggest producers enjoy higher protein diets incorporating red meat 3 to 4 times a week as part of a healthy, balanced diet. Other protein foods recommended for health include fish twice a week and legumes which are a good source of dietary fibre. Eggs are another source of protein - up to six eggs a week can be consumed. Evidence also suggests the diet should include low glycaemic index (GI) carbohydrates such as wholegrains; low fat dairy foods; and of course, fruit and plenty of vegetables.



Veronique Droulez, MLA
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E: vdroulez@mla.com.au

Recipe



Lamb rump steaks

with red lentil salad

This high protein, nutrition packed meal is ideal for active people such as producers.

Serves: 4

Preparation time: 15 minutes

Cooking time: 20-25 minutes

Ingredients

- 4 x 200g lamb rump steaks, trimmed of fat
- ¾ cup uncooked red lentils
- 1 small red capsicum
- 1 small yellow capsicum
- 3 tomatoes
- 1 Lebanese cucumber
- ¼ bunch parsley, chopped
- ¼ bunch mint, chopped
- ½ tsp cumin
- 1 red onion
- zest and juice of 1 lemon
- 2 tbsp olive oil
- pepper

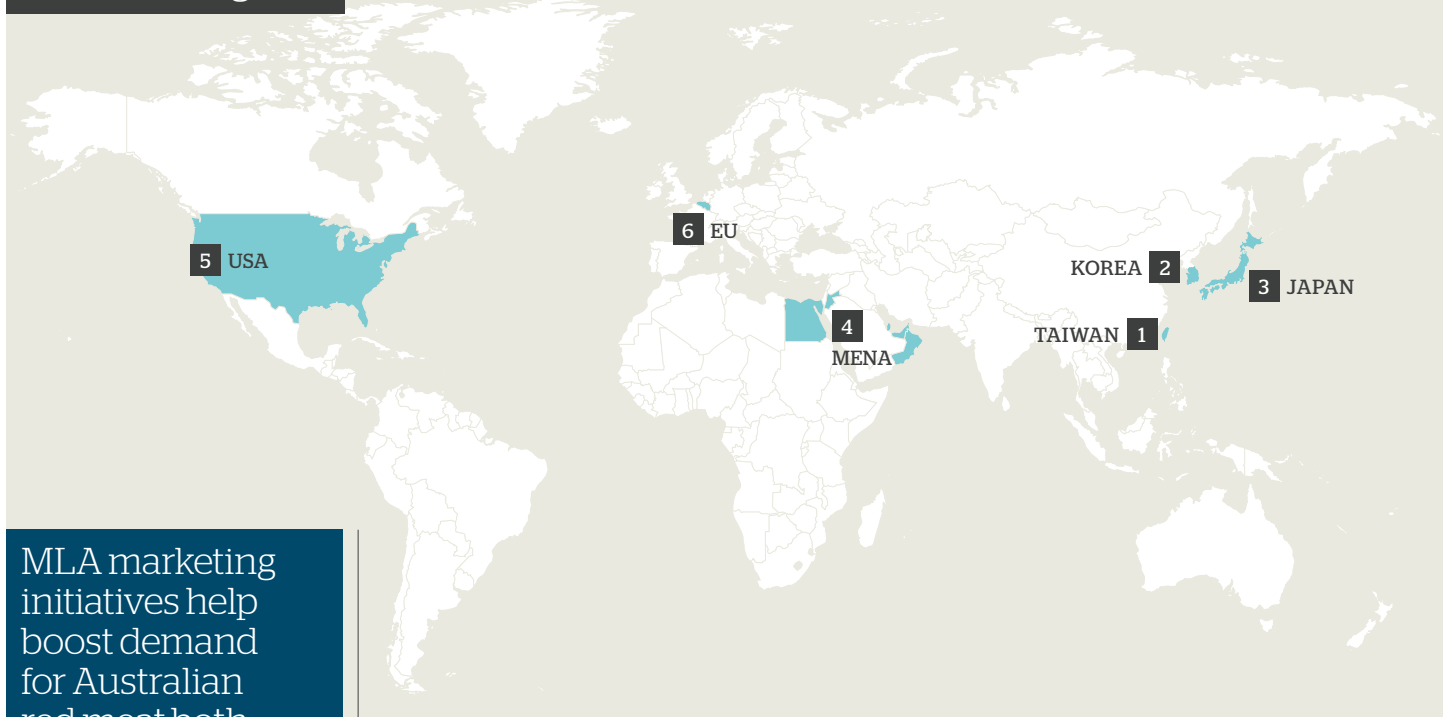
Method

1. Pre-heat a frying pan and brush the steaks with olive oil. Cook lamb over high heat for 4-5 minutes on each side or until cooked to your liking. Remove from heat and allow to rest, loosely covered with aluminium foil.
2. For the salad, cook lentils in boiling water for 3-4 minutes to retain texture and colour. Drain and place in cold water.
3. Dice all vegetables and place in a bowl. Add lentils and chopped parsley and mint.
4. Season with cumin, pepper, lemon zest and juice. Stir to combine.
5. Optional: serve this dish with grilled lime.

Tip

For juicy and tender lamb, rest after cooking.

Around the globe



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

1 TAIWAN

Hypermarketing Aussie beef

In line with MLA's program to support retailers in the region, a recent butchery and merchandising program was provided to Taiwanese retailer and advocate of Australian beef, Costco.

Reflecting Costco's desired image of a western style hypermarket, MLA butcher Calvin Gung demonstrated to Costco staff how to portion out chuck eye roll into steaks, Yakiniku and roast beef to increase sales margin and customers' purchase interest. The hypermarket chain currently operates eight outlets throughout the island. Their annual sales revenue is reported to be more than AUD\$ 1.6 billion.



MLA butcher Calvin Gung demonstrates how to portion out chuck eye roll into steaks to Costco staff in Taiwan.

Since the first quarter of 2011, Costco has been exclusively selling Australian grainfed beef. This is solely due to detection of beef from the United States containing ractopamine, a leanness enhancing drug banned in Taiwan.

2 KOREA

Beef's Big Bang theory

MLA teamed up with "G-Market", Korea's largest and most popular online retailer, to promote Australian beef in May. The 'Hoju Chungjung Woo Festival' was a seven day long, online event that showcased Australian beef products alongside images of one of Korea's most famous K-pop bands called 'Big Bang'.

The G-Market promotion also gave customers the chance to win prizes, such as Lotteria vouchers. Lotteria is Korea's

largest quick service restaurant chain with more than 900 outlets throughout the country that only uses Australian beef for their burgers. The G-Market website promotion offered marinated short ribs to thinly sliced brisket from various Australian suppliers.

3 JAPAN

An 'Elle' of a time for Aussie beef and lamb

Popular Japanese food magazine, *Elle a Table*, and Hikarie - a new shopping mall in Shibuya in the centre of Tokyo ran an Australian beef and lamb promotion with support from MLA to female shoppers. It was a 'Nakashoku' (home meal replacements or 'ready-to-eat' food such as *obento* lunch boxes) promotion where four popular food establishments, served up their signature dishes using Australian beef and lamb. Dishes included an Italian Deli Lunch Box, Aussie Beef Roast Beef Sandwich, Aussie Beef Patè and Braised Aussie Beef in Red Wine Sauce. Given the sluggish

900

Lotteria outlets use only Aussie beef in their burgers

economic situation, the ageing population and more women entering the workforce in Japan, the home-meal replacement sector is a growing segment of the Japanese foodservice sector that offers great opportunity for Australian product.

4 MENA

Red meat for Ramadan



Retailers in the Middle East/North Africa region embraced a special promotional program developed by MLA to grow demand for Australian beef and lamb during Ramadan (the month of fasting) celebrations, in July and August.

This year's campaign was supported by print media and point-of-sale targeting five retail chains across 65 participating stores in the UAE, Oman, Qatar, Jordan, Kuwait, Bahrain, Saudi Arabia and Egypt.

The campaign focused on MLA's Regional Business Development Manager, and well known chef, Tarek Ibrahim, recommending Australian red meat for this sacred time of year with recipes such as lamb biriyani with couscous, kofta and beef kebabs. According to Foodstuff Traders Association figures, Jordanians consume around 5,000 tonnes of red meat during Ramadan, 20-30% higher than the average consumption of other months, 90% of which is imported.

5 USA

Top lamb for top chefs

Australian lamb was heavily featured at the International Corporate Chefs Association (ICCA) Summit in June.

The ICCA is a unique association in the USA designed exclusively for corporate chefs from the top 200 multi-unit foodservice units, who are the key decision makers and menu developers within their chain operations.

The Summit went over three days and provided a wide range of activities and included education seminars (nutrition, flavours, social media, sustainability etc) and a culinary road trip.

6 EU

Australia on a platter

A recent Chefs Table in Brussels, hosted by the Australian Embassy, provided the platform for around 50 Belgium and Netherlands based wholesalers, end-users and food media to taste Australian beef for the first time.

The menu included Australian beef rump in Thai beef salad, sliced roasted beef tenderloin and roasted then grilled rib eye. Feedback about the taste, tenderness and flavour of Australian product was very positive, with most amazed at the quality.

The June event was held in partnership with MLA, Cleanseas and an importer of Australian wine to promote the range of high quality food and drink items available from Australia including red meat. Full administration and organisational support for the event came from the Australian Embassy, which Ambassador Brendan Nelson attended and opened.

50 wholesalers, end-users and food media from Belgium and the Netherlands dined on Australian beef at a Chefs Table event.

Market observations

Demand... the big unknown

Australia is one of few global market players with an expanding cattle herd and the capacity to produce additional product for global consumers in the medium term. But the outlook for demand is less certain. On one hand, reduced global supplies of beef could mean markets are in a position to pay high prices. On the other hand, subdued economic conditions could keep consumers in advanced economies in refrained spending.

Tim McRae
MLA Economist



MLA's *Australian cattle industry projections - mid year update*, released last month, outlines the combination of the favourable seasonal conditions since the start of 2010, a sharp contraction in female slaughter levels and relatively favourable cattle prices over the 30-month period, underpinned the rebuilding intentions of Australian beef producers.

For the year ending 30 June 2012, MLA estimates the Australian cattle herd increased 4% on the 2011 census result, to 29.65 million, the highest level since 1977.

Australian adult cattle slaughter for 2012 is expected to remain tight, at 7.45 million head, expanding towards eight million head by 2014.

With additional beef entering the supply chain in coming years, the outlook for demand still remains framed by the prosperity in advanced economies, after being plagued by tough conditions since 2008. In 2012, Australian beef and veal exports are forecast to reach

960,000 tonnes swt, up 1% on the previous year. As projected by MLA in January, the US has been the main growth market for Australian shipments in 2012.

While there have been brief periods of robust sales and a more positive economic outlook during the past four years, the massive debt, unemployment and growth issues for many economies continue to weigh heavily on Australia's beef trade. It seems to be for every step forward in beef demand, it takes a step back - each time favouring cheaper prices as consumers continue to 'trade down' in their purchasing preferences.

However, one key factor that remains unaltered, is the decline in global beef production. While this has put upward pressure on prices at times, there have also been periods where it has been overshadowed by the larger economic and demand issues. The big question is: what force will be greater going forward?



Download MLA's *Australian cattle industry projections - mid year update* by visiting www.mla.com.au/industryprojections

On the ground

Korea

**Michael Finucan**

MLA Regional Manager - Korea
E: mfinucan@mla.com.au



Nothing like being thrown in the deep end. It seemed I had only just heard the good news about my appointment to the role of MLA's regional manager for Korea when I found myself being introduced to 350 representatives of the Korean meat industry!

The importers, distributors, foodservice operators and retailers who attended the annual Australian Beef Grand Seminar in Seoul in June gave me an appreciation of the position Australian beef holds in this market. Those I spoke to were proud to source Australian product. And not just because they made a margin from selling it, but because of its other attributes - Australian beef is naturally safe and offers a wide variety of cuts and grades suited to the beef dishes Koreans love to eat.

But while these qualities have helped Australia supply a healthy share of the imported beef market in Korea over recent years, US beef is making its way back. The giant US beef industry has some distinct advantages over Australia: an ability to ship large volumes of a prized Korean cut - frozen short ribs - and a hefty marketing budget.

US beef is also aided by a preferential import tariff. Under the Korea-United States Free Trade Agreement (FTA), the 40% tariff on beef will reduce to zero over 15 years.

When talking with the Korean consumers I have met so far, I ask them why they choose Australian product over US. They have almost all responded with one or more of these three factors: price, safety and taste. As with consumers around the world, price is up there in Korea when it comes to a purchase decision. Clearly we must ensure that we are not overly disadvantaged in this area.

Safety is an area where Australia has a great message to tell. Our reputation in Korea as having a reliable traceability system, coupled with our disease free status and world class hygiene, provides Australian beef with a real marketing advantage.

This message has been successfully told in Korea via the Hoju Chungjung Woo (or Australian beef - clean and safe) positioning, which celebrates 10 years in the market this year. Australian beef's 'clean and safe' image is coveted by our competitors in this market but still very much 'owned' by Australia.

Market insight



Korea is currently Australia's third largest beef export market (by volume) but that trade started from humble beginnings.

In the mid-1970s Australia's beef trade to Korea consisted of limited shipments of frozen beef quarters. Now, Australian beef makes up about 80% of all chilled beef imports in Korea.

In the 1990s Australian beef was perceived by consumers as low in quality and price. Now, Korean consumers associate Australian beef with 'clean and safe' and 'quality'. Two decades ago Australian beef was channelled into low-value market segments including catering, manufacturing and the military. Today Australian red meat is sold through a variety of channels including supermarkets, department stores, online, fast food, barbecue and buffet franchises, as well as fine dining.

What's triggered this transformation?

Two key events have transformed Australia's beef trade to Korea: the liberalisation of the market and the incidence of BSE in the US.

In 2001 the Korean market was liberalised, moving the market from an import quota system to a 40% tariff. With the volumes of Australian beef no longer limited by a quota, the Australian industry raised the awareness of Australian beef and set about reversing the unfounded perceptions of its low quality.

In 2003 Korea banned US beef after BSE was detected in the US. Just a year earlier, the Australian country-

Australia supplies***30%**

of Korea's total beef foodservice demand and

29%

of its beef retail demand

* MLA estimates (2011)

**Beef's health kick**

The restaurant chain, Chaesundang, literally meaning 'a house where vegetables are fresh', has over 270 stores throughout Korea and is an avid user of Australian beef.

The company targets the family segment and health conscious young women with their 'well-being' and 'health food' messages.



of-origin logo - Hoju Chungjung Woo - meaning 'Australian beef, clean and safe' was launched. This tagline proved perfect given increased consumer attention towards food safety. It provided Australian exporters and importers with an opportunity to reinforce product integrity and develop loyal relationships across the supply chain and educate the market about Australian beef's credentials.

While US beef was absent from the market, Australian beef maintained a majority market share of the imported market and has since maintained this, even after US beef started flowing back into the market in mid-2009.

What's the market like now?

The over arching 'clean and safe' message from Australia continues to be a highly relevant message for Korean consumers, and is a solid platform for Australian companies to introduce their individual beef brands.

An important growth area for Australia over the years has been Korea's chilled beef market - mainly driven by the rapid expansion of fresh produce offerings in retail stores. From 2002 to 2011, Korea opened 223 hypermarkets, all offering chilled Australian beef products.

The global economic slowdown is currently affecting consumer confidence, subduing retail demand but igniting demand for 'ready-made' and take-out food in the foodservice sector.

In the 2012 mid-year projections: exports to Korea are down and forecast to continue to decrease next year due to subdued demand and local production.

Where do the opportunities lie for Australian beef?

Besides Australia's strong beef presence and individual branding in retail, Korea's vibrant foodservice scene also continues to offer opportunities for Australian companies. Growth in this sector is forecast to expand by 79% between 2009 and 2016, valued at \$113 billion by 2016.

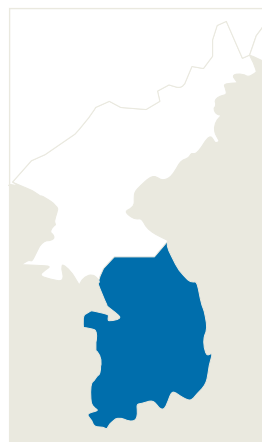
Korean sources have forecast that growth will come from expansion in fine dining and casual dining chains that require beef products and need points of differentiation in this highly competitive market.

Chaesundang is well known for its usage of fresh and healthy ingredients and shabu shabu (hot pot) menu, with Australian beef at the heart of its product offering.

Since the opening of their first restaurant in 2005, the company has offered Australian beef identified by the Hoju Chungjung Woo logo and now uses approximately 120 tonnes swt of chuck roll every month.

3rd
largest export market
for Australian beef

45%
of Australian beef
exported to Korea
is destined for
foodservice*



55% of Australian beef in Korea is sold at retail*

10.4 kg/person of beef is consumed by the average Korean (boneless equivalent - KREI: 2011) compared to 32kg in Australia*

13th largest economy in the world

50 million people in Korea

8 times more dense population in Korea's capital Seoul than New York

Korean barbecue

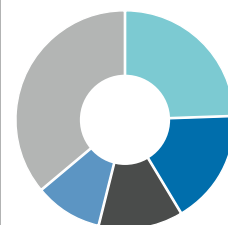
Koreans consume beef on the barbecue, in soups, stews, as a side dish and as beef jerky - and so require a variety of cuts. However, grilling pieces of beef in Korean styled barbecue restaurants remains the most popular way to consume beef. Short rib, chuck roll, blade and brisket or loin cuts are used frequently.



Why Koreans need our beef?

The average Korean consumed 2.6 kg/person of beef in 1980, rising gradually to 10.4 kg/person by 2011 (USDA). Korea's 3.35 million head of cattle supply less than 50% of total Korean beef demand, therefore creating opportunity for foreign suppliers such as Australia.

Composition of Australian beef exports to Korea 2011

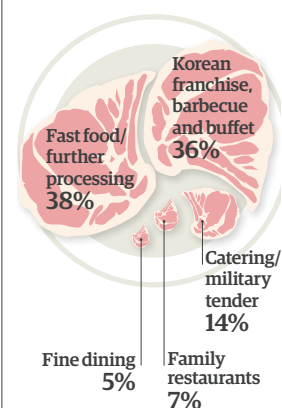


22% chuck roll
15% blade
11% manufacturing
11% short ribs
9% brisket
32% other

Where Australian beef is sold at retail*



Where Australian beef is sold at foodservice*



* MLA estimates (2011)



A cast of butchers and chefs took to the ice to 'settle their beef' on a Saturday morning Sunrise segment.

Fast Ed promotes Beefgiving Season

This month as part of the winter beef campaign, 'Fast' Ed Hamalgi cooked up hearty beef recipes on Better Homes and Gardens and Sunrise, imparting the 'Beefgiving Season' message to Australians.

MLA are sponsoring four Winter Festivals, held in Brisbane, Melbourne, Sydney and Fremantle, to spread the message that beef meals can warm you up this Beefgiving Season. The festivals feature Beefgiving staff dishing up beef casserole, curry and ragu samples as well as *Entice* magazine and other beef marketing material. The festivals attracted around 350,000 people and ran until 29 July.

Breeding for success

Two well attended workshops were recently held in Mount Barker and Dongara for beef producers. The workshops included presentations on a range of subjects relevant to the beef breeding herd and included presentations from the Department of Agriculture and Food Western Australia (DAFWA) beef team and guest speakers.

Topics included matching genotype with target market specifications, management options and the environment; MLA's feed demand calculator; and selection and management of heifers and bulls.

The workshops were well received by producers with many positive comments from the day on the relevance of material presented, quality of speakers and organisation of the event.



Dr Michael Lawrence from Murdoch University discussing the importance of combining selection using both EBVs and structural soundness with producers at the Mount Barker Breeding for Success field day.

Upcoming events

Meat Profit Day - Growing to 'meat' the future

A chance for WA producers to hear from a stimulating panel of speakers on the latest R&D tools and industry outlook.

When and where:
28 August, Albany WA

Bookings:
events@mla.com.au

Sheepvention

Sheepvention's competitions and events include the ram sale, sheep show, ewe weaner competition, farm dog competition, Alpaca show, inventions competition, seminars and wool fashion parade.

When and where:
6-7 August, Hamilton Vic

Bookings:
www.sheepvention.com

Confident livestock marketing workshops

A one-day workshop to assist producers to understand and apply market information in their business decisions.

When and where:
Sheep and lamb markets:
22 August, Keith SA
Cattle markets:
21 August, Mt Barker SA
23 August, Naracoorte SA

Bookings: Sheep and lamb markets:
www.mla.com.au/makingmorefromsheep
Cattle markets: www.mla.com.au/morebeef



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

Bred well Fed well

A series of Bred well Fed well workshops were held in southern Queensland, near Cunnamulla, Dirranbandi and Goondiwindi during April. Around 65 participants attended the on-property workshops which focused on using Australian Sheep Breeding Values (ASBV) to improve enterprise profitability; how to develop a breeding objective for sheep enterprises; better management of ewe nutrition for reproductive performance and flock profitability; and skills in developing simple energy budgets for the ewe flock. The feedback received from producers was extremely positive with some keen to follow on from the workshops and set up Lifetime Ewe Management groups.

Jason Trompf, Bred well Fed well presenter, and producers compare some rams' ASBV data to their visual characteristics as part of the day's practical sessions.



Dr Helen O'Connor from The University of Sydney presenting at the Look Good Feel Good event.

Look Good Feel Good

MLA hosted an interactive event for health journalists in May to learn about the Look Good Feel Good weight loss plan, a new brochure from MLA tailored to young women's unique health and lifestyle needs. Journalists heard from experts on scientific and consumer research which underpins the brochure and practical tips to follow a nutrient-rich, higher protein diet, including beef and lamb, to meet iron requirements. The event was well attended by health journalists who indicated an interest in publicising higher protein diets and eating plans that include beef and lamb 3-4 per week.

Wingham Beef Week

Supported by the local beef processing plant Wingham Beef Exports, in May Wingham Beef Week consisted of School Education days, junior judging and classes, beef appreciation and a hoof and hook competition.

Greg Butler, Meat Standards Australia (MSA) Training Facilitator, presented a session on portioning beef primals into their individual muscles and how retailers can value add to these products. MSA Trade Development Officer, Demelsa Lollback presented on topics relating to producer and processor requirements and the science relating to MSA.



High school students on a tour of the abattoir, Wingham Beef Exports.

Bred well Fed well

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

When and where:

14 August, Adelong NSW
15 August, Greenethorpe, NSW
16 August, Ardlethan NSW
16 August, Keith SA
17 August, Lockhart NSW

Bookings: www.makingmorefromsheep.com.au/events.htm

Agribusiness Today Beef Business Forum - Profitable Beef in a Challenging Future

This forum will draw professional speakers and demonstrators from MLA and retailers, as well as the much valued and highly regarded processor's perspective.

When and where:

30 August, Bathurst NSW

Bookings:

kbehrendt@csu.edu.au

Beyond the gate - WA

This red meat supply chain tour to be held the day before the Southern WA Meat Profit Day (see over) is a chance for MLA members to meet with processors, wholesalers, butchers and executive chefs, who deliver their product to the consumer.

When and where:

27 August, Albany WA

Bookings: 02 9463 9257
www.mla.com.au/BTG-Albany

Crops, rumps and woolly jumpers

An innovative farming forum, based on ABC's Q&A program and the SBS Insight program. A panel of six farmers share their experiences covering a range of farming systems across the region.

When and where:

22 August, Wagga Wagga NSW

Bookings: 02 6391 3871
sheep.connect@dpi.nsw.gov.au



WA 2015:
lamb exported
25,000t cwt

WA 2013:
1.3m head of
sheep processed

WA 2012:
cattle numbers
increase 5%

WA 2011:
105,800t
cwt beef

Southern WA Meat Profit Day

Growing to 'meat' the future

Albany Entertainment Centre, Toll Place, Albany, WA
Tuesday 28 August 2012

A perfect opportunity for red meat producers to find out the latest information on industry research, new products and trends for achieving greater profitability within their business.

Network with fellow producers and learn about the range of activities your levies are funding to improve productivity, increase demand and position red meat ahead of its competitors in domestic and international markets.

Source for figures above – MLA forecasts

To register book online at www.mla.com.au/MPD-Albany
or call 1800 675 717 and select option 4

For more information visit www.mla.com.au/events
or email events@mla.com.au

 Keep up-to-date #mlampd